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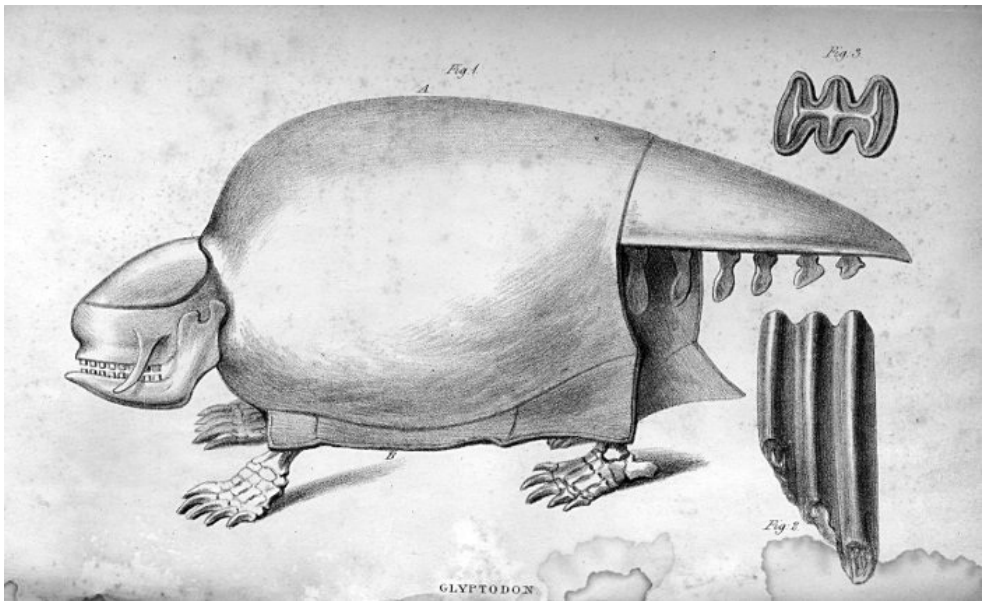

GLYPTODON.

BUENOS AYRES,

AND

THE PROVINCES OF THE

RIO DE LA PLATA:

THEIR PRESENT STATE, TRADE, AND DEBT;

WITH SOME ACCOUNT FROM ORIGINAL DOCUMENTS OF THE PROGRESS OF GEOGRAPHICAL DISCOVERY IN THOSE PARTS OF SOUTH AMERICA DURING THE LAST SIXTY YEARS.

BY

SIR WOODBINE PARISH, K.C.H.,

F.R.S., G.S., VICE PRESIDENT OF THE ROYAL GEOGRAPHICAL SOCIETY OF LONDON,

MANY YEARS HIS MAJESTY'S CHARGE D'AFFAIRS AT BUENOS AYRES.

LONDON:

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1839.

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INTRODUCTION.

The greater part of the materials for this volume were collected during a long official residence in the country to which they relate: containing, as I believe they do, some information which may be interesting, if not useful, I feel that I ought not to withhold them from the public, in whose service they were obtained.

The chapters which give an account of the settlements made by the old Spaniards on the coast of Patagonia, and of the explorations of the Pampas south of Buenos Ayres, both by them and their successors in the present century, will be found to throw some new light on the progress of geographical discovery in that part of the world. Our occupation of the Falkland Islands, in the first instance, and the work shortly afterwards published by Falkner in this country, pointing out the defenceless state of Patagonia, joined to the enterprising character of the British voyages of discovery about the same period, appears to have stimulated the Spaniards, in alarm lest we should forestall them, to examine their coasts, to explore their rivers, and to found settlements, of which every record was concealed from public view, lest the world at large should become better acquainted with possessions, all knowledge of which it was their particular care and policy to endeavour to keep to themselves.

Thus, though Spain, at an enormous cost, acquired some better information relative to countries over which she claimed a nominal sovereignty, the results were not suffered to transpire, but remained locked up in the secret archives of the viceroys and of the council of the Indies; where probably they would have been hidden to this day had not the South Americans assumed the management of their own affairs.

In the confusion which followed the deposition of the Spanish authorities, the public archives appear to have been ransacked with little ceremony, and many documents of great interest were lost, or fell into the hands of individuals who, like collectors of rarities in other parts of the world, showed anything but a disposition to share them with the public at large. I will not say that this was always the case, but the feeling prevailed to a sufficient extent to enhance materially the value of those which were either offered for sale or obtainable by other means.

Some few individuals were actuated by a different spirit, amongst whom I ought especially to name Dr. Segurola, the fellow-labourer with Dean Funes in his historical essay upon the provinces of La Plata, whose valuable collection of MSS. (from which that work was principally compiled) was always accessible to his friends, and to whom I have to acknowledge my own obligations for leave to take copies of many an interesting paper. Others, also, whom I do not name, will I trust not the less accept my thanks for the facilities they afforded me for obtaining such information as I required. The government, I must say, was always liberal, in giving me access to the old archives, and in permitting me to transcribe documents[1] which I could not have obtained from other quarters.

With these facilities, and by purchase, I found myself, by the time I quitted South America, in possession of a considerable collection of MS. maps and of unedited papers respecting countries of which the greater part of the world is, I believe, in almost absolute ignorance.

Amongst the most interesting perhaps of these I may mention—

The original Diaries of Don Juan de la Piedra, sent out from Spain, in 1778, to explore the coasts of Patagonia.

A series of papers drawn up by his successors the Viedmas, the founders of the settlements at San Julian and on the Rio Negro.

The original Journal of Don Basilio Villariño, who, in 1782, explored the great river Negro, from its mouth in lat. 41° to the foot of the Andes, within three days' journey of Valdivia, on the shores of the Pacific.

The Narrative, by Don Luis de la Cruz, of his Journey through the territory of the Indians and the unexplored parts of the Pampas, from Antuco, in the south of Chili, to Buenos Ayres, in 1806.

The Diary of Don Pedro Garcia's Expedition to the Salinas, in 1810, given me by my most estimable friend, his son, Don Manuel.

Together with a variety of other unpublished accounts of the Indian territories south of Buenos Ayres, principally collected by order of that government, with a view to the extension of their frontiers.

The substance of these papers, all which relate to the southern and least known parts of the New Continent, will be found in Chapters VII., VIII., and IX.

Respecting the eastern or Littorine provinces of the Republic, as I have ventured to call them, the most valuable data existing are, first, those collected by the Jesuits, and next, the various reports and memoirs drawn up by the officers employed to fix the boundaries under the treaties between Spain and Portugal of 1750 and 1777. The especial qualifications of the individuals, particularly of those employed in the last case, the length of time spent upon the service (more than twenty years), and the enormous expenses incurred by Spain in the endeavour to complete that survey, led to a large accumulation of invaluable geographical data respecting extensive ranges of country never before properly examined, much less described.

Nor were the labours of the officers in question confined to the frontiers. They fixed, as I have stated in Chapter VIII., all the principal points in the province of Buenos Ayres, made surveys of the great rivers Paranã and Uruguay, and of their most important tributaries; and drew up many notices of great interest respecting the countries bordering upon the higher parts of the Paraguay, which the pretensions of the Portuguese in that direction rendered it requisite for them to explore with more than ordinary care and attention[2].

M. Walckenaer's publication at Paris, in 1809, of the Travels of Don Felix Azara, one of the King of Spain's commissioners on that service, contains a general review of the labours of those officers, and is perhaps the best work in print upon the countries which it describes; still it can only be regarded as a very imperfect sketch of the information collected by one of many able men employed upon that particular service.

Another of the commissioners, Don Diego Alvear, drew up an historical and geographical work upon the provinces of Paraguay and the Missions, quite equal in interest, if not more so, than that by Azara, for a MS. copy of which I have to thank his son, the present General Alvear.

Colonel Cabrer, the only surviving officer of all those employed on this important survey, was living during the time I was at Buenos Ayres, and for many years had, to my knowledge, been engaged in drawing up an elaborate account of the whole progress of the survey from first to last; in his possession I saw a complete set of all the beautiful maps executed by the Spanish officers, the originals of which are deposited at Madrid. He is lately dead, and I understand that the authorities of Buenos Ayres have been in treaty for the purchase of his papers, which will be of the greatest importance, not only to them, but to the governments of the Banda Oriental, of Paraguay, and of Bolivia, whenever the time comes, as it must ere long, for definitively fixing their respective boundaries with Brazil. I considered myself fortunate in obtaining copies of several detached portions of these surveys, and particularly of an original map, drawn from them by Colonel Cabrer himself for General Alvear, when commanding-in-chief in the Banda Oriental in 1827.

There is no doubt that, so far as the Spanish frontiers extended, these maps are the best existing data respecting the countries which they delineate: on the other hand, we must look to the Portuguese authorities for materials for the adjoining provinces of Brazil. The most perfect map of that part of the continent perhaps ever made was drawn at Rio de Janeiro in 1827, for the use of the Marquis of Barbacena, when appointed to command the Emperor's army in the war with Buenos Ayres, and was taken with his baggage at the battle of Ituzaingo, and afterwards given to me. It comprises, on a large scale, all the country lying east of the Uruguay, from the Island of St. Catharine's to the River Plate. On my return to England I placed it in the hands of Mr. John Arrowsmith, with the rest of my geographical materials.

As regards the greater part of the interior provinces west of the Paraguay, the information obtainable is very imperfect; indeed of some vast portions of those regions, it may be said that nothing but the general courses of the principal rivers is as yet known. The immense tract called the Gran-Chaco is still in possession of aboriginal tribes, and other extensive districts are inhabited by people who, though of a different race, seem little beyond them in civilization.

It was not the policy of Spain to take the trouble of accurately examining her colonial possessions, except when obliged to do so in furtherance of measures of self-defence, or in the expectation of some profitable return in the precious metals, the primary objects of her solicitude: and, but that the high road from Potosi to Buenos Ayres ran through them, I believe in Europe we should hardly have known, till recently, even the names of the capital towns of the intermediate provinces: it is only since their independence that they have brought themselves into notice, and that any information has been acquired of the nature and importance of their native products.

When I arrived at Buenos Ayres in 1824, in hopes of obtaining the best existing accounts of their statistics, I addressed myself to the governors themselves; and I have every reason to believe, under the circumstances, that they were desirous to meet my wishes. I received from them all the most civil assurances to that effect; but, excepting from the Entre Rios, Cordova, La Rioja, and Salta, I found the authorities themselves utterly unable to communicate anything of a definite or satisfactory nature; and, although they promised to set to work to collect what I asked for, I soon found they had most of them other matters on hand which had more urgent calls on their attention.

Of the information which I did so obtain, the most complete by far was from General Arenales, the Governor of Salta, who not only forwarded to me an interesting report upon the extent and various productions of that province, but, what I less expected, a very fair map of it, drawn by his own son Colonel Arenales; an individual who has since distinguished himself amongst his countrymen by the publication of a work[3] wherein he has with great pains collected all the information he could obtain to elucidate the geography and capabilities of a province which nature seems to have destined to be one of the most important of the Argentine Republic. Were his good example followed by equally intelligent individuals in other parts of the interior, the natives, as well as foreigners, would be greatly assisted in learning not only what are the productions of their own country, but in what manner they might be rendered available in furtherance of its prosperity.

He has done his duty, and rendered a service to his country, by pointing out the great importance of the possibility, now proved beyond a doubt, of navigating the river Vermejo throughout its whole course, from Oran in the heart of the continent to its junction with the Paranã, and thence to the ocean.

Mr. Arrowsmith has adopted his delineation of the course of that river, as laid down from the diary of Cornejo, who descended it in 1790. Soria, who came down it in 1826, was deprived of all his papers in Paraguay; and although, on reaching Buenos Ayres, five years afterwards, he not only published a short account of his voyage, but a map also to illustrate it, being entirely from memory, it is little to be depended upon; neither is it reconcilable with the distance from Oran to the Paraguay, as estimated either by himself or Cornejo.

Of Soria's voyage, besides his own account, I had a much more full and curious narrative from an Englishman of the name of Luke Cresser, who was one of the party, and whose personal adventures would form an entertaining episode in any history of that enterprise. He was a Yorkshireman by birth, and originally a watchmaker, in which trade, after making a little money at Buenos Ayres, he had found his way into the upper provinces, and had finally become a grower of tobacco in the province of Oran. Having a large stock on hand about the time Soria was about to descend the Vermejo, he was induced to ship it, and to embark with him for Buenos Ayres. He was of the greatest service to the party on the voyage, and was severely wounded, in the skirmish they had with the Indians, by an arrow, which pierced his arm, and occasioned him much and long suffering afterwards. On reaching the Paraguay, had Soria listened to his urgent advice and entreaties, he never would have placed himself in Dr. Francia's power; for which, indeed, there does not appear to have been the slightest necessity. When the vessel was detained by that despot's orders, Cresser, like the rest, was stripped of all he possessed; and, after much suffering, was sent to Villa Real,—a wretched establishment on the Paraguay, about 150 miles above Assumption.

There, whilst his companions were bewailing their fate, the more enterprising Englishman obtained leave to proceed into the interior to the forests, where the yerba or tea is gathered, to work for his livelihood; and with such success, that, from beginning without a dollar of his own, by the time he was allowed to leave Paraguay, five years afterwards, he found himself in comparative affluence; and, though only permitted by the dictator to carry out of the country a portion of the yerba he had by his industry collected, he had still enough left when he sailed for Buenos Ayres to compensate him for the loss of all the tobacco with which he had originally sailed from Oran. The narrative of this person contains such curious details, not only respecting his residence in Paraguay, but also regarding the country about Oran, where he had passed some years previously to his voyage with Soria down the Vermejo, that I have thought it worth

communicating to the Geographical Society for insertion, if they please, at length, in one of their periodical journals.

If it was difficult to collect the most ordinary statistical data relative to the interior, it may easily be supposed how much more so it was to obtain information of any interest in a scientific point of view; nevertheless, in this respect, I was not altogether without resources; and the accidental residence of two or three observing and intelligent individuals of our own countrymen in the remotest parts of these widely-spread regions laid open to me sources of information even upon such matters as I little expected. The results of that portion of my correspondence will be found in various parts of this Volume, where I have had the satisfaction of acknowledging my obligations to the individuals from whom they were derived.

From the materials to which I have above alluded, and other papers in my possession, my original intention was to have attempted a work of a more extensive nature; but any necessity for this has been since superseded by the publication, which has been commenced by M. de Angelis, at Buenos Ayres, under the auspices of the Government, of an extensive collection of unedited historical documents relative to the provinces of La Plata.

In the course of the last three years five folio volumes, and portions of two more, have already appeared, in which not only many of the most interesting of the papers in my own collection are given, but a variety of others throwing great light upon the history and geography of the countries to which they relate[4].

I cannot hesitate to say that it is infinitely the most important and interesting publication which has as yet appeared in any of the new states of Spanish America, to the great credit of the enlightened editor, who has illustrated it with his own learned notes and observations, the fruits of a long study of the history of his adopted country.

Upon the appearance of the first volumes I gave up my own design, as a work of supererogation where one so much more valuable was attainable.

It became however manifest, as M. de Angelis' work proceeded, that its extent would rather render it available as a book of reference and authority than for general purposes; and, as it was in the Spanish language, particularly so for the general purposes of English readers. I was again, therefore, induced to resume my task, though with the essential change in its character from my original plan, to the brief and general sketch of the Republic, and of the progress of geography in that part of the world during the last 60 years, which now appears; referring those who desire more detailed information to the invaluable collection of original memoirs now in course of publication by Don Pedro de Angelis: it has been of great use to me in enabling me to complete my own chain of information, as indeed it must be to any one who pretends to give any account of the part of the world of which the documents it contains may be said now to constitute the original and authenticated historical records.

To M. de Angelis I am also indebted for the copy of a MS. map, by Don Alvarez de Condarco, in which are laid down not only a recent journey of his own in 1837, to examine the mines in the Indian territory south of the Diamante, but the several marches of the troops, detached from Mendoza, in 1833, to co-operate with the forces from Buenos Ayres under General Rosas, in the general attack made upon the native tribes. I had already received, as I have mentioned in Chapter IX., through my friend Don Manuel Garcia, a map drawn by General Pacheco, showing the march of the principal division of that army, along the banks of the River Negro, from the Islands of Choleechel to the junction of the Neuquen.

The routes in question have been very material to the laying down of the true courses of some of the many rivers which constitute the most important, though hitherto undescribed, features of that part of the continent:—and it is satisfactory to find that they are strikingly corroborative of the accounts, as far as they go, which I had already cited as given both by Villariño, by Don Luis de la Cruz, and our own countryman, Dr. Gillies.

Thus far I have spoken of my geographical materials:—they will be found embodied in the accompanying map of the Republic by Mr. John Arrowsmith, who has spared no time or labour in its construction. In this he has also availed himself of the invaluable recent survey of Captain FitzRoy, to give the whole of the line of coast upon the very best authority. In the interior the various routes, which appear now for the first time collected together, have been all re-protracted from the original sources of information, whilst a careful re-examination of the labours of the Boundary Commissioners and of other authenticated authorities has enabled him to correct many errors of position which had crept, I hardly know how, into the latest maps, not excepting those compiled in the topographical department of Buenos Ayres.

Upon the whole, although we have yet a vast deal to learn before any perfect map can be drawn of this extensive portion of the new continent, I trust that the present attempt will be regarded as no slight improvement upon our old geography of that part of the world[5].

I regret that I lost, during my residence at Buenos Ayres, the opportunity of making what too late I learnt would have been very acceptable additions to our zoological collections; but I never imagined that our public museums were so entirely destitute, as I found them upon my return, of specimens of the commonest objects of natural history, from a country with which we had been so many years in, I may say, almost daily intercourse. Mr. Darwin, and the officers of His Majesty's ship Beagle, have since done much to supply these deficiencies; but we still want, I believe, specimens of by far the greater part of the birds and beasts of which Azara gave us the description nearly forty years ago. The collections of some of the museums on the Continent are, I believe, much more complete; especially those of Paris, to judge from the accounts of the acquisitions made by M. Alcide d'Orbigny, the fruits of many years spent in those countries, to which he was sent in 1826, expressly, I believe, to collect information and specimens for the Museum of Natural History.

Instigated first by Dr. Buckland, I made those inquiries for fossil remains, the results of which I flatter myself have been of no common interest both to the geologist and comparative anatomist. The examination of the monstrous bones which I sent to this country, by the learned individuals who have taken the pains to describe them, assists us to unravel the fabulous traditions handed down by the aborigines respecting a race of Titans, whilst it proves indisputably that the vast alluvial plains in that part of the world, at some former period, the further history of which has not been revealed to us, were inhabited by herbivorous animals of most extraordinary dimensions, and of forms greatly differing from those of the genera now in existence.

To the account of the Megatherium, and other extinct animals, I am now enabled, by a delay which has

unavoidably occurred in the publication of this volume, to insert the representation of another extinct monster, the Glyptodon, which has been very recently discovered at no great distance from the city of Buenos Ayres, apparently in a very perfect state, and which I trust ere long will be in England. Mr. Owen, of the College of Surgeons, has been good enough to draw up for me the description of it, which I have added in a note at the end of the tenth chapter.

It is, perhaps, not unworthy of a passing observation here, that, amongst all the remains of extinct animals which we have now obtained from the Pampas, most of which too seem to have been singularly provided with a structure for self-defence, no instance, I believe, has as yet been satisfactorily proved of the occurrence of any portion of a *carnivorous* animal.

It only remains for me to allude to the third and last part of my book, upon the trade and public debt of the provinces of La Plata; and of which I can only say that I have spared no inquiry to render it as correct as is compatible with so brief and general a notice. The accounts officially published by the Government of Buenos Ayres, and the papers laid before Parliament, have enabled me to complete the Returns of Trade to the close of 1837. They show that the River Plate to the British manufacturer has been the most important of all the markets opened to him by the emancipation of the Spanish Americans; and that the value of the British trade there alone exceeds the aggregate of all other foreign countries put together. Spain herself has not taken for many years past so large a quantity of British manufactured goods as, it appears, have been sent to the River Plate.

The particulars of the debt have only been brought down to the commencement of 1837; for, although the accounts have since been published for another year, I confess I do not sufficiently understand them at this distance to attempt to explain them, further than to say that they show increased difficulties, from the lamentable and unexpected circumstances which have again disturbed the peace of the Republic.

On the party questions which have hitherto agitated the people of these countries, I have purposely said as little as possible; much less have I thought of writing the history of a country which has not been a quarter of a century in existence; the institutions of which are quite in their infancy, and must necessarily require a long period ere they can assume a more definite character.

The generality of my readers, I take it for granted, are acquainted with the nature of the old colonial government of Spain, with the events which led to the emancipation of the South Americans, and with the fact of their having declared for a democratic form of government in all the new states.

FOOTNOTES:

[1] Amongst other documents which I obtained through the kindness of the government were some large topographical maps of the province of Buenos Ayres, drawn expressly for me by desire of General Rosas, the present governor, comprising all the data respecting that province, collected by the topographical department up to the year 1834.

[2] A re-calculation by M. Oltmanns, of some of the observations of the Boundary Commissioners, has slightly altered a few of their positions: his corrections will be found in the volume for 1830, of the Memoirs of the Academy of Sciences of Berlin.

[3] Noticias Historicas y Descriptivas sobre el gran pais del Chaco y Rio Vermejo, por José Arenales. —Buenos Aires, 1833, 8vo.

[4] Collección de Obras y Documentos relativos à la Historia antigua y moderna de las Provincias del Rio de la Plata, ilustrados con Notas y Disertaciones, por Pedro de Angelis.—Buenos Aires, 1836, folio. The completion of this work has been suspended for want of paper to go on with, owing to the French blockade of Buenos Ayres, since March, 1838.

[5] For the convenience of those who may desire to have it separately, the map may be had from Mr. Arrowsmith without the book.

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BUENOS AYRES AND THE PROVINCES OF LA PLATA.

CHAPTER I.
DIVISIONS AND PRESENT STATE OF THE REPUBLIC.

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The United Provinces of La Plata, or, as they are sometimes called, the Argentine Republic, comprise, (with the exception of Paraguay and the Banda Oriental, which have become separate and independent states) the whole of that vast space lying between Brazil and the Cordillera of Chile and Peru, and extending from the 22nd to the 41st degree of south latitude.

The most southern settlement of the Buenos Ayreans as yet is the little town of Del Carmen, upon the river Negro.

The native Indians are in undisturbed possession of all beyond, as far as Cape Horn.

Generally speaking, the Republic may be said to be bounded on the north by Bolivia; on the west by Chile; on the east by Paraguay, the Banda Oriental, and the Atlantic Ocean; and on the south by the Indians of Patagonia. Altogether, it contains about 726,000 square miles English, with a population of from 600,000 to 700,000 inhabitants.

This vast territory is now subdivided into thirteen Provinces, assuming to govern themselves, to a certain degree, independently of each other; though, for all general and national purposes, confederated by conventional agreements.

For want of a more defined National Executive, the Provincial Government of Buenos Ayres is temporarily charged with carrying on the business of the Union with foreign Powers, and with the management of all matters appertaining to the Republic in common. The Executive Power of that Government, as constituted in 1821, is vested in the Governor, or Captain General[6], as he is styled, aided by a Council of ministers appointed by himself—responsible to the junta or legislative Assembly of the Province by whom he is elected. The junta itself consists of forty-four deputies, one-half of whom are annually renewed by popular election.

Geographically, these Provinces may be divided into three principal sections:—1st, the Littorine, or eastern; 2nd, the Central, or northern; 3rd, those to the west of Buenos Ayres, commonly called the provinces of Cuyo.

The Littorine Provinces are, Buenos Ayres, and Santa Fé, to the west, and Entre Rios and Corrientes to the east of the River Paranã. Those in the Central section, on the high road to Peru, are Cordova, Santiago del Estero, Tucuman, and Salta; to which may be added, Catamarca, and La Rioja. Those lying west of Buenos Ayres, and which formerly constituted the Intendency of Cuyo, are San Luis, Mendoza, and San Juan.

All these together now form the confederation of the United Provinces of La Plata.

Under the Spanish rule, the Viceroyalty of Buenos Ayres comprehended further, the provinces of Upper Peru, now called Bolivia; as well as Paraguay, and the Banda Oriental: and immense as this jurisdiction appears for one government, it was but a portion separated from that of the old viceroys of Peru, whose nominal authority at one time extended from Guayaquil to Cape Horn, over 55 degrees of latitude, comprising almost every habitable climate under the sun; innumerable nations, speaking various languages, and every production which can minister to the wants of man.

To Spain, it was a convenience and saving of expense to divide her American possessions into as few governments as possible; and under her colonial system, without a hope of improving their social condition, their native industry discouraged, and the very fruits of the soil forbidden them, in order to ensure a sale for those of the mother country, it was of little consequence to the generality of the people by what viceroy they were ruled, or at what distance from them he resided.

It became, however, a very different matter when that colonial system was overthrown, and succeeded by native governments of their own election. Then, all the many and various distinctions of climate, of language, of habits, and productions, burst into notice; and as they separately put forward their claims to consideration, the difficulty, if not impossibility, became manifest, of adequately providing for them by the newly-constituted authorities, which, although succeeding to all the jurisdiction of the viceroys, repudiated *in limine* the principles of the system under which such discordant interests had hitherto been controlled and held together.

The consequence has been, that most of the new states in their very infancy have been subjected to the embarrassing necessity of re-casting their governments, and dividing and subdividing their extensive territories, as the varying and distinct interests of their several component parts have shown to be requisite for their due protection and development. Nothing has tended more to retard the organization and improvement of their political institutions than this necessity; and nowhere has it been more strikingly exemplified than in the widely-spread provinces of La Plata. In the first years of the struggle with the mother country, one common object, paramount to all other considerations, the complete establishment of their political independence, bound them together—perhaps I should more correctly say, prevented their separation;—but the very circumstances of that struggle, and the vicissitudes of the war, which often for long periods together cut off their communications with the capital, and with each other; obliging them to provide separately for their own temporary government and security, gave rise in many of them, especially those at a distance, to habits of more or less independence, which, as they imperceptibly acquired strength, produced in some, as in Paraguay and Upper Peru, an entire separation from Buenos Ayres; and in others such an assumption of the management of their own provincial affairs, as ere long reduced the metropolitan government to a nullity.

It is true that, up to 1820, the semblance of a Central Government was maintained at Buenos Ayres, but in that year the unpopularity of the measures of the Directory and of the National Congress led to its final

dissolution, under circumstances which precluded all hope of its re-establishment, and terminated in the system of federalism, which has ever since *de facto* subsisted.

Experience has taught Buenos Ayres the inefficacy of forcible measures to bring back the provinces under her more immediate control; and though congresses have been more than once convoked for the purpose of establishing something more definite as to the form, at least, of their national government, whether central or federal, individual and local interests have always prevailed in thwarting such an arrangement; and the probability now is, that for a long time to come the national organization of this State will be limited to the slender bonds of voluntary confederation, which at present constitute the *soi-disant* union of the provinces, not only with each other, but with their old metropolis, Buenos Ayres.

It is not my purpose here to enter into the history of the domestic troubles and civil dissensions which brought about this state of things in the new republic: it is an unsatisfactory, and to most of my readers would be a very unintelligible, narrative. Suffice it to say, that whilst the political importance of Buenos Ayres has been apparently not a little diminished; on the other hand, it may be questioned if the provinces have reaped any substantial advantage by shaking off their immediate dependence upon the metropolis. Most of them have suffered all the calamitous consequences of party struggles for power, and have fallen under the arbitrary rule of the military chiefs, who, in turn, have either by fair means or foul obtained the ascendency; and if in some of them the semblance of a representative junta has been set up in imitation of that of Buenos Ayres, it will be found, I believe, that such assemblies have, in most instances, proved little more than an occasional convocation of the partisans of the governor for the time being, much more likely to confirm than to control his despotic sway.

The present political state of the provinces of La Plata is certainly very different from what was expected by the generality of those who originally took an interest in the fate of these new countries. It is, however, a state of things not confined to this republic; we shall find, more or less, the same scenes; the same violent party struggles, the same continual changes of government; the same apparent incapacity for arriving at anything like a settled political organization in almost every one of the several independent states into which the old possessions of Spain on the New Continent have resolved themselves; and this under circumstances, to all appearance, the most dissimilar with regard to the locality, climate, soil, language, wants, and physical condition of the inhabitants; with no one common element, in fact, in their composition, save their having all been brought up in, and habituated to, the same colonial system of the mother country. What, then, is the conclusion we must draw from this fact? Is it not evident that it was that colonial system which, wherever applied, unfitted the people for a state of independence, and left them worse than helpless when thrown upon their own resources?

Well might Spain urge upon other nations, as an argument against the recognition of those countries, that the South Americans were unfit for a state of independence. She knew the full extent of moral degradation to which her own policy had reduced them; but it was futile to allege it, when it had become manifest to all the world that her own power to reduce them again to subjection was gone for ever, and that the people of South America had not only achieved their complete independence, but were resolved and fully able to maintain it. The notoriety of those facts left no alternative to foreign governments whose subjects had any real interest in the question, whatever might be the speculative opinions of some parties as to the eventual prospects of the New States.

In this country our ignorance of the real condition of the people of South America naturally led us to look back to what had taken place in our own North American colonies, and with but little discrimination perhaps, to anticipate the same results, whereas nothing in reality could be more dissimilar than the circumstances of the colonial subjects of Great Britain and Spain when their political emancipation took place.

In the British colonies all the foundations of good government were already laid: the principles of civil administration were perfectly understood, and the transition was almost imperceptible.

On the other hand, in the Spanish colonies the whole policy, as well as the power of the mother country, seems to have been based on perpetuating the servile state and ignorance of the natives: branded as an inferior race, they were systematically excluded from all share in the government, from commerce, and every other pursuit which might tend to the development of native talent or industry. The very history of their own unfortunate country was forbidden them, no doubt lest it should open their eyes to the reality of their own debased condition.

When the struggle came, the question of their independence was soon settled irrevocably; but as to the elements for the construction at once of anything like a good government of their own, they certainly did not exist.

Under these circumstances, what was perfectly natural took place. In the absence of any other real power, that of military command, which had grown out of the war, obtained an ascendency, the influence of which in all the New States became soon apparent. They fell, in fact, all of them more or less under military despotism. The people dazzled with the victories and martial achievements of their leaders, imperceptibly passed from one yoke to another.

It is true that national Congresses and legislative Assemblies were everywhere convoked; but, generally aiming at more than was practicable or compatible with their circumstances, they in most instances failed, and by their failure rather confirmed the absolute power of the military chiefs. They, however, abolished the slave-trade, put an end to the forced service of the mita, so grievous to the Indians, and nominally sanctioned more or less the liberty of the press,—measures which gained them popularity and support amongst men of liberal principles in Europe, who fancied they saw in them expressions of public opinion, and evidences of a fitness amongst the people at large for free institutions; but this was an error.

The people of South America, with the Laws of the Indies still hanging about their necks, shouted indeed with their leaders, "Independence and Liberty," and gallantly fought for and established the first; but as to liberty, in our sense of the word at least, they knew very little about it:—how could they?

They have yet practically to learn that true liberty in a civilized state of society can only really exist where the powers of the ruling authorities are duly defined and balanced; and where the laws—not the colonial laws of Old Spain—are so administered as to ensure to every citizen a prompt redress for wrongs, entire personal security, and the right of freely expressing his political opinions. The working of such laws makes men habitually free and fit for the enjoyment of free institutions. But such a state of things is not brought about in a day or in a generation, nor can it be produced by any parchment constitution, however perfect in

theory. The experiment has been tried of late years in some of the oldest states of Europe, and has invariably failed. Is it then reasonable that we should expect it to be more successful in such infant states as these new republics? Time—and we, of all people in the world, ought best to know how long a time—is requisite to bring such good fruit to maturity.

Education, the press, a daily intercourse with the rest of the world, and experience not the less valuable because dearly bought, are all tending gradually to enlighten the inhabitants of these new countries, and to prepare them for their future destinies. And, although from a variety of causes, their advancement may appear slow, and their present state fall far short of what has been expected of them, the truth is, they have made immense progress, compared with their old condition under the colonial yoke of Spain;—and especially, I will say so, of Buenos Ayres.

FOOTNOTES:

[6] Upon the election in 1835 of the present Governor Don Juan Manuel Rosas, he refused, under the particular state of things at the time, to undertake the office, unless invested with extraordinary powers, which were in consequence granted by the Junta without limitation for such time as circumstances might render necessary:—he was elected for five years.

CHAPTER II.
RIVER PLATE.

The River Plate—why so called. Its immensity. Arrival off Buenos Ayres. Passengers carted on shore. Want of a better landing-place, for goods especially. Navigation of the River not so perilous as was supposed in former times.

The river Plate, or La Plata, was originally named after De Solis, who first entered it in 1515. Some years afterwards, Sebastian Cabot, ascending it above its junction with the Paranã, found silver ornaments amongst the natives; and thence believing, or desiring to induce others to believe, that that precious metal abounded on its shores, he gave it the false appellation by which it has ever since been known.

It is a singular coincidence, that thus the two mightiest rivers of the South American continent, indeed two of the most remarkable rivers of the world, the Plata, and the Amazons, should derive their names from fictions, rather than from those brave adventurers who first made them known, and to whom the honour was the more justly due; as both of them, Orellana, as well as De Solis, lost their lives in the prosecution of those particular discoveries.

But one feeling takes possession of the stranger on his arrival off this wonderful river—that of amazement at the immensity of its extent; a hundred miles before he enters it, he may have seen its turbid current, and had to struggle with its influence in the ocean itself[7]. At its mouth, from Cape St. Mary's to Cape St. Antonio, its width is 170 miles. Farther up, between Santa Lucia, near Monte Video, and the point of Las Piedras on its southern bank, within which its waters are generally fresh, it is double[8] the distance across from Dover to Calais.

But for that positive freshness, the stranger can hardly credit that he is not still at sea. He has yet to sail up it nearly two hundred miles ere he reaches the anchorage off Buenos Ayres, and then, at the end of his voyage, if the ship be large[9], he will probably find it difficult to make out the land.

It is only from the pozos, or inner roads, that the city becomes visible in its full extent, ranging along a slightly elevated ridge, which bounds the river. The towers of the churches, and here and there a solitary Umbú tree, alone break an outline almost as level as the horizon of the river itself. There is no back-ground to the picture, no mountains, no trees; one vast continuous plain beyond extends for nearly 1000 miles unbroken to the Cordillera of Chile.

Unless the weather be perfectly settled, of which the barometer is the best index, the landing is not unattended with danger. I have known many a boat lost in crossing the bar or bank which lies between the outer and inner roads[10]. Nor is the bank the only danger: thick fogs at times come on, suddenly enveloping land and water in total darkness without the slightest previous indication; in such a dilemma, if a boat be caught without the means of anchoring, the chances are that she may be carried down the river by the currents, and the people half-starved before they are picked up or can find the land again.

But supposing these dangers passed, nothing can be more inconvenient or strikingly characteristic of the country than the actual landing. A ship's boat has seldom water enough to run fairly on shore, and, or arriving within forty or fifty yards of it, is beset by carts, always on the watch for passengers, the whole turn-out of which I defy any other people in the world to produce anything at all approaching.

On the broad flat axle of a gigantic pair of wheels, seven or eight feet high, a sort of platform is fixed of half a dozen boards, two or three inches apart, letting in the wet at every splash of the water beneath; the ends are open—a rude hurdle forms the side, and a short strong pole from the axle completes the vehicle; to this unwieldy machine the horse is simply attached by a ring at the end of the pole, fastened to the girth or surcingle, round which his rider has the power of turning him as on a pivot, and of either drawing or pushing the machine along like a wheelbarrow, as may be momentarily most convenient:—in this manner, for the first time in my life, I saw the cart fairly before the horse:—in Europe we laugh at the idea; in South America nothing is more common than the reality.

The wild and savage appearance of the tawny drivers of these carts, half naked, shouting and screaming and jostling one another, and flogging their miserable jaded beasts through the water, as if to show the little value attached to the brute creation in these countries, is enough to startle a stranger on his first arrival, and induce him for a moment to doubt whether he be really landing in a Christian country. It is a new and a strange specimen of human kind, little calculated to create a favourable first impression.

In old times there was a sort of mole, such as it was, which ran some way into the river, and obviated a part, at least, of these inconveniences, but it was either washed or blown down some years ago, and the people have been too indolent, or too busy ever since to set about replacing it; not, however, for want of plans for its reconstruction, amongst which one for a chain-pier, some years ago submitted to the government, appeared particularly suited to the locality; why it was not adopted, I never heard, but it is no credit to the natives that something of the sort has not long since been built. Nothing is more wanted, or more deserving the primary attention of the authorities, whilst I believe no work they could undertake would more certainly repay its expenses, for the convenience to passengers is a small consideration compared with the value which any commodious landing-place for merchandise at Buenos Ayres would be of to the trade. The loss and damage yearly sustained by the present mode of carrying goods on shore, in the rude carts I have described, is incalculable, and highly detrimental to the port in a commercial point of view.

With respect to the passage up the river, though somewhat intricate, it is by no means so perilous as it was long believed to be, probably because the commercial shipping from Spain rarely ascended higher than Monte Video, to which Port the country produce from Buenos Ayres and the interior provinces was for the most part sent down in small craft for shipment to Europe.

In 1789 Malaspina commenced the elaborate survey of the river, afterwards completed by Oyarvide, and still further corrected by the observations of Captains Beaufort and Heywood, of the British navy, the latter of whom, also, published particulars directions for the navigation of the several channels between the banks. With his chart and sailing[11] directions, and due attention to the soundings and currents, there is now little risk; and that little would be still farther diminished by the establishment, long projected, of a floating light off the tail of the Ortiz bank, and of two or three leading landmarks opposite to the Chico channel.

The most dangerous parts of the river are buoyed, and licensed pilots ply off its mouth to take vessels either into the harbour of Monte Video, or up to Buenos Ayres.

Ships drawing fifteen or sixteen feet water may ran freely up to the anchorage of that city. Foreign vessels do not go higher, Buenos Ayres being at present the only port of entry; indeed, were it otherwise, and the navigation of the upper parts of the river thrown open, and declared free, as some of the provinces have at times wished, it is not likely that European shipping would ever avail themselves of it, seeing that the passage up from Buenos Ayres to Corrientes, besides the additional risk, would at least occupy as much time as the whole voyage out from France or England.

FOOTNOTES:

[7] Kotzebue says 200.—"In the parallel of the Rio de la Plata, although 200 miles from land, we were daily carried by the current thirty-nine miles out of our course; so great is the influence of this mighty river."—Kotzebue's *Voyage round the World*, 1823-26.

[8] The distance between Point Piedras and Santa Lucia Point is fifty-three miles.

[9] Vessels drawing more than sixteen feet water seldom get nearer than seven or eight miles.

[10] In former times the commanders of our men-of-war established a good rule, that "no boat should go on shore without its anchor, and none leave it after sunset;" which, if attended to by our merchantmen, might prevent many a calamitous accident.

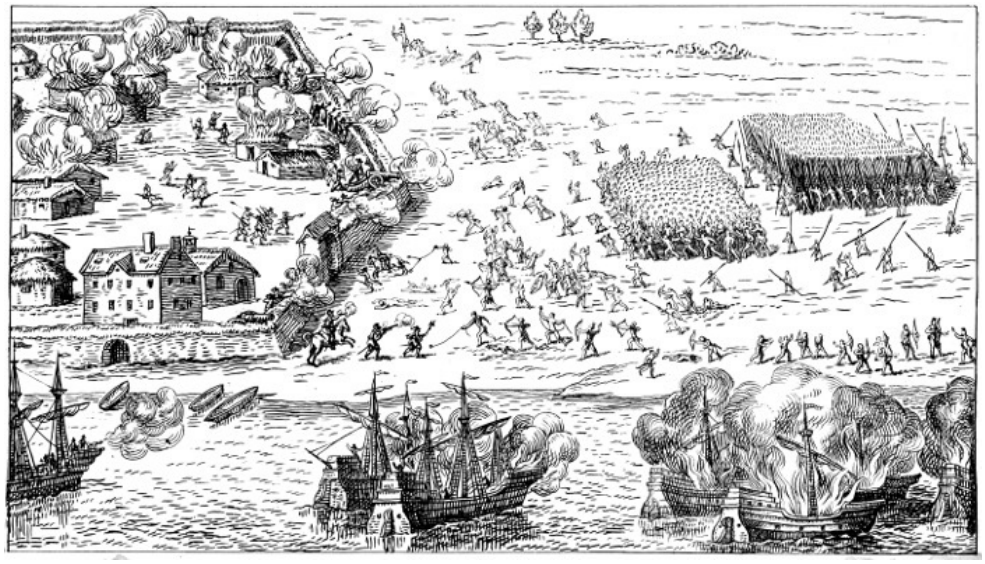
[11] They will be found in Purdy's "Sailing Directory, for the South Atlantic Ocean," published by Laurie, 1837, together with those of M. Barral of the French navy, the results of a still more recent survey of the River.

CHAPTER III.
CITY OF BUENOS AYRES.

First Impressions of Buenos Ayres. Date of the Foundation, and Insignificance of the Colony for a long period. Contraband Trade carried on through it a grievance to the Mother Country. Erected into a distinct Viceroyalty in 1776, and its trade opened in consequence of the modified system adopted by Spain about the same time. The advantages of this to Buenos Ayres.

If my first feelings on being carted ashore at Buenos Ayres in the uncouth manner I have described, were none of the most agreeable, they soon passed off, and gave way to different impressions. As I walked up to the lodgings which had been prepared for me, I was struck with the regularity of the streets and buildings, the appearance of the churches, the general cheerfulness of the white-stuccoed houses, and especially with the independent contented air of the people—- a striking contrast to the wretched beggary and slave population, of which I had lately seen so much at Rio de Janeiro.

The date of the foundation of this city is comparatively recent, and long subsequent to the arrival of the first discoverers of the country, to whom neither the aspect of the Pampas, nor the warlike disposition of the Querandis, the then inhabitants, appear to have offered any attractions. Their search was for the land of gold and silver, which was evidently not this: in quest of those precious metals they ascended the river, and for the most part settled in the more inviting regions of Paraguay; hoping from thence to open an easy communication with the rich countries of Peru.



The first Settlement at Buenos Ayres, in 1535, beseiged by the Querandi Indians.

(*From the original representation given in Ulric Schmidel's account thereof, on his return to Nuremberg.*)

In 1535 the Adelantado, Don Pedro de Mendoza, on his way to Paraguay with one of the most brilliant expeditions ever equipped in Spain for South America, landed to recruit his people near the spot where Buenos Ayres now stands, and caused a fort to be built there for the first time, in which he left what he supposed a sufficient garrison for its defence; but he was mistaken—the warlike natives as soon as he was gone drove out the Spanish soldiers, and remained for nearly another half-century in undisturbed possession of all that part of the country.[12]

It was not till the year 1580 that the famous Don Juan de Garay, then in Paraguay, determined once more to endeavour to form a permanent settlement in the same neighbourhood. In this attempt the Spaniards as before met with a most obstinate resistance on the part of the natives, who attacked them armed with their formidable slings (the bolas now used by the gauchos) and with bows and arrows, to which they tied burning matches, which set fire not only to their tents but to their shipping. De Garay's little band, which only consisted of sixty men-at-arms, was at first well nigh overwhelmed by the number of the savages who poured down upon them bravely fighting for their lands. On both sides prodigies of individual valour are related. The death, however, of the Cacique, who commanded in chief, seems to have decided the battle; the Indians, seeing him fall, fled, followed by the victors till they were weary of killing them: and such was the slaughter that to this day the scene of the engagement is called *La Matanza*, or "the Killing Ground."

After this victory De Garay took formal possession of the country in the King of Spain's name, and founded the present city of Buenos Ayres—A.D. 1580.

For two centuries the settlement thus planted languished in insignificance, abandoned to its own resources, and the mother country, to all appearance, fearing rather than desiring its aggrandizement: nor was this without cause;—Spain, in fact, lost so immensely by the contraband trade carried on from Peru, through the river Plate, that she became accustomed to regard with something more than indifference a possession which in consequence of her own prohibitory and restrictive system, was totally unproductive to her, whilst the facilities it offered for illicit trading made it a fruitful source of grievance and of disputes with other nations.

The extent, however, of these evils in the course of time produced their own remedy. The King of Spain at last discovered that a Viceroy at Lima could not put down the smugglers in the river Plate, or prevent the continual territorial encroachments of the Portuguese in the same quarter.

The necessity had long been evident of establishing a separate and independent authority on the spot where its vigilance was in daily request, and in 1776 Buenos Ayres was made the seat of a new Viceroyalty, and separated from the government of Peru.

It was about that time, also, that Spain made most important changes in her colonial system. The exclusive and pernicious monopoly of the whole trade of South America, till then possessed by the merchants of Seville and Cadiz, was put an end to, and a comparatively free intercourse was, for the first time, permitted with many ports in the new world, with which till then it was death to communicate. Buenos Ayres reaped a large share of the advantages of this alteration in the commercial views and policy of the mother country; and from a nest of smugglers became one of the first trading cities in Spanish America. The rapid increase of her population, under these new circumstances, is worth notice.

FOOTNOTES:

[12] See annexed plate, copied from the original in the account published by Ulric Schmidel, a volunteer under Mendoza, and one of the garrison besieged by the Querandis.

CHAPTER IV.
POPULATION OF BUENOS AYRES.

Statistics of the Population. Its great increase in the last fifty years. Castes into which it was formerly divided now disappearing. Numbers of Foreigners established there, especially British. Their influence on the habits of the Natives. The Ladies of Buenos Ayres; the Men and their occupations.

In the year 1767, when M. de Bougainville visited Buenos Ayres, he tells us that the number of the inhabitants did not exceed 20,000.

In 1778, the year in which the port was partially thrown open under the free-trade regulations of Spain, as they were called, a census was taken, by which it appears that the inhabitants of the city and of its campaña, or country jurisdiction, amounted to 37,679 souls, of which 24,205 belonged to the city, 12,925 to the country, and 549 were members of religious communities; divided as follows, viz.:—

Colour.	City.			Country.		
	Males.	Females.	Total.	Males.	Females.	Total.
1, Spaniards and Creoles	7,821	7,898	15,719	5,008	4,724	9,732
2, Indians	276	268	544	841	702	1,543
3, Mestizoes	289	385	674	..	..	..
4, Mulattoes	1,366	1,787	3,153	571	449	1,020
5, Negroes	1,933	2,182	4,115	351	279	630
Total	11,685	12,520	24,205	6,771	6,154	12,925

Summary.

Population of the city	24,205
Population of the country	12,925
Ecclesiastical establishments	549
Total	37,679

To these numbers, however, some, and not an inconsiderable, addition should be made for short returns, particularly from the country districts; for, let it be borne in mind, in examining all such official estimates of the population of the Spanish colonies, that, as any attempt on the part of the authorities to take a census was sure to be regarded as the forerunner of some new exaction for the service of the mother country, so it was as certain to be evaded, especially by the lower orders of the people, and, in proportion, to fall short of the reality. In this census it does not appear that the military were included, but in that year, or the preceding one, no less than 10,000 men were sent out from Spain under the command of the Viceroy Cevallos, in addition to the ordinary forces, to carry on the war with the Portuguese: a great part of them it may be assumed never returned, and should therefore be added to the numbers of the colonists. Making, then, a fair allowance for these deficiencies in the census for 1778, the population at that time probably did not fall short of 50,000 souls; and this calculation may be rather under than over the truth.

In 1789, ten years afterwards, Helms, the German traveller, on his way to Peru, was told by the Viceroy at Buenos Ayres that the city contained between 24,000 and 30,000 inhabitants, a calculation probably founded on the census of 1778, with his own vague notion of the probable increase upon it in the interim. No mention is made by him of the population of the country.

In 1795 the Viceroy Aredondo, on delivering up the government to his successor, took occasion to allude to the great increase which had taken place in the population since the opening of the trade, and spoke of it as then amounting altogether to nearly 60,000 souls.

In 1800 Azara calculated it to be 71,668, estimating 40,000 for the city, and 31,668 for the country-towns and villages within its jurisdiction—a great increase since 1778, compared with the past, which can only be ascribed to the more liberal policy adopted by Spain, and to the extraordinary impulse thereby given to the colony. This, however, was but an indication of the further results to be anticipated from the removal of those remaining restrictions which still grievously hampered the energies of the community, and retarded the development of the capabilities of a country formed by nature to be a great commercial emporium. The British invasions in 1806 and 1807 awakened the Buenos Ayreans to a sense of their own political importance, and the subsequent struggle with the mother country for their independence opened their ports to all the world; and in nothing are the consequences more strikingly exemplified than in the extraordinary increase which since that epoch has taken place in the population, notwithstanding all the waste of war in all its forms, foreign and civil, by land and by sea.

The following Tables of the Marriages, Births, and Deaths in the city and country districts of the province for 1822, 1823, 1824, and 1825, are taken from data published under the authority of the Government; and the calculations founded upon them give the most correct idea to be procured of the extent of the population up to the close of 1825.

No. 1.—MARRIAGES.

	City.				Country.			
	1822.	1823.	1824.	1825.	1822.	1823.	1824.	1825.
1. Whites	331	366	357	393	602	547	513	549
2. Free Coloured People	120	88	119	135	81	86	81	62
3. Slaves	130	112	107	71	40	59	48	41
Total	581	566	583	599	723	683	642	652

No. 2.—BAPTISMS.

	City.				Country.			
	1822.	1823.	1824.	1825.	1822.	1823.	1824.	1825.
1. Whites	1962	2110	2163	2102	2703	2672	2534	2735
2. People of Colour	748	816	835	793	498	532	498	399
Total	2710	2926	2998	2895	3201	3204	3032	3134

No. 3.—DEATHS.

	City.				Country.			
	1822.	1823.	1824.	1825.	1822.	1823.	1824.	1825.
1. Whites	1448	1927	1498	1812	1463	1801	1446	1392
2. Free Coloured People	591	846	714	895	350	364	333	252

3. Slaves	114	145	114	98	52	74	90	47
Total	2153	2918	2326	2805	1865	2239	1869	1691

SUMMARY.

	1822	1823	1824	1825
Total Marriages	1305	1249	1225	1251
" Baptisms	5911	6130	6030	6029
" Deaths	4018	5157	4195	4496
Excess of Births over Deaths	1893	973	1835	1533

Thus it appears that the proportion of births to deaths is in the ratio of about four to three: amongst the coloured population, the births are very little more than equal to the deaths; in the city they fall much short of them; the increase, therefore, is on the white stock. The births to the marriages appear to be as nearly five to one.

The *Statistical Register* of Buenos Ayres assumes the annual measure of mortality to be one in thirty-two in the city, and one in forty in the country; and, taking the average of the results for 1822 and 1823, arrives at the conclusion that the inhabitants of the city amounted, at the commencement of 1824, to 81,136, and those of the country to 82,080, making in all a population of 163,216. If we calculate, according to the same rule, the mean of the results of the bills of mortality for the four years ending with 1825, it will give us a population for the city of 81,616 persons, and for the country districts of 76,640, in all of 158,256, at the close of 1825; about 5000 less than the estimate made in the *Register* two years before, the falling off being in the country: but this is at once accounted for by the recruiting which took place in 1825 for the war with Brazil, which must have taken off a much larger number: allowing for which, I think we may fairly assume that the total population of the city and province of Buenos Ayres at the close of that year was not far short of 165,000 souls, being, as nearly as we have the means of calculating, about double what it was twenty years before. At the time I am writing, ten years afterwards, I have not a doubt that it amounts to nearly 200,000[13].

As an additional exemplification of the increase which has taken place in the population since the time of M. de Bougainville, I annex a plan of the city, showing what were its limits in his time, and what has been added since.

From the numbers let us turn to the general composition of this population.

The census of 1778 divided it into five castes.

1. The Spaniards and their descendants born in America, generally known as Creoles.

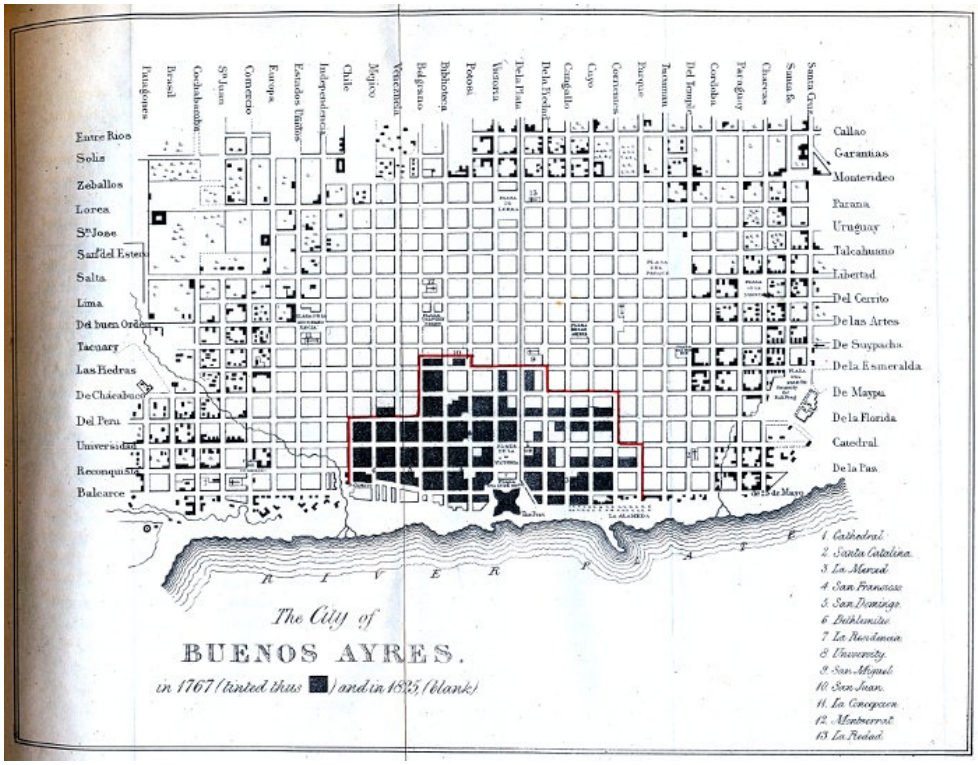
2. The native Indians.

3. The Mestizoes—offspring of the Spaniard and Indian.

4. The Mulattoes—offspring of the Spaniard and Negro.

5. The Negroes or Africans born.

Of these five castes, however, the Indians and their Mestizo offspring formed a very small and insignificant proportion, and can only be regarded as accidentally domiciliated at Buenos Ayres in consequence of its being at that time the principal channel of communication between Peru, their proper soil, and Spain.



***The City of* BUENOS AYRES, *in 1767* (*tinted thus* ■) *and in 1825*, (*blank*).**

The original Indians of Buenos Ayres were a hostile race, who would hold no intercourse with their conquerors. No mixture, therefore, of Spanish and native blood took place in that particular part of South America, which could produce a distinct caste, as in the Upper Provinces and in Peru, where the more peaceable and domesticated inhabitants continue to the present day to constitute the main stock of the population. In those parts we see a striking difference in the people; the further we advance into the interior, the more scarce become the white in proportion to the coloured inhabitants. The aboriginal Indian blood decidedly predominates in the Mestizo castes, whilst the negro and his Mulatto descendants, so common on the coast, are there almost unknown. The cause of this is easily explained; for a long period

very few European women reached the interior of America: the Spaniards, therefore, who settled there, were under the necessity of mixing with the natives, from which connexion has arisen that numerous race, the Mestizoes, which forms so large a part of the present population of those countries. The same difficulty in transporting their women from Europe did not occur with respect to Buenos Ayres; there the European stock was easily kept up, though for a long period it increased but slowly; and, but for the adventitious circumstance of its having been for some years a depôt for the slave-trade, under the Asiento Treaties, the population of Buenos Ayres would have been nearly free from be seen that the Indian and Mestizo no longer appear: the division made is simply into the white and the coloured population; and, although the latter still at that time amounted to nearly a fourth part of the whole, it had ceased to increase. In the four years the births barely exceeded the deaths, and whilst the proportion of deaths amongst the coloured people increased, there was a striking falling off in the number of their marriages and births, even from 1822 to 1825. The slave-trade has in fact, been prohibited since 1813, by a decree of the Constituent Assembly, consequently any further supply from the Negro stock has ceased, and it cannot be very long ere all trace of its having ever existed must be merged in the rapid increase of the whites—a result which will be greatly accelerated by the introduction of fresh settlers from Europe, who are daily arriving and domiciliating themselves in the new republic. Of the extent of this some notion may be formed when I state that the number of foreigners, who, up to 1832, had fixed themselves in the city and province of Buenos Ayres, amounted, with their wives and children, to no less than from 15,000 to 20,000 persons. Of these, about two-thirds were British and French, in about equal proportions; the remainder was made up of Italians, Germans, and people of other countries, not the least numerous of whom were emigrants from the United States, and especially from New York.

As it may interest some of my readers to know what classes of our countrymen find employment at Buenos Ayres, I have given in the Appendix an account of them, as taken from a register which I established on my own arrival there, together with the marriages, births, and deaths amongst them, as far as they could be learned for the period stated: to these I have further added a copy of the Treaty I concluded with the Government of Buenos Ayres, in 1825, securing to His Majesty's subjects in that country many important privileges, and amongst the rest the free exercise of their own religion:—a great object to so numerous a community:—I had subsequently the satisfaction of seeing it fully carried out by the erection of an English church, capable of containing 1000 persons, towards which the Buenos Ayrean Government itself contributed, by giving a valuable plot of ground for the purpose:—His Majesty's Government appointed the chaplain, and regularly defrays one half of the annual expense, the British residents paying the remainder. A Presbyterian chapel has been since built in virtue of the same privilege by the Scotch part of the community; and for the Catholics, an Irish priest is allowed to do duty in one of the national churches.

In a population so intermixed, and in such daily communication with the people of other countries, it is not surprising that national peculiarities should have very nearly disappeared. Thus the men of the better classes in Buenos Ayres are hardly to be distinguished in their dress from the French and English merchants who have fixed themselves amongst them, whilst the ladies vie with each other in imitating the last fashions from Paris: it is only in their out-door costume that any difference is apparent; then the more becoming mantilla and shawl thrown over the head and shoulders supersede the European bonnet and pelisse. Some of them are very beautiful, and their polite and obliging manners, especially to strangers, render them doubly attractive. Our countrymen have formed many matrimonial connexions with them, which has contributed, no doubt, to the good feeling with which they are so generally regarded by the natives.

Education, it is true, has not as yet made great progress amongst them, but in this improvement is taking place, and if the young ladles of Buenos Ayres do not study history and geography, they are adepts in many pleasing accomplishments; they dance with great grace, and sing and play very prettily; the piano-forte, indeed, is a constant resource morning as well as evening in every respectable house.

Amongst the men there are native poets, whose productions do honour to the Spanish language. A collection of them, called *La Lira Argentina*, was printed in 1823, which is well worth the notice of all lovers of Spanish verse. But the men have more advantages as respects education than the ladies: in their schools and universities they are now very fairly grounded in most branches of general knowledge, and of late years it has been much the custom amongst the better families to send their sons to Europe to complete their studies.

I should say of them in general that they are observing and intelligent, and extremely desirous to improve themselves.

Their ordinary habits are certainly a good deal influenced by climate: I cannot speak of them as an industrious people, and yet it is rare to see a man who has not some nominal occupation.

From the number of *doctores*, a stranger might suppose that all the upper classes were lawyers or physicians. This is not exactly the case; but, as that degree serves to mark the man who has received a liberal education, it is generally taken by those who pass through the schools, without particular reference to their future calling. Thus I have known *doctores* in all pursuits—ministers of state, *employés* of all sorts, clerks in public offices, military officers, and merchants; all attaching to it the same importance as we do, perhaps with less right, to the ordinary title of esquire as the designation of a gentleman.

Law and physic, however, do give employment to revolution in this, as in other Catholic countries, has put an end to the unconstitutional influence exercised by them in old times, and under different circumstances: the Government having taken possession of the ecclesiastical property, the officiating priests are left to depend upon a stipend, in general barely sufficient for their decent maintenance, so that there is but small inducement left for men to devote themselves to a life of celibacy.

But it is the trade and commerce of Buenos Ayres which is the great source of occupation for its extensive population; since, though the importing and exporting part of the business may be chiefly carried on by the foreign merchants, the details are for the most part left to the natives: they collect, and prepare, and bring in for sale, all the produce of the country, and retail the goods imported from foreign countries: nor is it thought at all degrading for young men of the best connexions to stand behind a counter: there they gossip with their fair customers upon a perfect equality, and in dandyism a Buenos Ayrean shopkeeper may be backed against the smartest man-milliner of London or Paris.

The mechanics and artisans form also a large class, as may be supposed, in a country where everything is wanted, and no man feels inclined to do much; it is in this line that the European has so decided an advantage over the native from his more industrious habits; for he requires no siesta, and works whilst the

natives of all classes, high and low, are asleep: he cannot fail to prosper if he will but avoid the drinking-shops; but he must be resolute on that point, for it is a temptation which he finds at the corner of every street: no less than 600 pulperias are open in the city alone, as appears by the list of licences annually taken out at the police[14].

For everyone who will work there is employment, and as to real *want*, it can hardly exist in a country where beef is dear at a halfpenny a-pound, and where the generality of the lower orders want nothing else.

FOOTNOTES:

[13] By a return for 1836, it appears that in the *City* in that year,

The Marriages were	412
Baptisms	3211
Deaths	2785

exclusive of those in the hospitals. I have no return from the *Country*.

[14] The same list will give some idea of the general distribution of the trades for 1836; it was as follows:—

358	Wholesale stores.
348	Retail shops.
323	Tailors, shoemakers, milliners, and all handicrafts.
6	Booksellers.
598	Pulperias, or drinking shops.
26	Billiard-tables.
44	Hotels, taverns, and eating-houses.
48	Confectioners and liqueur-shops.
29	Chemists and apothecaries.
76	Flour-shops and bakeries.
44	Baracas, or hide-warehouses.
33	Timber-yards.
13	Livery-stables.
6	Coachmakers.
874	Carts and carriages paid duties.

CHAPTER V.
CITY OF BUENOS AYRES.

Great extent of the City. Public Buildings. Inconvenient Arrangement and want of Comfort in the Dwellings of the Natives a few years ago. Prejudice against Chimneys. Subsequent Improvements introduced by Foreigners. Iron gratings at the windows necessary. Water scarce and dear. That of the River Plata excellent, and capable of being kept a very long time. Pavement of Buenos Ayres.

Buenos Ayres, like all other cities in Spanish America, is built upon the uniform plan[15] prescribed I believe by the Council of the Indies, consisting of straight streets, intersecting each other at right angles every 150 yards; and, from the peculiar construction of the houses, covers at least twice the ground which would be required for any European city of the same population.

With the exception of the churches, which, though unfinished externally, exhibit in their interior all the gaudy richness of the religion to which they belong, and will be lasting memorials of the pious zeal of the Jesuits, who built the greater part of them, there is nothing remarkable in the style of the public buildings. The old government considered money laid out in beautifying the city as so much thrown away upon the colonists, and the new government has been as yet too poor to do more than has been absolutely necessary; what has been done, however, has been well done, and does credit to the republican authorities.

In their private dwellings there was a wretched want of every comfort, when I first went to the country. With but few exceptions, they were confined to a ground floor; the apartments built *en suite*, without passages, round two or three successive quadrangular courts, called patios, opening into each other; and the whole distribution about as primitive and inconvenient as can be imagined.

The floors of the best rooms were of bricks or tiles, the rafters of the roof seldom hid by a ceiling, the walls as cold as whitewash could make them; whilst the furniture was of the most gaudy, tawdry, North American manufacture: a few highly-coloured French prints, serving, perhaps, to mark the state of the fine arts in South America.

Nothing could be more anti-comfortable to English eyes. In cold weather these cold-looking rooms were heated by braziers, at the risk of choking the inmates with the fumes of charcoal; chimneys, so far from being looked upon as wholesome ventilators, were regarded as certain conductors of wet and cold; and it was not till long after the introduction of them by the European residents had practically proved their safety and superiority over the old Spanish warming-pans, that the natives could be induced to try them. The apprehension that they increased the risk of fire was even without foundation, for never were the habitations of man built of such incombustible materials. The roofs and floors, I have already said, are all of brick, and the few beams which are necessary for supporting the former are of a wood from Paraguay, as hard as teak, and almost as incombustible as the bricks themselves.

Of the prejudices of the natives about chimneys I may perhaps have rather a sensitive feeling, from a practical experience I had myself upon the subject soon after my landing amongst them. There was but one in all the apartments I occupied with my family, and that one my Spanish landlord, to my no small dismay and astonishment, ordered a bricklayer to stop up one afternoon over our heads, because he had had a dispute with my servants about the necessity of occasionally sweeping it, which he chose to take this summary way of putting an end to. The weather was wet and bad enough, and I never was more in want of the comfort of a good fire; but no entreaty or remonstrance could shake the obstinate determination of the old Don. He had the advantage of us by living over head, in the upper apartments of the building; and he was determined to make us fully sensible of the *de facto* superiority of his authority. He required no chimney himself, and he could not be made to understand that a Spanish brazier would not answer all our English wants just as well as it did his.

I lived, however, long enough in Buenos Ayres to see great changes in these matters, and such innovations upon the old habits and fashions of the people as would make a stranger now doubt whether it really be the place he may have read of. In nothing is the alteration more striking than in the comparative comfort, if not luxury, which has found its way into the dwellings of the better classes: thanks to the English and French upholsterers, who have swarmed out to Buenos Ayres, the old whitewashed walls have been covered with paper in all the varieties from Paris; and European furniture of every sort is to be met with in every house. English grates, supplied with coals carried out from Liverpool as ballast, and often sold at lower prices than in London, have been brought into very general use, and certainly have contributed to the health and comfort of a city, the atmosphere of which is nine days out of ten affected by the damps from the river. Nor is the improvement confined to the internal arrangement of the houses, a striking change has taken place in the whole style of building in Buenos Ayres. With the influx of strangers, the value of property, especially in the more central part of the city, has been greatly enhanced, and has led the natives to think of economising their ground by constructing upper stories to their houses in the European fashion, the obvious advantage whereof will no doubt ere many years make the plan general, and greatly add to the embellishment of the city.

Some peculiarities will probably long be preserved, such amongst other as the iron gratings, or rather railings, which protect the windows, and which, on more than one occasion, have proved the best safeguards of the inhabitants: it requires some time for a European to become reconciled to their appearance, which ill accords with the *beau-idéal* of republican liberty and public safety; yet when painted green they are rather ornamental than otherwise, particularly when hung, as they frequently are, with festoons of the beautiful air-plants of Paraguay, which there live and blossom even on cold iron, and one does get reconciled to them, I believe, from a speedy conviction of their necessity in the present state of society in those countries:—in the hot nights of summer, too, it is some comfort to be able to leave a window open without risk of intrusion; though some of the light-fingered gentry have made this not quite so safe as it used to be. I have known more than one instance of a clever thief running off with the clothes of the sleeping inmates, fished through the gratings by means of one of the long canes of the country, with a hook at the end of it:—in one well-known case, a gentleman's watch was thus hooked out of its pocket at his bed's head, and he was but just roused by his frightened wife in time to catch a last glimpse of the chain and seals as they seemingly danced out of the window.

It will hardly be credited that water is an expensive article within fifty yards of the Plata, but so it is; nothing can be worse than the ordinary supply of it. That obtained from the wells is brackish and bad, and

there are no public cisterns or reservoirs, although the city is so slightly elevated above the river, that nothing would be easier than to keep it continually provided by the most ordinary artificial means. As it is, those who can afford it go to a great expense in constructing large tanks under the pavement of their court-yards, into which the rainwater collected from the flat-terraced roofs of their houses is conducted by pipes; and in general a sufficiency may thus be secured for the ordinary purposes of the family; but the lower orders, who cannot afford to go to such an expense, depend for a more scanty supply upon the itinerant water-carriers, who, at a certain time of day, are to be seen lazily perambulating the streets with huge butts filled at the river, mounted on the monstrous cart-wheels of the country, and drawn by a yoke of oxen; a clumsy and expensive contrivance altogether, which makes even water dear within a stone's throw of the largest river in the world. Taken at the very edge, it is seldom of the purest, and generally requires to stand twenty-four hours before it deposits its muddy sediment, and becomes sufficiently cleared to be drinkable; it is then excellent, and may be kept for any time. I have drunk it myself on board ship, after it had been two voyages to England and back, and never tasted better.

The principal streets are now tolerably paved with granite brought from the islands above Buenos Ayres, especially from Martin Garcia. How the people got about before they were paved it is difficult to understand, for the streets must have been at times one continued slough; at least if one may judge from the state of those which are still unfinished, and which, after any continuance of wet weather, are nearly, if not entirely, impassable, even for people on horseback, much more so for carriages. I have seen in some of them the mire so deep that the oxen could not drag the country carts through it; and it not unfrequently happens, in such a case, that the animals themselves are unable to get out, and are left to die and rot in the swamp in the middle of the street.

It was a fair sample of the miserable economy and wretched policy of the colonial authorities, that a commercial city of such importance, and in which the traffic was daily increasing, should have been allowed so long to remain in such a state, with an inexhaustible supply of the best paving materials in the world within twenty or thirty miles of it, and of such easy water-carriage. The people however, were led to believe that the difficulties and impediments to such an improvement as the general paving of the city were next to insurmountable.

The Viceroy himself, the Marquis of Loreto, when the first notion of such a plan was started, gravely gave, amongst other reasons against it, the danger of the houses falling down from the shaking of their foundations, by the driving of heavy carts over a stone pavement so close to them, whilst another and still more weighty objection in his opinion was, the necessity it would entail upon the people to put iron tires to their cart-wheels, and to shoe their horses, which, he reminded them, would cost them more than the animals themselves. Fortunately, his immediate successors, Aredondo and Aviles, were not deterred by similar alarms. The former commenced the work with activity about the year 1795, with the aid of a subscription voluntarily raised by the inhabitants; and the latter carried it on to a much greater extent, levying a trifling duty upon the city for the purpose, which was readily submitted to, when, as the work advanced, the improvement became manifest. In later times, especially during the government of 1822-24, much more was done, and there are few of the principal streets which are not now more or less completed.

The granite is excellent, and was carefully examined in situ by Mr. Bevans, an English engineer, a few years ago, who reported that it was easy to be worked, and the supply inexhaustible. When the working of it is better understood by the natives, it will probably be brought into much more general use.

FOOTNOTES:

[15] Mr. Scarlet has given the best possible description of this plan, in comparing it to a chess-board: —the relative proportions are as nearly as possible four English acres to each square.

CHAPTER VI.
CLIMATE OF BUENOS AYRES, AND ITS EFFECTS.

Climate of Buenos Ayres, liable to sudden changes. Influence of the North Wind. Case of Garcia. Effects of a Pampero. Dust-Storms and Showers of Mud. The Natives free from Epidemics, but liable to peculiar affections from the state of the atmosphere. Lockjaw of very common occurrence. The Smallpox stopped by Vaccination. Introduced in 1805, and preserved by an individual. Its first introduction amongst the Native Indians by General Rosas. Cases of Longevity, of frequent occurrence.

Azara, the best of all writers upon the country, has with much truth observed that the climate of Buenos Ayres is governed not so much by its latitude as by the wind, a change of which will continually produce an alteration of from 20 to 30 degrees in the thermometer[16]?

I have been often asked whether the heats in summer are not almost intolerable. On some days they are so; the glass perhaps above 90° in the shade, and all nature gasping for air; but on those very days the most experienced of the natives will be clothed in warm woollens instead of linen jackets and trousers, for fear of catching cold.

During the greater part of the year the prevailing winds are northerly, which, passing over the marshy lands of Entre Rios, and then over the wide expanse of the Plata, imbibe their exhalations, and, by the time they reach the southern shores of the river, have a great influence upon the climate. Everything is damp: the mould stands upon the boots cleaned but yesterday; books become mildewed, and the keys rust in one's pocket. Good fires are the best preservatives, and I found them, if not absolutely necessary, at least very comfortable, during quite as many months as I should have had them in England; and yet I never, during nine years, saw snow, or ice thicker than a dollar, and the latter only once. Upon the bodily system the effect produced by this prevailing humidity is a general lassitude and relaxation; opening the pores of the skin, and inducing great liability to colds, sore throats, rheumatic affections, and all the consequences of checked perspiration; one of the best safeguards against which is doubtless the woollen clothing of the natives, of which I have already spoken; though they require it, perhaps, the more especially, because they seldom stir out of their houses in the extreme heat of the day; and it is at the time they do go out, when the sun has lost its power and the damps of evening are setting in, that such precautions are doubly necessary. Europeans, at first, are loth to take the same care of themselves, but sooner or later they discover that the natives are right, and insensibly fall into their ways.

The evil effects of all this humidity, so far as they are dangerous, appear to be confined to the immediate vicinity of the river, and to the inhabitants of the city; for in the pampas the gauchos sleep upon the ground during the greater part of the year in the open air without risk. Their skins, however, like those of the cattle they watch, are probably impervious to the wet.

Before I went to Buenos Ayres I had suffered much from malaria fever, caught in Greece; and when I saw, for the first time, the low, flat, marshy appearance of the whole country, I expected nothing less than a return of my old ague. Everything around seemed to bespeak it: but Buenos Ayres is free from such disorders, and cases of intermittent fever, such as that I speak of, are rarely known there.

Still, though free from the malaria of the Mediterranean coasts, the sirocco of the Levant does not bring with it more disagreeable affections than the viento norte, or north wind of Buenos Ayres; indeed, the irritability and ill-humours it excites in some people amount to little less than a temporary derangement of their moral faculties: it is a common thing to see men amongst the better classes shut themselves up in their houses during its continuance, and lay aside all business till it has passed; whilst amongst the lower orders it is a fact well known to the police that cases of quarrelling and bloodshed are infinitely more frequent during the north wind than at any other time. In illustration of this, I shall quote a case in point, the account of which I received from one of the most eminent medical men in the country, who had paid particular attention during a practice of more than thirty years to its influence upon the human system.

In the year —— a man named Garcia was executed for murder. He was a person of some education, esteemed by those who knew him, and, in general, rather remarkable than otherwise for the civility and amenity of his manners; his countenance was open and handsome, and his disposition frank and generous; but when the north wind set in he appeared to lose all command of himself, and such was his extreme irritability, that during its continuance he could hardly speak to any one in the street without quarrelling. In a conversation with my informant a few hours before his execution, he admitted that it was the third murder he had been guilty of besides having been engaged in more than twenty fights with knives, in which he had both given and received many serious wounds; but, he observed, it was the north wind, not he, that shed all this blood. When he rose from his bed in the morning, he said, he was at once aware of its accursed influence upon him;—a dull headache first, and then a feeling of impatience at everything about him, would cause him to take umbrage even at the members of his own family on the most trivial occurrence. If he went abroad his headache generally became worse, a heavy weight seemed to hang over his temples, he saw objects, as it were, through a cloud, and was hardly conscious where he went. He was fond of play, and if in such a mood a gambling-house was in his way he seldom resisted the temptation; once there, any turn of ill-luck would so irritate him, that the chances were he would insult some of the by-standers. Those who knew him, perhaps, would bear with his ill-humours, but, if unhappily he chanced to meet with a stranger disposed to resent his abuse, they seldom parted without bloodshed. Such was the account the wretched man gave of himself, and it was corroborated afterwards by his relations and friends, who added, that no sooner had the cause of his excitement passed away than he would deplore his weakness, and never rested till he had sought out and made his peace with those whom he had hurt or offended.

Europeans, though often sensible of its influence, are not in general so liable to be affected by this abominable wind as the natives, amongst whom the women appear to be the greatest sufferers, especially from the headache it occasions. Numbers of them may be seen at times in the streets, walking about with large split-beans stuck upon their temples; a sure sign which way the wind blows. The bean, which is applied raw, appears to act as a slight blister, and to counteract the relaxation caused by the state of the atmosphere.

But it is not the human constitution alone that is affected; the discomforts of the day are generally increased by the derangement of most of the household preparations:—The meat turns putrid, the milk

curdles, and even the bread which is baked whilst it lasts is frequently bad. Every one complains, and the only answer returned is—"*Señor, es el viento norte.*"

All these miseries, however, are not without their remedy; when the sufferings of the natives are at their climax, the mercury will give the sure indication of a coming pampero, as the south-wester is called; on a sudden, a rustling breeze breaks through the stillness of the stagnant atmosphere, and in a few seconds sweeps away the incubus and all else before it; originating in the snows of the Andes, the blast rushes with unbroken violence over the intermediate pampas, and, ere it reaches Buenos Ayres, becomes often a hurricane.

A very different state of things then takes place, and, from the suddenness of such changes, the most ludicrous, though often serious, accidents occur, particularly in the river; whither, of an evening especially, a great part of the population will resort to cool themselves during the hot weather. There they may be seen, hundreds and hundreds of men, women, and children, sitting together up to their necks in the water, just like so many frogs in a marsh: if a pampero breaks, as it often does, unexpectedly upon such an assembly, the scramble and confusion which ensues is better imagined than told; fortunate are those who may have taken an attendant to watch their clothes, for otherwise, long ere they can get out of the river, every article of dress is flying before the gale.

Not unfrequently the pampero is accompanied by clouds of dust from the parched pampas, so dense as to produce total darkness, in which I have known instances of bathers in the river being drowned ere they could find their way to the shore. I recollect on one of these occasions, a gang of twenty convicts, who were working at the time in irons upon the beach, making their escape in the dark, not one of whom, I believe, was retaken.

It is difficult to convey any idea of the strange effects of these dust-storms: day is changed to night, and nothing can exceed the temporary darkness produced by them, which I have known to last for a quarter of an hour in the middle of the day; very frequently they are laid by a heavy fall of rain, which, mingling with the clouds of dust as it pours down, forms literally a shower of mud[17]. The sort of dirty pickle in which people appear after being caught in such a storm is indescribable.

Sometimes the consequences are more serious, and the pampero is accompanied by the most terrific thunder and lightning; such, I believe as is to be witnessed in no other part of the world, unless it be the Straits of Sunda. Nothing can be more appalling. In Azara may be read an account of nineteen persons killed by the lightning which fell in the city during one of these storms.

But the atmosphere is effectually cleared; man breathes once more, and all nature seems to revive under the exhilarating freshness of the gale:—the natives, good-humoured and thoughtless, laugh over the less serious consequences, and soon forget the worst; happy in the belief that, at any rate, they are free from the epidemical disorders of other regions.

Still such variations from the ordinary courses of nature cannot but be productive of strange consequences; and, though the transient effects of an overcharged atmosphere may be quickly dispelled by a pampero, and the people be really free from the epidemics of other countries, there is every reason to believe that, in this particular climate, the human system is in a high degree susceptible of affections which elsewhere would not be deemed worth a moment's consideration. Besides those I have already spoken of as arising from the north wind, old wounds are found to burst out afresh, new ones are very difficult to heal; an apparently trivial sprain will induce a weakness of the part requiring years perhaps to recover from, as I know from my own experience; and lock-jaw from the most trifling accidents is so common as to constitute the cause of a very great portion of the deaths from hurts in the public hospitals. A cut thumb, a nail run into the hand or foot, a lacerated muscle, will generally terminate in it; and our own medical men well know how great a proportion of our wounded in the attack of 1806 and 1807 died from this dreadful cause. The native practitioners attribute its frequent occurrence to some peculiarity in the atmosphere acting upon the system in a manner they are as yet unable to explain. Under the name of the "mal de siete dias" (the seven days' sickness), a vast number of children are carried off by it in the first week of their existence; but, as this mortality is principally limited to the lower orders, it may perhaps in most cases be traced to mismanagement and neglect. With us, the long confinement of the mother ensures the same care of the infant in the first weeks of its life; but, in a country where the mother leaves her bed in two or three days to return to her work, the child must often be neglected. Many a Buenos Ayrean washerwoman may be seen at her usual work at the riverside three or four days after her delivery, with her infant lying for the greater part of the day upon a piece of cold hide, beside her on the damp ground. Can any one wonder that it takes cold and dies? There was a time, and but few years ago, when it was gravely asserted that the mortality amongst infants arose from their being baptized with cold water, and the authorities, concurring in the notion, actually issued a decree that none but warm water should be used for such purposes in the churches. I believe, however, that the deaths were not found to diminish, and that the priests are again permitted to use cold water as before, though I doubt the enactment to the contrary having ever been repealed; but why should these cases so generally terminate in lock-jaw[18]?

The dreadful ravages occasioned formerly by the small-pox have latterly been in a great measure arrested amongst the civilised portion of the inhabitants by the general use of vaccination: accidentally conveyed to Buenos Ayres in 1805 by the owner of a cargo of slaves, it was preserved by the patriotic zeal of an enlightened priest, Dr. Segurola, who, deeply impressed with its immense importance, voluntarily devoted himself to the task of propagating it amongst his countrymen, especially the poor, whose ignorant prejudices he had often to combat, and whom he was not unfrequently obliged to bribe to submit to the operation. For sixteen years he laboured incessantly in this vocation, at the expiration of which, he had the satisfaction of finding his single exertions no longer adequate to satisfy the general demand for it. The Government then (in 1822) relieved him of his charge, and instituted a proper establishment for the express purpose of propagating vaccination gratis, not only in the city of Buenos Ayres, but throughout the republic; others were afterwards added in the several country districts, from which the lymph is now distributed to all who apply for it, and has been sent into every province of the interior. The authorities make it compulsory, as far as they can, on parents to carry their children to these establishments; and the parochial priests are charged to see that they do so.

By a report published in 1829 upon this subject, it appeared that in the city alone, in the previous nine months, as many as 4160 children had been vaccinated; a large proportion to the births, which are estimated at little more than 6000 yearly. I was more than once applied to for it from Rio de Janeiro, whither it was always most readily forwarded by the Buenos Ayrean administrators.

But the destruction created by the small-pox amongst the Spaniards was nothing when compared to its dreadful consequences amongst the native Indians. Whole tribes have been swept away by it: I believe, nations—whose languages have been lost. The plague is not more a frightful scourge than this disorder, when it attacks the miserable inhabitants of the pampas: they themselves believe it to be incurable, a feeling which adds to its lamentable consequences, for no sooner does it appear than their tents are raised, and the whole tribe takes to flight, abandoning the unfortunate sufferers to the certainty of perishing of hunger and thirst, if the virulence of the disorder itself does not first carry them off.

An opportunity, however, offered during the time I was at Buenos Ayres of making known to these poor people, also, the effects of vaccination, under circumstances which it is to be hoped may eventually lead to its diffusion amongst them, as well as their more civilised neighbours.

A large party of some of the friendly tribes, with their wives and children, repaired to the city on a visit of duty to the Governor, General Rosas, and had not been there long when some of them were attacked with small-pox, amongst the rest, one of their principal Caciques. As usual, the sufferers were immediately abandoned by their own relatives, and might have died like dogs, had not their more civilised friends taken charge of them, for which the poor wretches were abundantly grateful; but their surprise was without bounds, when the Governor himself, who had a regard for the old Chief, went in person to visit him. General Rosas did not fail to remark the strong impression created by his visit, and saw at once the advantage to which it might be turned. Ordering the astonished Indians to be brought before him, he showed them the mark upon his own arm, and fully explained to them the nature of the secret which had enabled him to visit their dying Cacique with impunity. The result was, that nearly 150 of them, including some of their Caciques, Catrieu, Cachul, Tetrué, Quindulé, Callinao, Toriano, and Venancio, with their wives and children, were vaccinated on the spot at their own earnest solicitation; and great was their childish delight on finding, in due time, the appearance of the disorder upon their arms, which they were fully satisfied would prove an infallible charm against the worst powers of the Evil one.

The impression created by this interesting occurrence will not be easily effaced, and, although subsequent events may have unfortunately delayed for a time the further propagation of this inestimable blessing amongst the Indians, I have little doubt that it will again be sought for; and who can say that, with good management, it may not be converted into a means of domiciliating and reducing to Christianity the remnants of a race, who, in their turn, might repay with productive labour their benefactors a hundred fold?

I must not close this chapter without adding that, notwithstanding what I have said as to the effects of the climate upon some constitutions, the people in general live to a good old age in perfect enjoyment of their mental as well as bodily faculties; and that instances of longevity are common, the following extracts from the several population returns will sufficiently prove:—

"In the census of 1778, 33 cases are quoted of individuals then living in the city, aged from 90 to 100; and 17 of from 100 to 112."

In the tables of mortality for 1823 and 1824, 58 persons are said to have died between the ages of 90 and 100; 6 between 100 and 110; 3 between 112 and 116; 1 of 128, and another of 130. The two last were females.

FOOTNOTES:

[16] Meteorological Tables will be found in the Appendix.

[17] The following letter, received from Buenos Ayres after my own departure, gives an account of one of these visitations. It is dated

"Buenos Ayres, 11th February, 1832

"Yesterday we had another of those awful dust-storms which you have previously witnessed; it came on about a quarter past twelve o'clock. The rapidity of its approach, and awful opacity, alarmed the whole population; in an instant, as it were, there was a transition from the glaring ray of the meridian to the most intense darkness. Immense flocks, or rather one immense flight of birds, immediately preceded it, and, in fact, however incredible it may appear, commenced the obscurity by their numbers.

"The whole time of its duration was eleven minutes and a half, the total darkness eight minutes and a half, by watch, observed by Dr. S. and myself by candlelight; it was accompanied by loud claps of thunder, but not a ray of lightning was visible, although the thunder was by no means distant. After eleven minutes and a half the rain began to fall in very large black drops, which had the effect upon the white walls of making them appear, when the sun again showed itself, as if they had been stained or sprinkled with ink. I never witnessed a more majestic or awful phenomenon. The consternation was general; every one rushing into the nearest house, and all struggling to shut their doors on their neighbours. I have heard as yet of no accidents, although doubtless there must have been many; the wind, of course from S.S.W."

[18] Horses are very liable to the same affection, and are continually lost from it.

CHAPTER VII.
HISTORY OF THE SPANISH SETTLEMENTS ON THE COAST OF PATAGONIA.

Little known of Patagonia till the appearance of Falkner's work in 1774. It stimulates the Spanish Government to send out an expedition under Piedra in 1778, to form settlements upon the coast. He discovers the Bay of San Joseph's. Francisco Viedma forms a settlement on the River Negro. Antonio, his brother, explores the southern part of the coast, and forms another at San Julian's. His account of the Indians he found there. The New Settlements abandoned in 1783, with the exception of that on the River Negro. Villariño ascends that river, as far as the Cordillera opposite Valdivia. A dispute with the Araucanian Indians prevents his communication with the Spaniards of Chile, and obliges him to return. Piedra succeeds Viedma, attacks the Pampa Tribes, and is defeated. Don Ortiz de Rosas, father of the present Governor of Buenos Ayres, is taken prisoner by them, and succeeds in bringing about a general pacification. Subsequent neglect of the settlement on the Rio Negro. Its population in 1825, and coasting-trade with Buenos Ayres.

Before they became independent of Spain, and whilst the people of Buenos Ayres possessed in the Banda Oriental more waste lands than they wanted, safe from any incursions of the Indians, and better adapted perhaps than any other in South America for the rearing of cattle, at that time their only object, they had no particular inducement to extend their possessions further than the River Salado; all beyond was left to the Indians, and little or nothing was known of their country, except what they chose to communicate, until Falkner published his account of Patagonia in a country town in England in 1774. The appearance of that book produced results which the author perhaps little anticipated, for it stimulated the Spanish Government to make a general survey of the coast of Patagonia, and to form settlements upon it, the history of which to this day has never yet been made public. It is of those measures, and the information derived from them, that I purpose to give some account in this chapter.

Father Falkner, the author above alluded to, was an Englishman, who, from a very early age, seems to have had a passion for travelling. Brought up to the medical profession, he went in the capacity of a surgeon on board a trading-vessel to Cadiz, where he embarked in one of the Assiento ships, bound on a slaving voyage, eventually to Buenos Ayres: there he was induced to enter the order of Jesuits, in which, as a missionary, he afterwards made himself conspicuous for the zeal with which he devoted himself to the conversion of the Indian inhabitants of the unexplored regions of that part of the world. Forty years he passed amongst them, and, but for the expulsion of his order from South America, he would probably have ended his days there. On his return to England, he wrote his book, to this day the only authentic account we have of the manners and customs of the Indians of the pampas, whilst the map it contains, compiled partly from his own observations, and partly from Indian accounts, has furnished the principal, if not the sole data for all those which have since been published of the interior of their country.

One of his principal objects avowedly was to point out how vulnerable by any hostile naval power were the Spanish possessions in those parts; and hardly had the book appeared when the Spanish Government, taking alarm lest his suggestions should be listened to in England, sent secret orders to the Viceroy of Buenos Ayres to have the whole coast of Patagonia carefully surveyed, with a view "to the formation of such new settlements upon it as might secure the King of Spain's rights, and forestall the English in their supposed intention of appropriating to themselves the valuable fisheries on the southern part of the coast."

Competent officers were sent out from Spain for the purpose, and no expense was spared to execute the survey as completely as possible. The command was intrusted to Don Juan de la Piedra, who sailed from Monte Video on this service on the 15th December, 1778.

Running down the coast, on the 7th January he entered the great bay, then called Bahia Sin-fondo, or San Matthias' Bay, but now more generally known under the name of San Antonio, at the bottom of which, in latitude 42° 13′, he discovered the entrance of a noble harbour, which he named San Joseph's.

Piedra passed three months in examining the shores of this great gulf and the peninsula which bounds it, and so impressed was he with its capabilities that, without proceeding further, he left an officer and part of his men to build a fort there, and returned himself to the River Plate to give an account of his discovery.

According to his report, indeed, it appeared on many grounds to offer a most eligible site for a new settlement. The port itself was said to be deep and commodious, affording anchorage for ships of any size, whilst its situation seemed particularly convenient not only for facilitating the further exploration of the great rivers Negro and Colorado, which empty themselves a little to the northward of it, but for securing more or less the entrance of those rivers against any sudden surprise by the enemies of Spain, a point to which great importance was attached in the instructions of the surveying officers, in consequence of the statements made by Falkner as to the possibility of passing up them into the very heart of the Spanish possessions.

The vast number of whales and seals which were seen in its neighbourhood, moreover, held out the promise of its becoming a station whence to carry on those fisheries which the Spanish Government of the day were so anxious to establish[19]; whilst the extensive salt deposits in several parts of the peninsula promised an inexhaustible supply of an article of the first necessity in Buenos Ayres in curing the hides and beef.

The only drawback to the situation was the apparent scarcity of fresh water, which the discoverers had great difficulty in finding in the first instance, though subsequently a sufficiency was obtained at some distance from the coast: it was, however, at all times more or less brackish, and eventually caused much sickness and suffering to the settlers.

The Viceroy was dissatisfied with Piedra for returning, and superseded him, when it devolved upon Don Francisco and Antonio Viedma (the officers next in command of those sent out from Spain) to carry into execution the intentions of their Government. These brothers were long employed upon various parts of the coast of Patagonia, and collected much valuable information respecting that *terra incognita*.

In April, 1779, Don Francisco sailed from San Joseph's, to form a settlement on the River Negro, in favour of which he was fortunate enough to propitiate the Viceroy, who supplied him with men and stores, and all

things necessary for the purpose.

Don Antonio was left in charge at San Joseph's; but, the scurvy breaking out amongst the people to a great extent, they became so dissatisfied that he was under the necessity in the course of the summer of returning with the greater part of them to Monte Video. He was not, however, permitted to be long idle; and in the January following (1780) was again despatched to carry out the original plan, and to survey the whole of the southern part of the coast of Patagonia.

In furtherance of these orders, he examined the several ports of St. Helena, San Gregorio, the northern shores of the great Bay of San George, Port Desire, and San Julian's: which occupied him till the end of May, when, the cold weather setting in, he hutted his people for the winter at Port Desire, and despatched one of his vessels to Buenos Ayres with an account of his proceedings.

Of all the places he had visited, San Julian's appeared to offer the best, if not the only suitable site for any permanent establishment. Everywhere else, the coast presented the aspect of sandy, steril dunes, intermixed with stones and gravel, fit only, to all appearance, for the occupation of the wild guanacoes and ostriches, which wandered over them in quest of the scanty coarse grass which constituted their only herbage. No wood was to be seen bigger than a small species of thorny shrub, fit only for the purposes of fuel; and, as to water, it was every where scarce, and the little to be found was generally brackish and bad. The ports, too, were most of them difficult and dangerous of access, affording little or no security for vessels above the size of a brig.

San Julian's was so far an exception, that at high tide the largest ships might enter and lay safely at anchor within the bar off its mouth. A constant supply of water, too, was found three or four miles inland, proceeding from some springs in the hills, about which there was good pasturage, and enough of it to have induced a considerable tribe of Indians to fix upon it as their ordinary dwelling-place. There, also, Viedma proposed to plant a little colony; and, the Viceroy approving the plan, the people were removed from Port Desire in the month of November, and commenced building their habitations in the vicinity of the springs above mentioned, about a league from the coast. They received the materials, and a variety of necessary supplies, from Buenos Ayres, not the least useful of which were some carts and about twenty draught-horses, which enabled them afterwards to keep up a constant communication between the shore and their little settlement.

They found the Indians extremely well disposed, and ready to render them every assistance in their power, in return for the trifling presents they made them. Altogether there might be about 400 of them, and about half as many more were encamped upon the Santa Cruz River further south. These were apparently the only inhabitants of those regions. They said that in their journeys northward they fell in with no other toldos or encampments till they came to a river twenty-five days off; there were some more two days beyond again upon a second river, and thence it was twenty days further to the toldos of the Indians of Tuca-malal, on the river called by Villariño the Encarnacion, which falls into the great River Negro; altogether, according to their computation, something less than fifty days' travel from San Julian's[20]. To those parts they were in the habit of occasionally repairing in order to buy fresh horses from the tribes there resident, who they said had plenty of them, and exchanged them for the guanaco skins which they took from the more southern part of the country. They caught those animals with their bolas and lassoes, and often supplied the colonists with fresh meat when they had no means of their own of obtaining it.

This assistance was of the greater value to them, as the winter set in with a severity, against which they were very indifferently prepared. The months of June, July, and August were piercingly cold, much snow fell, and the people, unused to such a climate, became very sickly, and many of them died. Viedma himself was so ill as to be some time confined to his bed; nor was it till the return of spring that the survivors began to recover their strength, and were able to go on with the works. They got through the subsequent winter better, after their houses were completed, and they were able to collect some necessary comforts about them. The vegetables they planted throve well, and in the second February they gathered in their first harvest, which yielded a fair crop in proportion to the corn sown. The brushwood in the surrounding country was sufficient to supply them with fuel, but there was no timber fit for building, of which they were daily in want; and in quest of this Viedma was induced to make an excursion into the interior by the Indians, who asserted that an abundance was to be had near the source of the Santa Cruz river, which they said was a great lake at the foot of the Cordillera, whither they offered to guide him.

On this expedition he left San Julian's early in November (1782), with some of his own people, and a party of the Indians under their cacique. Proceeding westward, and inclining to the south, over hills and dales, at a distance of about twenty-five leagues they reached the Rio Chico, or little river, which the Indians said fell into the harbour of Santa Cruz. There was at that time no difficulty in fording it, the water not being much above their saddle-girths, and its width not above fifty yards, though, from the appearance of its steep and water-worn banks, it was evidently a much more considerable stream during the season of the floods. The Indians said it was the drain of a lake far in the north-west, formed by the melting of the snows in the Cordillera.

So far, wherever they halted, they had found no lack of pasturage for their horses, or water, or brushwood for fuel; but after crossing the Chico the country became more rocky and barren: fourteen leagues beyond the Chico they came to a much more considerable river, called the Chalia by the Indians, who described it as issuing from another lake in the mountains, between the sources of the Rio Chico and those of the great river of Santa Cruz, which it joined, they said, further on. They found it too deep to cross where they first reached it, and were obliged in consequence to follow its course upwards for eight leagues, over a stony, rugged country, which lamed all their horses, and the desolate appearance of which was increased by the visitation of a flight of locusts which had devoured all the vegetation for three leagues. They crossed it, at last, at a place called Quesanexes by their Indian guides, from a remarkable rock standing out like a tower from the rocky, rugged cliffs which there bounded the bed of the river (some basaltic formation probably).

On looking at the sketch, in the seventh volume of the "Journal of the Geographical Society," of Captain FitzRoy's Survey of the river Santa Cruz, it appears probable that the Chalia is the stream which runs into it from *basalt glen*, and which, though a very inconsiderable one at the season he passed by it, was manifestly one of much more importance at other times.

Eight leagues after crossing the Chalia they came to the great lake under the Cordillera, which the Indians had talked of as the origin of the Santa Cruz River.

Viedma describes it as of great extent, situated in a sort of bay, or vast amphitheatre of the mountains,

from the steep ravines of which ran down the many streams which filled it, chiefly derived from the melting of the snows in the north-west: he skirted it for twelve leagues to its extremity in that direction, and estimated its extreme length at about fourteen; its width, he says, might be from four to five leagues. Some dark patches amongst the snow on the distant heights indicated the clumps of trees of which the Indians had spoken; but the few which Viedma was able to examine were not what he had been led to expect; he speaks of them as resembling a wild cherry, with a fruit in appearance not unlike it, though of a more orange colour, and without a stone and very tasteless; the wood stunted, and so crooked as to be entirely unfit for anything but burning. May it not have been the crab-apple? We know there are plenty of apples further north in the same range.

Describing the appearance of the Cordillera from the head of the lake, he says, towards the north it looked like a vast table-land stretching from east to west; but it had a different appearance in the south, breaking into steep and broken peaks, for the most part covered with snow. The Indians said that neither to the north nor south was the main chain passable by man or beast for a very long distance. They all concurred in stating that a large river issued from the south-east angle of the lake, which they believed to be the great river of Santa Cruz[21]; Viedma, unfortunately, was not able to examine it, as he wished, in consequence of the apparent swelling of the mountain-torrents, which alarmed the Indians lest they should so increase the rivers as to prevent their recrossing them on their return; nor were they very wrong, for, by the time they got back to the Chico, they found it a wide and rapid stream no longer fordable.

It was proposed that some of the Indians who could swim should tow Viedma across on a balsa, which they set to work to construct of hides and sticks, but when completed, it looked so frail and dangerous a ferry, that the Spaniards preferred running the risk of swimming their horses over. This they accomplished without accident, and reached San Julian's in safety again on the 3rd of December, after nearly a month's absence, during which they were much indebted to the Indians for their friendly aid, and knowledge of the country through which they passed.

The people of this tribe, who had never seen a Spaniard before, Viedma describes as of large stature, generally above six feet high, and very stout and fleshy; their faces broad, but of good expression, and their complexion rather sunburnt than naturally dark. Their skin cloaks, worn very long, and reaching when on foot to their heels, gave them an appearance of greater height than the reality. Their habits and customs, according to his account, seem to differ little from those of the Pampa tribes, of which I shall elsewhere have to speak. The men employed themselves in hunting guanacoes and other animals for their skins, and for meat to eat, whilst the women performed all the domestic offices and drudgery of the household, such as it was; but the good disposition uniformly shown by them gave Viedma a most favourable opinion of them, forming, as it did, a striking contrast with the character of the tribes further north.

Shortly after this excursion (in April, 1783) Don Antonio, considering his little colony as fairly planted, proceeded to Buenos Ayres for the recovery of his health. There the mortification awaited him of learning that all his labour had been thrown away, and that the Government of Spain had resolved to break up the Patagonian settlements. The fact was, that the great trouble and expense already incurred, from the necessity of supplying all their first wants from Buenos Ayres; the grumbling and complaints of the settlers themselves, of the hardships they had to go through, and of the inclemency of a climate to which they were unaccustomed (which, joined to the bad quality of their salt provisions, had certainly produced scurvy amongst them to a frightful extent), had all tended to create so unfavourable an impression upon the Viceroy, that he had been led to express a strong opinion to his Government as to their worse than uselessness. The consequence was, that after three or four years, in which upwards of a million of hard dollars was spent upon them, orders were sent out to abandon them all, except the settlement upon the Rio Negro, after setting up at San Joseph's, Port Desire, and San Julian's, signals of possession, as the English had done at Port Egmont, for evidence in case of need, of his Catholic Majesty's rights[22].

Don Antonio Viedma, who took a lively interest in the settlement he had formed at San Julian's, in vain raised his voice against this determination, and endeavoured to show that the grievances of the settlers were but the natural difficulties to be expected in the infancy of all new colonies; that they knew the worst of them, and many of their remedies; that a further experience of the seasons had shown that the lands, so far from being unfit for cultivation, as amongst other things was alleged, were quite sufficiently productive to support them in after-years without further aid from Buenos Ayres; and as to the expenses, the heaviest were already incurred; whilst the fisheries alone promised sources of wealth and revenue to the mother country, as well as to the neighbouring viceroyalty. But these arguments met with little attention, and came too late to alter the determination of the higher powers.

The same jealous policy which led the Spanish Government to cause the coast of Patagonia to be surveyed, equally influenced them in withholding from publication the results, which remained carefully hid from all inspection in the archives of the Viceroyalty, though I cannot but think, had the reports even of Viedma himself been given to the world, they would have been the best possible security to his Catholic Majesty against the curiosity or encroachments of foreign nations. Not only did they all tend to show that the coast itself was full of dangers, but they also proved that the interior of the land was, throughout, a steril and desolate waste, scarce of water and vegetation: a region fit enough for the wild beasts which had possession of it, but very little adapted for the supply of any of the wants of man. I cannot conceive what temptations such possessions could possibly have offered to any European power whatever, nor can it, I think, create surprise that Spain herself abandoned them.

With respect to the fisheries, had there been any real spirit of enterprise in the people of Monte Video and Buenos Ayres, they might have monopolized them; but no such spirit existed, and they were suffered to fall into the hands of the more adventurous sailors of England, North America, and France. They equally neglected the importation of salt, though a more necessary article to them, perhaps, could hardly have been placed within their reach; and after Viedma's voyage it was well known that any quantity of it, of an excellent quality, could be obtained either at San Joseph's, Port Desire, or San Julian's. All that was necessary was to collect it at the proper season, in the months of January, February, and March, when it is hard and dry, and consequently in the fittest state for shipping.

Dean Funes, the historian of Buenos Ayres, writing on this subject, cannot suppress his indignation at the apathy of his countrymen, though he attempts, at the same time, to find an excuse for it in an observation of Humboldt's with a simplicity quite worth quoting. He says—"Who doubts that the Spaniards of South America might have carried on these fisheries at infinitely less cost than the English and North Americans, when their own coasts of Patagonia and round Cape Horn are known to abound in whales, even in the

harbours, by all accounts? But it was not the cost, neither was it the want of hands, which caused this important object to remain neglected. It was the natural indolence of the people and indifference of the Government. How, indeed, was it possible," he adds, "to find men to follow the hard profession of the sea, amongst a people who prefer a hunch of beef to all the comforts of life? 'The hope of gain,' Baron Humboldt observes, 'is too weak a stimulus in a climate where bounteous nature offers man a thousand ways of obtaining a comfortable subsistence without the necessity of leaving his native home to go to fight with the monsters of the deep.'"

The Dean was a wise old man, who knew the character of his countrymen thoroughly. Nor are his observations confined to the Spaniards of South America. Speaking of the ill-success of a company in Spain to which the king, in 1790, had conceded extraordinary privileges, as an encouragement to carry on these fisheries, he says—"Its continual losses, up to the period of its final failure, lead us to the conclusion, that projects depending upon intelligence, economy, and activity, are not made for a people notoriously behindhand in information, and habitually extravagant and lazy."

Whilst Don Antonio was occupied at San Julian's, his brother, Don Francisco, was with no less zeal laying the foundations of the settlement upon the Rio Negro, the only one, as it appeared, of these new establishments which was destined to be maintained.

It certainly possessed many advantages over the more southern parts of the coast which had been explored. It was not, like San Julian's, a thousand miles distant from the governing authorities. Succours in case of need could be sent to it by land as well as by sea from Buenos Ayres; and this consideration alone obviated the strongest objections made by the poorer classes to settling themselves permanently on other parts of the coast. The river itself was not only a safeguard against the Indians, but fertilized the adjoining lands, and insured to the colonists a never-failing supply of fresh water, the want of which had caused perhaps the greatest part of their sufferings at the other places.

There were also other motives which operated more powerfully than these in determining the Spanish Government to maintain a settlement upon the River Negro.

It was by proceeding up this river that Falkner supposed a hostile naval power might surprise the Spanish territories in the interior and in Chile—a notion founded upon the concurrent accounts given him by the Indians of the possibility of ascending it as far as the Cordillera, and even to Mendoza. If these accounts were to be depended upon, and such a communication were really practicable between the shores of the Atlantic and the provinces of Chile, and Cuyo, it was impossible to foresee to what important consequences it might lead, and how valuable (independently of its advantages as a military position) might become a settlement which would necessarily be the key of that communication.

To determine a point of so much interest, in a geographical as well as political point of view, was therefore one of the first objects after the first settlers were fairly established; and an expedition was prepared to explore the river to its sources, and to examine its principal affluents. The command was intrusted to Don Basilio Villariño, a master-pilot in the Spanish navy, who had sailed with Piedra in 1778; and had since been the chief practical officer engaged in the survey originally undertaken by that commander. In the four years which had elapsed since the commencement of that service, he had himself examined and laid down the Bays of Anegada and of Todos Santos, the bar of the River Negro, and the ports of San Antonio, of San Joseph, and that to the south called Porto Nuevo. He had also surveyed the River Colorado for about seven leagues from its mouth. No man, then, in those parts could be better qualified for the task, and no expense or supply was spared, that he might be furnished with everything likely to ensure his success.

Four large launches (chalupas) were fitted out, to which masters, carpenters, caulkers, and ample crews were appointed, besides a number of peons with horses, who were to attend them along the banks of the river to assist in reconnoitring the country, and in towing the boats against the stream, when contrary winds might prevent their sailing.

On the 28th September, 1782, they started from the settlement of Carmen, and were absent till the 25th of May following; and, although on some points they did not perhaps realize all the expectations of those who sent them, yet they certainly obtained much new and valuable information, and for the first time determined correctly the course of the great river they ascended, and proved the possibility of navigating it to the very foot of the Andes.

The heavy Spanish launches unfortunately proved ill-calculated for the service, and could make but little way with the fairest wind against the force of the stream. They were obliged in consequence continually to have recourse to the towing-rope, a tedious and laborious operation, which occupied them a whole month before they reached the great island of Choleechel, about seventy leagues, according to their daily reckoning, from Carmen.

This island[23] (the eastern extremity of which was found to be in latitude 39°) is not only one of the most remarkable features in the map of the River Negro, but is a point of great importance connected with the inroads of the Aucazes Indians into the Province of Buenos Ayres. It is here that, in their journeys from the Cordillera, they leave the course of the Negro and strike across to the River Colorado, whence their beaten track runs straight to the mountain ranges of the Ventana and Vulcan, where they pitch their tents, recruit their horses, and watch for a favourable opportunity to scour the Pampas, and carry off the cattle from the defenceless estancias on the frontiers of Buenos Ayres.

Being at all times greatly encumbered with their women, children, and cattle, and having no notion of anything like a raft or canoe to facilitate the passage of the rivers they have to cross, they are obliged to resort to those points where they are fordable, and afterwards to follow such routes as will lead them by places affording sufficient pasture for the daily maintenance of their horses and cattle. Now, in their descent from the Cordillera, their only pass across the great River Neuquen is just above its junction with the Negro, the course of which they are forced afterwards to follow as far as the Choleechel, from the impracticability of the country to the north of it, and the scarcity of fresh water for their animals.

The great importance, therefore, of any military post at this point, will be at once evident, and Villariño did not hesitate to give his strong opinion to his superiors, that a fort built here, with a small Spanish garrison, would be one of the most effectual checks upon these savages, and the best defence for the cattle owners of Buenos Ayres.

After fifty years of further experience, this suggestion (in 1833) has been acted upon by General Rosas, the present Governor, and the Choleechel, now called Isla de Rosas, has been occupied as a military station.

After reaching their tracks, it was not long before the Spaniards fell in with a party of the Indians themselves, travelling by the river's side towards the Cordillera. Villariño, anxious to conciliate them in order to obtain their aid as he proceeded, was at first lavish in his presents to them, particularly of spirits and tobacco, which appeared to be the objects most in request among them. The more, however, they got, the more they wanted; and upon the first hesitation to comply with their unreasonable demands, they became as insolent as they were importunate. They conceived suspicions, too, of the real designs of the Spaniards in exploring those parts, and shrewdly enough guessed that some more permanent occupation of their country was projected—an idea in which they were confirmed by the lies of a vagabond who deserted to them from the boats, and whose first object, of course, was to sow the seeds of dissension between them and his countrymen, in order to facilitate his own escape.

Although they dared not openly attack the Spaniards, they soon gave manifest proof of their determination to thwart the progress of the expedition by every means in their power. Riding on in advance of the boats they destroyed the pasturage along shore, and, hovering just out of the reach of danger to themselves, annoyed the party by all kinds of petty hostilities, and kept Villariño in continual alarm for the safety of his peons and cattle.

This conduct on the part of the natives, added to the certainty now acquired, that the service would be one of much longer duration than had been contemplated, made Villariño pause before he proceeded farther, and finally, determined him to halt where he was till he could communicate with Carmen, and receive from thence such further supplies as would render him independent for the rest of the voyage.

In passing the Choleechel, he had been much struck with a little peninsula, covered with rich pasturage, and easily made defensible against the Indians; and thither he now returned to await the further assistance he had applied for to his superior.

By running a sort of palisade across the narrow isthmus which separated their position from the main, and landing their swivels from the boats, the Spaniards soon formed a little fortification[24], perfectly secure from any sudden attack on the part of the Indians, but of them they saw nothing more so long as they remained there.

Six weeks elapsed before Villariño received answers to his letters, conveying to him the orders of Don Francisco Viedma, to proceed with the expedition; but in the interval the river fell so considerably that Villariño became alarmed (and not, as it appeared, without good cause,) lest he should be driven into the season when the waters were at their lowest, which would greatly add to his difficulties as he advanced:—nor was this the worst:—though Don Francisco had sent him an ample supply of provisions and other necessaries for the prosecution of the enterprise, he had at the same time peremptorily ordered him to send back all the peons with their horses, under the idea that this would be the surest means of obviating any future disputes or collision with the Indians. Villariño, without time to remonstrate, had no option but to obey this order, though he saw at once that it deprived him of his main-stay, and would necessarily very much retard his future progress.

Under these circumstances, on the 20th of December, the boats once more got under sail to proceed up the river. Its winding course rendered the sails of little use, and it was hard work without the horses to make way against the force of the stream, the rapidity of which, as well as the difficulty of getting along, was much increased by innumerable small islands, which stud the river above Choleechel; indeed the men were nearly worn out, as might have been expected, with the toil of working at the towing-rope almost continually.

In ten days they only advanced twenty-four leagues; they were not then sorry to fall in again with some of their fellow-creatures, albeit they were Indians, from whom they procured some horses, which relieved them from this part of their labour at least. They too were journeying westward, and much information was obtained from them respecting the upper parts of the river which greatly encouraged them to proceed, for there seemed little doubt from their accounts, that it was navigable to the foot of the Cordillera, from whence they might easily communicate with Valdivia.

These Indians were returning to their ordinary haunts on the eastern slopes of the Cordillera, over against that city, and they readily offered their assistance to the Spaniards to show them the way over, when they arrived at their lands, which they described as being near the Huechum-lavquen, or lake of the boundary spoken of by Falkner. They said it was not more than three days' journey from thence to Valdivia, with the people of which it appeared they were in the habits of intercourse, and among whom they found ready purchasers for all the cattle they could carry off from the Pampas. Thus it appeared that the people of Buenos Ayres might thank their countrymen on the shores of the Pacific for a great part of the depredations they were continually complaining of from the hostile incursions of these savages.

This party was a fair sample of the evil consequences of such a system. It consisted altogether of about 300 people under their caciques, who had left their country more than a year before for the sole purpose of collecting cattle for the Valdivians; and they were now on their way home with about 800 head, every animal of which bore a Buenos Ayrean mark, and had been stolen from some estancia in that province. They were less shy than the Indians whom the Spaniards had before fallen in with, and so long as they got plenty to eat and drink they journeyed on by the side of the boats in apparent good humour, giving such assistance as was in their power, and such information as they could with respect to the country they passed through. But this did not last long; and when after about a fortnight they found that Villariño could not afford to make the caciques and their wives drunk every day they changed their tone, and even went so far as to lay a plot for getting the boat's crew on shore on pretence of a feast, in order to rob and murder them. Frustrated in this by a timely discovery of their treachery, they suddenly galloped off, carrying with them, however, two of the men, whom it was supposed, by means of their women, they had contrived to inveigle from the boats.

Cunning and treachery, Villariño observes, seem the special characteristics of these people; thieves by habit, plunder is the object of their lives, and to obtain it fair means or foul are alike justifiable in their eyes. Kindness is thrown away upon them, and fear alone seems to have any influence over them which can be calculated upon.

In thirty days from their leaving Fort Villariño, the boats arrived at the confluence of the River Neuquen, or Sanquel-leubú as it is sometimes called by the Indians, from the huge canes or reeds which overgrow its banks. This river was erroneously supposed by Villariño to be the Diamante, and he did not hesitate to lay it down as that river, and to express his belief that had he gone up it in twenty-five days he should have

found himself in the province of Mendoza. Subsequent information has corrected this error, and shown it to be the river *Neuquen*, which here joins the Negro, and which, rising a little above Antuco, is increased by many other streams from the Cordillera, which subsequently fall into it.

Villariño was blamed for not exploring this river, certainly by far the most considerable affluent of the Negro. He seems to have satisfied himself with merely ascending it in a little boat for about a couple of leagues, which brought him to the place where the Indians are in the habit of crossing it, and where he doubted whether there was sufficient water at the time to allow the launches to go up, though, from the vestiges of the floods along shore, it was evidently navigable at times for much larger craft. His best excuse for not doing more was his anxiety to reach the Cordillera before the state of the snow should prevent his communicating with Valdivia. To make the best of his way onward in that direction was now his main object; but the difficulties he had as yet experienced were nothing to those which awaited him in his further progress. The horses obtained from the Indians were completely worn out, and after passing the Neuquen, the whole labour of towing the boats along again devolved upon the men.

About a league above the junction of the two rivers, the latitude was found to be 38° 44´. The course of the Negro shortly afterwards was found to incline very much more to the south, apparently turned off by the prolongation of a chain of hills from the north, which equally determines the course of the Neuquen higher up, and as far as the eye can reach from the point of its junction with the Negro.

Through these hills the Negro has either found, or forced a passage, which on either side is bounded by steep, rocky escarpments, rising 500 or 600 feet above it; and here the stream ran with such violence, that it was with the greatest difficulty the launches were dragged on, one by one; a difficulty further increased by the shallowness of the water, which made it necessary in many places to deepen the channel with spades and pick-axes, and to unload the boats and carry their cargoes considerable distances, before they could proceed[25].

All this caused incredible fatigue to the men, unaccustomed to such service, and supported only on the dry and salt provisions they had with them. Their legs became swelled with working for days together in the water, and they were covered with sores from the bites of the flies and mosquitos which hovered in clouds above its surface. The scurvy broke out, and some of them became seriously ill: fortunately they fell in with some apple-trees, the fruit of which was a great comfort to the sick; but the snow-capped peak of the Cerro Imperial, as well as the whole range of the Cordillera, was now in full view before them; and the hope of being soon in communication with Valdivia gave them fresh courage, and redoubled their exertions to reach their journey's end.

Two whole months were spent in making a distance of forty-one leagues from the Neuquen. This brought them, on the 25th of March, to the foot of the great range of the Cordillera, and to an island about a mile and a half long, where the main stream was found to be formed by two distinct rivers, there uniting from opposite directions; the one coming from the south, the other from the north.

As they knew by their latitude, which a little before reaching this point they had found to be 40° 2´ S., that they were already to the south of Valdivia, Villariño had no hesitation as to which of these rivers he should attempt to ascend. Before going on, however, he determined on giving the men a day or two's rest, of which he availed himself to make a short excursion in his little boat up the southern fork, which turned out to be a river of some magnitude.

At its mouth, he says, even at that time, when the waters were at their lowest, it was about 200 yards across, and about five feet in depth; its course from the S.S.W., running with much velocity through a deeply-cut channel over a bed of large rounded stones: the country, as far as could be seen, was a desolate mass of gravel. Some little way up, they found the burial-place of an Indian cacique, over which two stuffed horses were stuck upon stakes, according to their custom; further on, the shore was strewed with trunks of many large trees brought down by the floods; they were of various sorts, but principally pine and cedar, probably the same as is shipped in large quantities from the opposite side of the Cordillera, and from Chiloe, for other parts of Chile and Peru. From the Indians they subsequently learned that dense forests of these trees were to be met with higher up the river. How valuable they would be to the settlers on the Rio Negro, and how easily they might be floated down to them!

Villariño named this river the Rio de la Encarnacion. By the Indians, it is called Limé-leubú, or the river of leeches: indeed they call the main stream so, during its whole course to the junction of the Neuquen; after which, they give it the appellation of Curi-leubú, the River Negro. They described it as proceeding from the great lake of Nahuel-huapi,[26] where, in the year 1704, the Jesuits established a mission, which was afterwards destroyed by some hostile savages, and the Fathers murdered. The vestiges of their habitations and chapel still remain, and that part of the country is called by the Indians Tuca-malal, probably from some allusion to the ruins; the inhabitants call themselves Huilliches, or the southern people. Through them, to Villariño's surprise, the Pehuenches Indians, whom he shortly afterwards fell in with, had already received accounts of the establishment of the Spaniards at San Julians; the news had doubtless been carried to them by the friendly Indians, with whom Viedma had been in communication at that place, and whom he speaks of in his diary as having gone northward on an expedition which lasted four months, to buy horses from the Indians in that direction.

But if the Spaniards were surprised to hear these people speak of their countrymen at San Julians, 600 miles off, they were much more so, to be asked by them if the war between Spain and England was over. In this, however, it turned out that they had a more direct interest than might have been expected; certain articles of European manufacture which they had been in the habit of purchasing from the Valdivians having become scarce and dear, from the interruption of the trade of that place with Spain in consequence of the war. Who would have supposed that the Indians of Araucania could have known or cared whether England and Spain were at war or not?

Having taken this cursory view of the Encarnacion, Villariño returned to continue his voyage up the northern branch of the Negro, which is called the Catapuliché by the Indians. It would perhaps be more correct to consider, as they do, the Encarnacion as the upper part of the Negro, and the Catapuliché as an affluent joining it from the opposite direction. Its shallowness prevented their making much way up it; after much labour and difficulty, in twenty days they had only advanced ten leagues, and then all hope of getting further was at an end. This was on the 17th of April, when they were in latitude 39° 40´, over against Valdivia.

The Catapuliché runs along the base of the Cordillera, distant five or six miles; it is joined by several

streams from the mountains, which irrigate the intervening slopes and plains, and form good pasture-grounds for the Indians; and here they found their old acquaintances, who had run away from them lower down the river; and who, nothing abashed by what had passed, came at once to the boats to beg for spirits and tobacco.

Villariño, restraining his indignation at their effrontery, renewed his intercourse with them in the hope of obtaining their assistance in reaching Valdivia; which, by their accounts, was not more than two or three days' journey distant across the mountains. Deputations arrived also from the Pehuenches, and Aucazes, Araucanian tribes in the neighbourhood, who showed a great readiness to be of any use;—they brought the Spaniards fruit and other necessaries, and everything promised a speedy realization of their wishes to be placed in communication in a few days with their countrymen on the shores of the Pacific. At the moment, however, when they were looking forward to the speedy accomplishment of this object, their hopes were blasted by an unlucky quarrel amongst the Indians themselves, in which one of their principal caciques, Guchumpilqui, was killed. His followers rose to avenge his death, and Chulilaquini, the chief who killed him, fled with his tribe to the Spaniards, earnestly soliciting their protection; to obtain which the more readily, he told a plausible story of a general league being formed amongst the Indians to attack them on the first favourable opportunity, and that it was in consequence of his refusal to join in this coalition, that the dispute had arisen which cost Guchumpilqui, the principal in the plot, his life. As this Guchumpilqui was the leader of the tribe they had met with on the Rio Negro, whose manœuvres had already impressed Villariño with the belief that he meditated some such treachery, he was quite prepared to credit Chulilaquini's tale; and thinking it at any rate advisable to secure the aid of some of the savages, he too readily promised him the protection he asked for. This brought the expedition to an end.

As soon as it was known that the Spaniards were disposed to take the part of Chulilaquini, they were regarded as declared enemies, and preparations were made to attack them. The Indians were bent on avenging the death of their chief, and it was soon evident that, as to communicating with the Valdivians under the circumstances, it was out of the question. After some fruitless efforts, at any rate, to get a letter conveyed across the mountains, Villariño was reluctantly obliged to make up his mind to return. Since entering the Catapuliché, much snow and rain had fallen, which had increased its depth as much as three or four feet: it had become in fact a navigable river, instead of a shallow stream. Their Indian allies helped them to lay in a stock of apples, of which there are great quantities in all those parts, and of piñones, the fruit of the pine-tree, which, taken out of the husk, is not unlike a Barbary date in taste as well as appearance; and with these supplies they once more got under weigh, the swollen stream carrying them down rapidly and safely over all the shoals and dangers which had cost them so much toil and difficulty to surmount as they went up; the land too, had put on a new appearance after the rain, and many places which appeared arid and steril wastes before, were now covered with green herbage. With little more than an occasional oar to keep them in the mid-stream, they went the whole way down to Carmen without the smallest obstruction, and arrived there in just three weeks from the time of leaving the Catapuliché, after an absence altogether of eight months. Thus it was proved to be perfectly practicable to pass by this river from the shores of the Atlantic to within fifty or sixty miles of Valdivia on the Pacific, the mountain-range alone intervening.

To what beneficial account this discovery of an inland water communication across the continent might in the last fifty years have been turned by an enterprising people, it is difficult to calculate. The Spaniards seemed rather desirous to conceal than to publish the fact of its existence. Till the expedition of General Rosas in 1833, against the Indians, no boat ever again went up the Negro higher than Choleechel; and but that I obtained possession of Villariño's Diary during my residence at Buenos Ayres, and published the substance of it in the "Journal of the Geographical Society," his Enterprise would probably have been consigned to perpetual oblivion.

Chulilaquini followed the boats, and settled his people within reach of his Spanish friends, in the neighbourhood of Carmen; but the Indians, in general, looked upon the new settlement with the greatest jealousy, and became extremely troublesome.

In this state of things, Don Juan de la Piedra, who it has already been stated was originally sent from Spain to take command of the establishments in Patagonia, and who had never ceased to remonstrate against the act of the Viceroy, which deprived him of that command, was reinstated by orders from the government at home; and proceeded in consequence to the Rio Negro, to resume his functions as principal Superintendent (1785); over-anxious, perhaps, after what had passed, to distinguish himself, instead of making any attempt to conciliate the Indians, he boastingly took the field, and advanced into their lands to attack them, with a force totally inadequate to the purpose: the consequence was, that he was surrounded and totally defeated. He himself perished miserably, and several officers fell into the hands of the savages: happily for them, some relations of the victors were at the same time in the power of the Viceroy, and the hope of recovering them by exchange, induced the savages for once to save the lives of their prisoners.

Amongst them was Don Leon Ortiz de Rosas, father of the present Governor of Buenos Ayres, then a Captain in the King's service, who turned his captivity to such good account, that he not only succeeded in an extraordinary degree in conciliating the respect and good will of the principal Caciques, but finally brought about a peace between them and the Viceroy, which lasted many years, and deservedly established the celebrity of the name of Rosas throughout the pampas.

The Spanish government for a short time took some interest in the establishment on the Negro:—upwards of 700 settlers were sent there from Gallicia, and large sums were spent upon it; but the expectations formed of its importance were not realized. The colonists remained satisfied to carry on a petty traffic with the Indians for skins, instead of launching out upon the more adventurous speculation of the fisheries upon the coast, and the authorities at Buenos Ayres, finding them more expensive than useful, became indifferent about them, and allowed them to sink into the insignificance of a remote and unprofitable colony.

Thus, in 1825, when the war between Buenos Ayres and Brazil broke out, there were hardly 800 inhabitants. The blockade of the river Plate made it then a resort for the privateers of the Republic, and once more brought it into notice. A small coasting trade is now carried on with it, and many seal-skins are collected there to be sent to Buenos Ayres, as well as those of the guanaco, hare, skunk, and other animals, brought in by the Indians from the deserts further south: it has of late years also furnished occasional supplies of salt for the Saladeros of Buenos Ayres.

Had the government of Buenos Ayres been able to exercise any efficient superintendence over the

adjoining coast, the fishery of seals, and seal elephants, might have become of importance; but in the absence of all control, the unrestrained and indiscriminate slaughter of the young as well as of the old animals has driven them from their former haunts further south, where they are still found by the English and North American fishermen, who know their *rookeries*, as they are called; and in the proper season, take them in great numbers.

The Governor of Carmen is an officer appointed from Buenos Ayres, to the Junta of which province the inhabitants name a representative.

FOOTNOTES:

[19] In a subsequent report of Viedma's, he says that, when the first accounts of San Joseph's were brought to Monte Video, a merchant of that place, Don Francisco de Medina, fitted out a vessel to go a whaling there, the crew of which, in the first month, harpooned no less than fifty fish within the port.

[20] Their day's journey is usually about four leagues when on a long march.

[21] Captain FitzRoy followed it for nearly 200 miles, and found it a very considerable river the whole way,—never fordable, according to the accounts he received. He must have been very near the lake when he found himself obliged to turn back.

[22] In 1670 Sir John Narborough passed six months at San Julian's; he also visited Port Desire, and took possession of it, with all due form, for his master, Charles II.—Anson was also at both places in 1741, and the account of his voyage contains views of that part of the coast, and of the harbour of San Julian's.

Narborough, who is very precise in his description of the country, gives an account of a geological fact, which is of some interest now-a-days. He says, "Going on shore on the north-west side of the harbour of San Julian's with thirty men, I travelled seven or eight miles over the hills, &c. On the tops of the hills and in the ground are very large oyster-shells; they lie in veins in the earth and in the firm rocks, and on the sides of the hills in the country; they are the biggest oyster-shells that ever I saw, some six, some seven inches broad, yet not one oyster is to be found in the harbour."

[23] The Choleechel is not now a single island, but is divided into two or three, by branches of the river which intersect it. These channels may have been formed since Vallarino's voyage.

[24] Fort Villariño in the map.

[25] The river was probably unusually low even for the season; for Villariño observes in this part of his journal, that it was nearly five months since they had had a rainy day.

[26] Nahuel-huapi signifies the Island of Tigers according to Falkner.

CHAPTER VIII.
SURVEYS AND DISCOVERIES IN THE INTERIOR.

Malaspina Surveys the Shores of the Rio de la Plata in 1789. Bauza maps the Road to Mendoza: De Souillac that to Cordova. Azara, and other Officers, in 1796, fix the positions of all the Forts and Towns in the Province of Buenos Ayres. Don Luis de la Cruz crosses the Pampas, from the frontiers of Conception in Chile to Buenos Ayres, in 1806. Attempt at a new delineation of the Rivers of the Pampas from his Journal. His account of the Volcanic appearances along the Eastern Andes. Sulphur, Coal, and Salt found there, also Fossil Marine Remains. The Indians of Araucanian origin: Habits and customs of the Pehuenches.

Piedra's orders confined him to the east coast of Patagonia, as has been shown in the preceding chapter; but in 1789 Spain sent forth an expedition of much more importance, especially in a scientific point of view. [27]

The ships employed were the *Atrevida* and *Descubierta*, under the command of the well-known Malaspina, who not only revised Piedra's and Viedma's surveys of Patagonia, but, rounding Cape Horn, explored the greater part of the coast of the Pacific, from its southern extreme to the Russian settlements in the north-west. Malaspina, upon his return, was thrown into a dungeon and deprived of his papers,—why, has never transpired; nor was it till several years afterwards that those admirable charts, the results of his labours, were published by order of Langara, the Spanish Minister of Marine, which have since been so useful to modern navigators in the South American Seas, and will long be an honour to the Spanish navy. Malaspina's name, however, was not permitted to be affixed to them, neither has the journal of his voyage ever been published.

It is only very recently that the details have been discovered at Buenos Ayres of the first portion of his work, viz., the survey, in 1789, of the whole of the northern and southern shores of the Plate, as high up as the Paranã, in which nearly 150 points were fixed by him. In the Appendix all those of any importance will be found, in a tabular form, together with other positions, determined on good authority.

It was this survey, with the soundings afterwards taken by Oyarvide (who lost his life in completing them), that furnished the materials for the chart of the river Plate, officially published at Madrid in 1810: nor was this all that Buenos Ayres owed to Malaspina: upon his return to Valparaiso from the north-west coast, he detached two of his most intelligent officers, Don José Espinosa, and Don Felipe Bauza, well known in this country, to map the road across the pampas; and by them the true positions of Santiago in Chile, of Mendoza, San Luis, the post of Gutierres on the river Tercero, and other points along the line, were, for the first time, determined. Their map, so far as it extends, is the best, and the only one of that line of country, I believe, ever drawn by any one capable of taking an observation.[28]

Whilst they were thus engaged in fixing one part of the geography of the interior, the Viceroy turned to account the temporary sojourn at Buenos Ayres of some of the officers attached to the commission for laying down the boundaries under the treaty of 1777 with Portugal, and employed them in mapping other portions of the territory under his immediate jurisdiction.

In 1794 M. Sourreyere de Souillac, the astronomer of the third division of that commission, laid down the line of road from Buenos Ayres to Cordova, and fixed the latitude of that city in 31° 26´ 14".

In 1796 Azara, with Cerviño and other officers employed on the same service, made a detailed survey of the frontiers of the province of Buenos Ayres, in the course of which they fixed the positions of all the towns and forts of any importance between Melinqué, its north-western extremity, and the most southern bend of the river Salado, beyond Chascomus. That river they found to have its origin in a lake in latitude 34° 4´ 45", longitude from Buenos Ayres 3° 36´ 32"; it is an insignificant stream, of trivial importance till joined by the Flores.

Thus materials were collected for laying down a considerable portion of country upon the very best authorities; but, like the surveys of the coast, many years were suffered to elapse ere they were made available to the public. Bauza's map was not published till 1810, and it was only in 1822 that the positions fixed by Azara in 1796 appeared for the first time as his in the "Statistical Register," published that year at Buenos Ayres. De Souillac's might have remained unknown for ever, had not Señor de Angelis lately brought them to light; as well as Malaspina's "Fixed Points on the Shores of the River Plate."

But, after all, however valuable were these data in perfecting a knowledge of the country already occupied, they led to no new discoveries, and by far the greater part of the interior of the continent, to the south of the Plate, remained unexplored, till Spain becoming involved in the general war carried on between the great powers in Europe, her colonial subjects on the shores of the Pacific began to experience more or less inconvenience from the stoppage of their ordinary trade. They found that the ships which used to visit them direct from Europe for the most part ran into the river Plate, rather than encounter the increased risk of capture in the longer voyage round Cape Horn; and it became therefore to them an object of considerable importance to shorten, if possible, the over-land journey from thence to the opposite side of the continent, and particularly to the southern parts of Chile.

This led to explorations being set on foot by the public authorities, in the years 1803, 1804, and 1805, the result of which was, the discovery of several new passes over the Cordillera, south of Mendoza, one of which, the pass de las Damas, was examined by the same M. de Souillac, already spoken of, who reported that at a very small expense it might be made practicable for the passage of wheel-carriages. It only remained to be shown whether or not it was possible to travel in a direct line across the pampas from any of those passes to Buenos Ayres.

In this state of things, Don Luis de la Cruz, an enterprising officer who had seen much of the Indians, offered to start from Antuco, in the province of Conception, the most southern of the passes yet known, to endeavour to reach Buenos Ayres by a straight course across the pampas. This proposal was accepted by the Governor of Chile, and in order to secure as far as possible the co-operation of the native tribes, which indeed was absolutely necessary to the success of the undertaking, the Caciques of the Pehuenches, who inhabited the country on the eastern slopes of the Cordillera, were summoned to hold a grand parlamento, or parley, to consider it. There had been long a friendly intercourse between them and the Spaniards, who, moreover, had at times afforded them protection from the attacks of their enemies; they therefore did not

hesitate on this occasion to intimate to them that they expected in return all the good offices and aid which they could give to Cruz and his party.

They attended at the time appointed, and after a grave discussion after their fashion, which lasted several days, they agreed to take the expedition under their particular protection, and see it safe to Buenos Ayres; Cruz, on his part, engaging that the Indians who accompanied him should be presented to the Viceroy, rewarded with suitable presents, and sent back in safety to their friends at the conclusion of the service. This pact was ratified with much formality; the hand of Cruz being solemnly placed in that of the most ancient of the Caciques, to signify that thenceforward he was under his special care.

Whist the expedition was preparing, Cruz spent a couple of days in an unsuccessful attempt to get to the summit of the volcano in the vicinity of Antuco, which he describes as being then in continual action, and at times burning so strongly as to be visible from a very considerable distance: but he was stopped, and obliged to turn back, by a heavy fall of rain and snow, considered by the Indians as an interposition of the Deity to prevent the examination of a region which they held it to be forbidden to mortals to approach.

On the 7th of April (1806), all being ready, the party left the fort of Ballenar, near Antuco, to commence their journey. It consisted of twenty persons, viz., Cruz and four officers, a surveyor to measure the daily distances, and fifteen attendants, besides their Indian escort; having with them carts and horses and all things they might want on the way. Striking across the pampas in as direct a course for Buenos Ayres as the nature of the country would permit, in forty-seven days they arrived at Melinqué,[29] the north-western frontier fort of that province, having travelled, according to their measured daily journeys, rather more than 166 leagues;—adding 68 more for the distance between Melinqué and Buenos Ayres, made the total distance from Antuco to that city, by this route, 234 leagues;—being 75 less than the ordinary post-road from Buenos Ayres to Mendoza.

The narrative which Cruz subsequently drew up of this expedition is extremely diffuse, and would be tiresome to most readers from the extreme minuteness with which he has thought it necessary to detail the daily discussions and parleys which, upon every trivial occurrence, took place with the Indians.

In a geographical point of view, the most interesting part of it is that in which he describes the rivers which he crossed after descending the Cordillera; from which I have attempted in the map to give an idea of them, differing, as will be seen, from that hitherto adopted. In this I have been also much guided by the observations, in my possession, of the late Dr. Gillies, my correspondent for many years at Mendoza, who had himself been as far south as the river Diamante, and had taken great pains to collect information respecting the geography of that part of the country.

The old notion was, that nearly all the rivers south of Mendoza uniting in one wide stream, to which the Diamante, as one of the principal affluents, gave its name, ran direct south into the Rio Negro; and this, as I have mentioned in the preceding chapter, was Villariño's idea, and led him, without hesitation, to believe that the great river, whose mouth he explored, and which, he says, he does not doubt would have led him to Mendoza, was the Diamante.

From a careful examination of Cruz's journal, and other data in my possession, I am satisfied this will be found to be an error, and that the great river which flows into the Negro is the Neuquen, which Cruz crossed on the sixth day after he left Antuco, at the place called Butacura, and about eighteen leagues on his journey. The Neuquen[30] is formed by many streams from that part of the Cordillera, all which Cruz names, and the principal of which appear to be the Rinqui-leubú, which descends from the mountain of Pichachen, and further north the Cudi-leubú, the drain of many small rivers. No one, he says, doubts that the Neuquen, from the junction of the Cudi-leubú, is navigable as far as the Rio Negro, and thence to the ocean.

Proceeding in a north-easterly direction, Cruz fell in with another, considerable river, as large, he says, as the Neuquen, called by the Indians the Cobu-leubú,[31] whose sources they reported to be in the Cordillera of Curriliquin, over-against the province of Maule, in Chile; and they spoke of seven rivers which fell into it in its course from the north to the place where the expedition crossed it. Cruz says distinctly *it does not fall into the Neuquen*, but, changing its southerly course about where they passed it, it ran eastward, in which direction the travellers kept it in view, at times coasting it, for several days, till at a place called Puelec it again turned towards the south, taking thence, as the Indians affirmed, its course to the sea. This river, there can be no doubt whatever, is the Colorado, which falls into the sea a little to the north of the Rio Negro.

The hilly ranges of the Cordillera were found to extend about ten leagues beyond the pass of the Cobu-leubú, above spoken of, after which the pampas commence, which continue unbroken to Buenos Ayres.

Two days after passing Puelec, whence the river Cobu-leubú takes a southerly course, and having gone about seventy-four leagues by their daily computation from Antuco, the travellers reached the river called by the Indians *Chadi*-leubú, or the *Salt* River (probably a continuation of the Atuel), which, uniting with the Desaguadero, or Drain of the Diamante, about five leagues below where they crossed it, discharges itself into a vast lake about ten leagues further south, called by the Indians the Urré-lauquen, or the bitter lake.

In old times, according to Dr. Gillies, the Diamante, which he says rises from the eastern base of Cauquenes Peak in the Cordillera, fell into the Atuel a little below Fort San Rafael, where it will be seen on reference to the map that the two rivers very nearly approximate; but about twenty-five years ago it took another course, forming for itself a separate channel, by which it discharges itself into the Desaguadero, which carries to the south the waters of the rivers Tunuyan and Mendoza, and is finally lost with the Chadi-leubú in the great salt lake above mentioned.[32]

The Chadi-leubú, according to Cruz, was one of the most considerable of the rivers he had yet passed. The people and houses crossed it swimming, and the baggage was carried over in a balsa, a sort of hide-raft. It formed the boundary of the lands of the Pehuenches, and many were the debates which ensued amongst Cruz's Indian companions as to the probable view which the tribes in the pampas beyond would take of the expedition.

One day it was the dream of some old woman, another, the augury of a soothsayer, that excited their doubts and alarms, and made them hesitate as to the propriety or not of going on with the Spaniards. In their embarrassment, however, they made a notable discovery, which was no other than that Cruz held constant communication with a spirit which directed him in all his proceedings:—he was observed continually to refer to it, and the spirit, which was his watch, was heard to give out certain mysterious

sounds whenever consulted. Cruz had no desire to deceive them, but the impression was not to be got rid of, and it was so far of use that it inspired them with fresh courage to go on.

It was determined, after much consultation, to send forward an embassy to the Caciques of the Ranqueles tribes, who lived in the pampas beyond, and especially to Carripilum, the most influential amongst them, to announce the approach of the expedition, and its peaceable objects, and to endeavour to propitiate them beforehand in its favour. Fortunately, Carripilum was in good humour, and, in the belief that he should get presents in proportion to the importance of the expedition, not only received them with honour, but resolved to accompany them himself to Buenos Ayres, where Cruz assured him the Viceroy would welcome his arrival, and be glad to enter into treaties with him for opening a new road through his territories for the Spaniards trading between Buenos Ayres and Chile.

In twenty-nine days after passing the Chadi-leubú, and in forty-seven after their departure from Antuco, the travellers arrived at the fort of Melinqué, on the north-west frontier of the province of Buenos Ayres; where, whilst halting to refresh themselves, and to allow the Indians to celebrate their safe, arrival, according to their custom, in beastly drunkenness, some straggling soldiers, flying from the rout, brought in the disastrous intelligence of the landing of the British troops under General Beresford, and the fall of Buenos Ayres.

The dismay of poor Cruz at this unexpected intelligence may be easily imagined. Encumbered with a numerous party of Indians who had accompanied him across the continent, far from their homes, in the expectation of the rich presents they were to have upon their arrival at Buenos Ayres, and relying upon promises which it was now totally out of his power to fulfil, he was in the greatest embarrassment.

To proceed was out of the question; and as to going to Cordova, whither it was reported the Viceroy had fled, it was evident that at such a time matters of much more pressing importance would prevent his attending to the objects of the expedition. His resources too were utterly exhausted. The Indians, however, who soon heard reports of what had happened, evinced a degree of good feeling which could hardly have been expected from them under the sore disappointment of their own expectations. Having heard from Cruz a confirmation of the bad news, they at once expressed themselves satisfied that it was impossible for him to fulfil his engagements towards them, and announced their resolution to relieve him from any difficulty on their account by returning whence they came. All they desired was, that he would duly report to the Viceroy that they had faithfully, and as far as they could, fulfilled their engagements, so that they might claim their due reward in better times. The Pehuenches did not part without much lamentation from their Christian friends, and they repeated again and again their readiness to obey any orders the Viceroy might be pleased to send them. Carripilum made the same protestations, and left one of his relations to proceed with Cruz in search of the Viceroy, expressly to make an offer of any aid which the Spaniards might desire from the Indians against the common enemy.

Cruz found the Viceroy at Cordova, who received him with kindness, and paid every attention to the Cacique who accompanied him. He was equipped in a new suit of Spanish clothes, and after a time dismissed with presents and every demonstration of the high estimation in which the Viceroy held the services of Carripilum and his companions.

Don Luis himself, upon the recovery of Buenos Ayres, repaired thither, and drew up the diary of his interesting journey, which, like those of Villariño and Viedma, and many other interesting papers of the same sort, was thenceforward consigned to oblivion in the secret archivo.[33] The various important political events which shortly afterwards began and rapidly succeeded each other were, however, perhaps some excuse for its remaining unnoticed.

In describing the eastern parts of the Cordillera, Cruz says that, at the time he was there, only the volcanoes of Antuco and Villarica were in activity,[34] though the traces of others extinct might be seen in every direction:—the evidences of their ancient eruptions, he says, might be followed for thirty leagues continuously:—he speaks, amongst other volcanic appearances, of hot springs resorted to by the Indians for their medicinal qualities, and says so abundant is the sulphur in all those parts that several rivers are strongly impregnated with it; vast quantities also of bituminous substances are everywhere to be seen, and beyond the Neuquen, he says, there is an abundance of coal.[35] Nor is there good ground for doubting his assertion, since on the opposite side of the Cordillera, in about the same latitude, coal has long been known to exist, and has been occasionally used by the foreign vessels trading with that part of Chile. Near the sources of the Neuquen are mines of rock-salt: in the level lands, also, between that river and the Chadi-leubú, salt may at all times be collected from the surface of the ground, and the intermediate streams are all more or less brackish from its influence.

Fossil marine remains appear to abound amongst the lower ranges of the Cordillera which Cruz passed, not only strewed over the surface at considerable elevations, but deeply imbedded in the soil, as might be seen wherever sections were formed by the courses of the mountain-torrents.

In addition to his description of their country, Cruz has added to his journal some account of the manners and customs of the Pehuenches;[36] those Indians who take their name from the abundance of pine-trees in the lands they occupy, derive their origin from the Araucanian race inhabiting the southern parts of Chile; as indeed do all the wandering tribes found in the pampas from the frontiers of Mendoza and Cordova to the Rio Negro in the south:—they all speak a common language, and, if their customs in any degree vary, it will only be found to arise from the greater or less distance they are removed from their original stock, or as they are brought into occasional contact with their Christian neighbours. Divided and subdivided into innumerable petty tribes, or rather family groups, they wander from place to place in quest of pasturage for the sheep and cattle which constitute their sole possessions; continually quarrelling and fighting with each other, and rarely united by any common object save to make some occasional plundering expedition against the defenceless properties of the Spaniards on the frontiers. Such at least are the habits of those generally known as the Pampas, and Ranqueles, tribes; but of them I shall speak more particularly in the next chapter.

The Pehuenches, whose customs Cruz describes, appear to be a somewhat better race. They are not so far removed from their original stock in Araucania; and their vicinity to the Spaniards of Chile, and friendly intercourse with them, has had a manifest influence in modifying their original habits.

In person they are described as fine men, stouter and taller than the inhabitants of the plains, but, like all the Indians of the same stock, in the habit of disgustingly bedaubing and disfiguring their faces with paint. They wear a sort of cloak over the neck and shoulders, with another square cloth fastened round the loins,

and those who can get them, little conical hats bought from the Spaniards, and the same sort of boots as are made by the gauchos of Buenos Ayres from the dried skin of a horse's leg fitted to the foot. The bridles of their horses are beautifully plaited, and often ornamented with silver: spurs of the same material are in great request amongst them, and are eagerly purchased of the Spaniards.

The women as well as the men paint themselves: *their* chief ornaments consist of as many gold or silver rings as they can collect upon the fingers, and large ear-rings, resembling both in size and shape a common English brass padlock.

Their habitations consist of tents made of hides sewn together, which are easily set up and moved from place to place. Their principal food is the flesh of mares and colts, which they prefer to any other; if they add anything in the shape of cakes or bread, it is made from maize and corn obtained from the Spaniards in exchange for salt and cattle, and blankets, of the manufacture of their women, for it is rarely they remain long enough in the same place to sow and reap themselves.

Their Caciques or Ulmenes, as they call them, are generally chosen either for their superior valour or wisdom in speech—occasionally, but not always, the honour descends from father to son: they have but little authority in the tribe, except in time of war, when all submit implicitly to their direction.

They are not, however, entirely without laws and punishments for certain crimes, such as murder, adultery, theft, and witchcraft. Thus he who kills another is condemned to be put to death by the relations of the deceased, or to pay them a suitable compensation. The woman taken in adultery is also punishable with death by her husband, unless her relations can otherwise satisfy him. The thief is obliged to pay for what he is convicted of stealing; and, if he has not the means, his relations must pay for him. As to those accused of witchcraft, they are burnt alive with very little ceremony; and such executions are of frequent occurrence, inasmuch as a man rarely dies a natural death but it is ascribed to the machinations of some one in communication with the evil spirit. The relatives of the deceased, in their lamentations, generally denounce some personal enemy as having brought about his end, and little more is necessary to ensure his condemnation by the whole tribe: sometimes in his agony the unhappy victim names others as his accomplices, and, if the dead man be of any importance amongst them, they too are often sacrificed to his manes in the same barbarous manner.

As to their religion, they believe in a God, the creator and ruler of all things, though they have no form of worship: they also believe in the influence of an evil spirit, to whom they attribute any ill that befalls them. They consider that God has sent them into the world to do right or wrong as they please; that, when the body perishes, the soul becomes immortal, and flies to a place beyond the seas, where there is an abundance of all things, and where husbands and wives meet, and live happily together again.

On the occasion of their funerals, that they may want for nothing in the other world to which they have been used in this, their clothing and accoutrements, and arms, are buried with them; sometimes a stock of provisions is added; and when a Cacique is buried his horses are also slain and stuffed with straw, and set upright over his grave. The internment is conducted with more or less ceremony, according to the rank of the deceased:—if he be a man of weight amongst them, not only his relations, but all the principal persons of the tribe, assemble and hold a great drinking-bout over his grave, at which the more drink, the more honour.

They have great faith in dreams, especially in those of their ancients and Caciques, to whom they believe they are sent as revelations for the guidance of the tribe on important occasions; and they seldom undertake any affair, either of personal or general importance, without much consultation with their diviners and old women as to the omens which may have been observed.

Marriage is an expensive ceremony to the bridegroom, who if obliged to make rich presents, sometimes all he is worth, to the parents of his love, before he obtains their consent. Thus daughters are a source of sure wealth to their parents, whilst those who have only sons are often ruined by the assistance which is required from them on these occasions. Such as can afford it take more wives than one, but the first has always precedence in the household arrangements, and so on in succession.

When a child is born it is taken with the mother immediately to the nearest stream, in which after both are bathed, the mother returns to her household duties, and takes part in preparing for the feast that follows.

In almost all these habits, the Pehuenches appear to fellow the Araucanians, of whose manners and customs Molina has given a full account in his History of Chile.

The mother of one of my servants lived seven years amongst these savages, and confirmed Cruz's account on all the points I have here stated. In general, she said, she was as kindly treated by them as was possible under the circumstances:—she had been taken by the Pampas Indians, and by them sold to the Pehuenches, that she might have less chance of escaping and ever reaching her own home again. Men, women, and children, she said, lived much more on horseback than on foot.

A knowledge of their language might assist much to make us better acquainted with their country, for their nomenclature of places, as well as of persons, is rarely insignificant. I have already stated that the Pehuenches derive their name from pehuen, the pine-tree, which abounds on the slopes of the Cordillera where they dwell. The Ranqueles are so called from ranquel, the thistle, which covers the plains which they inhabit. The Picunches take their name from picun, the *north*. The Puelches signify the people to the east, and the Huilliches those to the south: *che* means people.

The following will serve as examples of some of the appellations of their Caciques:—Culucalquin, the Eagle; Maripil, the Viper; Ancapichui, the Partridge; Quilquil, the Little Bird; Guayquiante, the Sun; Cari-mangue, the Condor; Antu-mangue, the Ostrich; Pichi-mangue, the Vulture; Paine-mangue, the Old Condor.

FOOTNOTES:

[27] The only authentic notice which I believe has as yet appeared of this important voyage is the very brief one attached to the "Collection of Astronomical Observations by Spanish Navigators," published by Don José Espinosa, chief of the Hydrographical Department of Madrid, in 1809.

[28] Carta esferica de la parte interior de la America Meridional para manifestar el camino que conduce desde Valparaiso à Buenos Ayres construida por las observaciones astronomicas que hicieron en estas partes en 1794 Don José de Espinosa y Don Felipe Bauza, Oficiales de la Real Armada—en la direccion hidrografica, año 1810.

[29] Position of Melinqué fixed by Azara, lat. 33° 42′ 24", long. from Buenos Ayres 3° 30′ 38".

[30] *Neuquen* or *Nehuen* signifies the rapid river, according to Angelis.

[31] Although in the copy of Crux's MS. in my possession, as well as in Señor de Angelis's collection, the name of this river is written *Cobu*-leubú; I suspect it to be an erroneous writing for *Colu*-leubú, which signifies the great river. I believe this the more, as I find that people who have journeyed south from Mendoza speak of it (at least of what I suppose to be the upper part of the same river) as the *Rio Grande*.

[32] The track laid down on the map from Fort San Rafael along the northern bank of the Diamante, to its junction with the Desaguadero, and thence southward into the Indian territory, was fixed by compass, and given me by Dr. Gillies.

[33] An estimate, annexed to his journal, of the expenses which he calculated would be requisite to make the road he had passed practicable for carriages the whole way from Antuco to Buenos Ayres, made them amount to no more than 46,000 Spanish dollars.

[34] Captain Fitzroy says that no less than four volcanoes, now in activity, may be seen from Chile.

[35] If coal really exist at the sources of the Neuquen, which he says is navigable to the sea, it is impossible to calculate on the extent of its future influence upon the prosperity of the neighbouring provinces whenever the people shall open their eyes to the power of steam-navigation. As yet, it would appear as if the people of Mendoza and San Luis had as little idea of the use even of a canoe as the Indians themselves, otherwise it seems hardly credible that the Spaniards should never have made the slightest attempt to send a boat down any one of these rivers.

[36] Pehuen signifies a pine-tree.

CHAPTER IX.
PROGRESS OF INLAND DISCOVERY.

Ignorance of the Buenos Ayreans respecting the lands south of the Salado previously in their Independence. Colonel Garcia's expedition to the Salt Lakes in 1810. The Government of Buenos Ayres endeavours to bring about an arrangement with the Indians for a new boundary. Their warlike demonstrations render futile this attempt. March of an army to the Tandil, and erection of a Fort there. Some account of that part of the country. The coast as far as Bahia Blanca examined, and extension of the frontier-line as far as that point. The hostility of the Indians makes it necessary to carry the war into the heart of their Territories. General Rosas rescues from them 1500 Christian captives. Detachments of his army occupy the Choleechel, and follow the courses of the River Negro and of the Colorado till in sight of the Cordillera.

Having given some account of the explorations of the Old Spaniards beyond Buenos Ayres, I shall now proceed to state what has been done by their successors since their independence. It is inconceivable the ignorance which, up to a very recent period, existed amongst even the higher classes of the people of Buenos Ayres respecting the Indian territories which immediately bounded their own lands to the southward. It is indeed only by a laborious investigation of the history of their frontiers, and of the steps taken from time to time to advance them, that we can even now obtain any tolerable notion of the physical features of that part of the continent. This, however, is worth the trouble, as it will furnish materials for laying down a considerable portion of country hitherto most imperfectly and erroneously described in all existing maps.

One of the first attempts made by the Independents to acquire accurate data respecting the country to the south of the Salado appears to have been in 1810, on the occasion of one of the periodical expeditions to the great salt lakes in the south. Those expeditions formed a singular exception to the ordinary supineness and indisposition of the Spaniards to cross their own frontiers. They consisted of large convoys of waggons dispatched under direction of the municipal authorities to collect salt for the yearly supply of the city, escorted by a military force to protect them from the Indians. Of their apparent importance some idea may be formed from one, of which an account has been preserved, and which took place during the time of the Viceroy Vertiz, in 1778, composed of 600 waggons, with 12,000 bullocks, and 2600 horses, and nearly 1000 men to load them, besides an escort of 400 soldiers. The Indians, on these occasions, were propitiated by suitable presents, and, as the caravans never deviated from their object, they became habituated to them, and, instead of regarding them with jealousy, in general rather looked forward with eagerness for the annual tribute in the shape of presents which the Spaniards were ready to pay them for an unmolested passage across their territories. They even lent the people their assistance at the salt-lakes to load their waggons in exchange for beads and baubles from Buenos Ayres.

The Viceroy occasionally attached some pieces of artillery to the troops, and generally availed himself of the opportunity to make a salutary display amongst the savages of the military discipline and power of the Spanish soldiers, which no doubt had its due effect; but no one thought of turning these expeditions to any further account:—they never departed from the same direct and beaten track across the pampas, and not the slightest pains were taken to collect any further information respecting the country beyond, at least in the time of the Old Spanish rule.

The members of the National Government, set up in 1810, were animated by a different spirit: they foresaw with the dawn of their new destinies the prospect of their becoming a commercial people, and the consequent necessity of giving such encouragement to the extension of their pastoral establishments as would tend to the multiplication of the staple commodities of the country. The extension of their frontiers, and their due protection by military posts were consequently among the first objects of their attention; and when the annual expedition to the Salinas was about to set out, they took care to select an officer for the command of it qualified to reconnoitre the country and to collect such information as might assist them in determining upon their future plans for an extension of their territorial jurisdiction.

Colonel Garcia, the officer in question, had previously seen much of the Indians on the coast of Patagonia. He was of a conciliatory disposition, and was on many other accounts eminently qualified for the task committed to him. From the diary of his expedition, which is in my possession, it appears that the caravan or convoy placed under his charge, on this occasion, consisted of 234 waggons, with 2927 bullocks, and 520 horses attached to them. His attendants, including soldiers, were 407: they had also two field-pieces with them. Nor was this considered a large party, compared with former expeditions with the same object; indeed Garcia soon found to his cost that his force was hardly sufficient to secure him common respect from some of the many Indian Caciques, who, from the time of his leaving the frontier fort of Cruz de Guerra to his arrival at the Salinas, successively besieged him with their importunities for presents, especially of tobacco and spirits, and kept him in continual alarm lest they should attempt to carry off by force what they could not obtain by other means. Each who presented himself called himself master of the lands they were passing through, and expected corresponding presents to purchase his permission to pass forward. Nor was this the worst: it appeared that something had given rise amongst the Indians to a suspicion of the ulterior objects of the Buenos Ayreans; and, under an impression that they projected a forcible settlement in their lands, the Ranqueles tribes from the plains south of San Luis and Mendoza, under their principal Cacique Carripilum (the same spoken of in the foregoing chapter), had collected their forces with the secret determination to endeavour to cut off the whole party. Fortunately the fidelity of some of the Puelches, or Eastern tribes, who hate and are continually at variance with the Ranqueles, enabled Garcia to discover and disconcert their hostile plans, and finally, though with considerable difficulty and danger, to accomplish his object, and return with his convoy of salt-carts in safety to Buenos Ayres.

Amongst the results of this expedition was the determination by observation of seventeen points along the line of road from the Guardia de Luxan, in lat. 34° 39′, long. west of Buenos Ayres 1° 2′, to the Great Salt Lake in lat. 37° 13′, long. west of Buenos Ayres 4° 51′;[37] the whole distance travelled being 97 leagues, or, adding 24 for that from Luxan to the capital, 121 from Buenos Ayres. The journey out occupied 23 days, and the return 25; altogether the party was absent just two months, viz., from the 21st of October to the 21st of December.

The only features which seem worthy of remark along the road are the numerous lakes, which appear to be

the collections of the streams from the western ramifications of the Sierra Ventana; the most considerable of which is the Laguna del Monte, in lat. 36° 53′, long. from Buenos Ayres 3° 57′; its name, the Lake of the Wood, is taken from a large island upon it covered with fine timber; it is formed by the river Guamini, and other streams from the mountain group so called; its width was estimated to be three or four leagues, and in the rainy season it forms one with the lakes of Paraguayos, extending more than seven leagues to the south-west.

Although, the Laguna del Monte was salt, it was observed that the waters of some of the smaller lakes in its immediate vicinity were perfectly sweet. The same observation was made at the Salinas; the sweetest water was abundant in the immediate vicinity of the Great Salt Lake.

Shortly before reaching the lake of Paraguayos, the Sierra de la Ventana and its ramification, the Guamini, were seen and particularly observed: the Sierra Guamini bore south 15° east, and the Ventana south-east a quarter east. There they were met by several of the best-disposed of the Caciques and their followers, who supplied them with cattle in exchange for the articles they had with them. They accompanied them to the Salinas, which they reached two days afterwards; and to them they owed their protection from the hostile Renqueles and Carripilum, whose treachery they discovered and exposed.

Speaking of the character of these Indians, Garcia says they are remarkable alike for their cowardice as for their ferocity: their warfare is a system of continual deceit and treachery, and their stolen victories are always signalized by savage cruelties. Nothing could exceed their submissive obsequiousness to the Spaniards from the moment they knew they had an intimation of their hostile intentions, and were upon their guard against them. The prevailing vice amongst them all, even the best of them, is drunkenness,—the Caciques set the example upon every occasion; and it is seldom that their orgies end without the loss of lives, for in their cups they are always quarrelsome:—then the slightest offence is remembered, and they draw their knives, wounding and killing one another, and falling upon all, even their nearest relations, who would attempt to restrain them. Of all the Indians the Ranqueles are the worst:—they may be called the bush-rangers of the pampas:—if they cannot rob the Spaniards they will make war upon the other tribes, to carry off their horses and cattle. The Puelches, on the contrary, or eastern people, at that time settled about the Salinas and the mountains towards the coast, were found to be more peaceably disposed: they were the possessors of large herds and flocks of their own, and the manufacturers of many articles in demand amongst the Spaniards, such as ponchos, skin-cloaks, bridles, and feather-brooms, which they used to sell to them at Buenos Ayres and on the frontiers.

The extent of the Great Salt Lake is not given, and Garcia says it was impossible to ride round it from the thick woods which lined its banks; but, from an eminence a little to the south, he got a general view of it, as well as of the country for a considerable distance. Looking towards the south, as far as he could see, was one immense level plain, covered with pasturage: to the eastward, in the distance, some woods were visible, which, he was told, extended to the hilly ranges of Guamini and La Ventana. On the opposite side, to the westward of the lake, was a vast forest of chañar, algaroba, and an infinite variety of other trees, which the Indians told him extended with little interruption for three days' journey in that direction; and they added the singular circumstance that, about a day and a half off in the midst of it, upon a hilly range of some extent, were to be seen the ruins of the brick buildings of some former inhabitants (antigua poblacion), though, as to who they might have been, or when they ceased to exist, they had not the smallest notion, neither had they any tradition which could throw light upon it. The fruit-trees, they said, which, had been planted there, had multiplied exceedingly, so that it was a great resort of the Indians in their journeys across the pampas, to gather figs, peaches, walnuts, and apples, and other fruits, of which there was an abundance for all that went there. Wild cattle also, they said, were in the surrounding forest, but they were not so accessible, and were difficult to follow up through the woods. Colonel Garcia hazards no conjecture as to who could have been the settlers in this secluded and remote spot, nor has any one else obtained since any further account of them. The age of the trees might perhaps throw some light upon the date of the buildings, and I imagine that the names alone of those I have mentioned are sufficient to indicate that they must have been of European introduction, and consequently that those who planted them must have done so subsequently to the discovery of that part of the world by the Spaniards. Nothing, I was told, existed at Buenos Ayres which could throw any light whatever upon the subject.

Had the practice continued of carrying on these expeditions, it is probable that the Buenos Ayreans would have become better acquainted with the southern part of the pampas; but, upon the opening of an unrestricted trade, the importation of salt from the Cape de Verd Islands and other countries rendered it unnecessary for the government to put itself to any expense about them; and, as individuals without the protection of the troops would not run the risk of encountering the Indians, the Salinas ceased to be resorted to, and the people of Buenos Ayres became reconciled to purchasing of foreigners an article of which they have an inexhaustible supply within their own territory.

Garcia proposed to the government to form a military settlement at the Salinas, to be the central point of a line of frontier to be drawn from the river Colorado across the pampas to Fort San-Rafael on the river Diamante, south of Mendoza. This he conceived would effectually check the depredations of the Ranqueles and their thievish associates, whilst the friendly and well-disposed Puelches Indians to the south, he was tolerably assured, would at that period have been glad to have been brought under the immediate protection of the government of Buenos Ayres. The principal Caciques of the latter were three brothers, from the vicinity of Valdivia, where in their early life they had learned to respect the Spaniards, and to appreciate the benefits of keeping up a friendly and well-regulated intercourse with them. Nowhere had the king's officers taken such pains to conciliate the native tribes as in Chile, and so well had that system of treating them answered, that, in the present case, these brothers declared there was nothing they desired more than the permanent establishment of a more intimate connexion between them and the people of Buenos Ayres, and that they would gladly place themselves and their followers under the immediate protection of the government.

But Garcia's plan embraced more than could be done at once by the rulers of Buenos Ayres; and partly, perhaps, on that account, and partly because all their disposable forces and means were shortly afterwards required to carry on the struggle for their independence, it was, with many other projects laid aside, and many years elapsed ere any further step was taken.

Nevertheless the results of their new political condition developed themselves, as was anticipated, and the increase of their trade led to the extension of their pastoral establishments. Although the government took no measures for their protection, the people of the country began to occupy the lands to the south of the Salado, which soon brought them into contact and collision with the Indians, who, on their part, looked

with a very natural jealousy upon settlements planted without their concurrence on lands which from time immemorial they had been accustomed to consider as exclusively their own. The more peaceable tribes retired to the fastnesses in the mountains to the south, but the Ranqueles and other migratory hordes retaliated by carrying off the cattle and plundering those who had thus intruded themselves within their territories. In these marauding expeditions they were often joined by some of the vagabond gauchos, deserters from the army, and such wretches flying from the pursuit of justice as, in times of civil commotion especially, are to be found in all countries. By those unprincipled associates they were soon taught to look with less dread upon the fire-arms of the Buenos Ayrean militia, and even to use them, whenever, either by the murder or robbery of some defenceless estanciero, they fell into their hands. Nor was this the worst. During the unhappy civil dissensions which broke out between Buenos Ayres and the provinces, some of the unprincipled leaders of the reckless factions which divided the Republic sought alliances with the Indians,[38] the fatal consequences of which they only too late discovered. Like bloodhounds it was impossible to restrain them. When once the weakest points were shown them, they burst in upon the frontier villages, murdering in cold blood the defenceless and unprepared inhabitants, and carrying off the women and children into a slavery of the most horrible description.

It was manifest that the impunity with which these outrages were committed arose mainly from the total absence of any protection on the part of the government for those settlers who had advanced their estancias beyond the old forts within the line of the Salado, and the public voice called loudly for some prompt remedies for the evil, the most efficacious of which appeared to be the adoption of some one of the many plans from time to time proposed for a new line of military posts to cover the rural population south of that river; the hilly ranges of the Vuulcan, especially, seemed to present a natural frontier which it appeared only necessary to occupy to secure the object; but the information respecting all that part of the country was still exceedingly imperfect; and it was determined, therefore, in the first instance, to send out an exploratory expedition to examine them. This led to Colonel Garcia being again called upon to proceed to the south, with the double object of endeavouring to induce the Indians to enter into an arrangement with the government of Buenos Ayres for a new boundary as the basis of a general pacification, and of acquiring precise information as to the most eligible positions for the establishment of military posts in the hilly ranges in that direction.

The communications he had had twelve years before with the leading Caciques of the tribes inhabiting the country eastward of the Salinas led him vainly to hope that those tribes at least might be brought to acquiesce peaceably in the views of the government, and, provided they were left in possession of the lands they occupied in the vicinity of the Sierra Ventana, that they would not oppose the occupation by the Buenos Ayreans of the more northern line of the Vuulcan and Taudil; but Garcia was not aware of the great change which had taken place in the feelings and policy of the Indians, from a variety of circumstances, since his journey to the Salinas in 1810.

The messengers, however, sent forward to announce his mission were well received, and a respectable deputation, headed by Antiguan, one of their principal chiefs, was sent forward to meet and to conduct the ambassador and his suite to their toldos at the foot of the Sierra Ventana, where the Caciques of the Puelches proposed the negociations should be opened, promising to invite thither at the same time representatives from all the tribes of the Pampas, not excepting the Ranqueles, and the Huilliches or People of the South, inhabiting the lands as far as the rivers Colorado and Negro.

Under this escort, and accompanied by Colonel Reyes, an engineer officer, and about thirty persons, soldiers and peons, Colonel Garcia set out from Lobos for the Indian territory on the 10th of April, 1822. On the 12th they crossed the Salado at a place where its depth allowed of the safe passage of carts, and where its width was not above thirty or forty feet; this was some way above the junction of the Flores, after which it becomes a river of more consequence, its breadth extending to 300 yards in the winter season, when it is impassable except in canoes. The next day they crossed the Saladillo at the pass of Las Toscas; this stream falls into the Salado a little above the river Flores, towards which they proceeded through a country much intersected by swamps, which obliged them to deviate continually from their direct course. When near the Lake de las Polvaderas, Colonel Reyes, being desirous to take an observation, produced his sextant, which led to an unexpected but serious manifestation of alarm and suspicion on the part of the Indians. Some foolish person, it appeared, when they were setting out had told them that the commissioners had with them instruments through which they could see all the world at once, and nothing would satisfy them, when they saw them brought out, that the Spaniards were not in direct consultation with the gualichù, or devil himself. It was impossible to do away with this notion of theirs, which led to the inconvenience of obliging the officers afterwards to take their observations by the stars at night instead of by the sun in the day-time.

About two leagues beyond where they crossed the Flores they verified its junction with the Tapalquen in a vast marsh. The Flores is in fact but the drain of the waters of that river; it was found to be more brackish than even the Salado. In the thick jungles along its banks many tigers were seen, which, however, excited little apprehension compared with the horseflies and mosquitos, from whose venomous attacks there was no escape. They followed the Tapalquen till they came in sight of the Sierra, distant ten or twelve leagues, the Amarilla Hills bearing south-south-east, and those of Curaco south-south-west; between these two groups runs one of the passes frequented by the Indians in their journeys to the Ventana, where the travellers halted, and in the night, whist their Indian guides were asleep, by an observation of Mars, determined the latitude to be 36° 45´ 10"; the longitude they fixed at 54° 13´ from Cadiz; variation 17° 10´.

The following morning, making a pretext for lagging behind out of sight of their Indian friends, they reconnoitred the pass, and determined with a theodolite the height of some of the hills in its immediate vicinity; the highest point of the Amarilla, or Tinta group, called Lima-huida, south-east of the pass, was 200 feet, and the two peaks of Curaco, which they had seen at a distance the day before, measured, the one 270, and the other about 200 feet. A small guard-house or fort would effectually close this pass against the Indians.

To the south of this part of the chain, the country is a succession of hills and dales, watered by many streams from the Sierra, and apparently well adapted for an agricultural settlement. Taking a course about south-south-west, on the third day after leaving the pass of Curaco they came in sight of the second range of mountains, called the Sierra de la Ventana, and arrived at the toldos of Antiguan their conductor, whose people, apprized of their approach, came out in great numbers, men, women, and children, to receive them. Antiguan lost no time in despatching messengers in every direction to summon the general meeting of the Caciques, whilst Colonel Garcia encamped with his little party on the borders of a lake, where it was

determined that the grand parlamento, or parley, was to be held. Thither they were attended by a friendly old cacique, Lincon, whom Garcia had known and made a friend of on his former expedition, and to whose advice and assistance they were in the sequel very essentially indebted. From him they learnt that the chiefs of the Ranqueles were far from peaceably disposed, or inclined to take part in any treaties with the government of Buenos Ayres for their lands; and that there existed generally amongst the Indians much jealousy and distrust of the Spaniards, in consequence of the measures they had of late been taking with respect to them. He warned them, also, not to be surprised at any warlike display which might be made at the approaching meeting, as it was probable that the Caciques would avail themselves of the opportunity to show the number of fighting men they could command.

It was fortunate they had some such notice of what they were to expect; for when, in two or three days afterwards, the Indians assembled, they certainly made an appearance much more like a general gathering of armed forces for war than of negociators for peace.

On the day appointed for the general conference, a body of about 200 men made their appearance at an early hoar, formed in battle array, and slowly advancing towards the commissioners' tents to the sound of horns (cornetas). On arriving within a short distance, they broke into small parties, uttering loud shouts, and charging over the plain, making cuts and thrusts in the air right and left with their swords and lances, and then wheeling about and riding round and round their leader, who apparently directed these manœuvrings. The principal object of all this, the commissioners were told, was to drive away the gualichù, or evil spirit, whose secret pretence they apprehended might otherwise maliciously influence the approaching negociations.

The trappings of some of the horses of these warriors were curiously ornamented with beads, and hung, about with little bells. Several of them wore sort of helmet, and a buff coating of hide, so well prepared as to be perfectly soft and flexible, though several times double; the helmets made of it are so tough as to resist the cut of a sword, and sometimes are bullet-proof.

This was but the advanced-guard of a numerous host which afterwards came in view, covering the horizon, and making really a very imposing appearance. Altogether there might be something more than 3000 fighting men regularly marshalled under their respective Caciques in nine divisions. Though these Indians belonged to the *soi-disant* friendly tribes, the commissioners could not fail to be struck at once with the quantity of arms and accoutrements amongst them, which were manifestly the spoils of war and of their own countrymen murdered on the frontiers. Their whole demeanour, too, was insolent and arrogant in the extreme, partaking infinitely more of defiance than any real desire for a permanent peace, which caused many misgivings to Garcia and his officers as to the result of their mission.

After a variety of martial manœuvrings, on a given signal a great circle was formed, in the midst of which the Ulmenes or principal Caciques, taking their places, commenced the parlamento by a preliminary discussion amongst themselves as to whether or not they should enter into any negociations whatever with the government of Buenos Ayres without the Ranqueles. On this point there were great differences of opinion, the most sagacious of the speakers shrewdly prognosticating, that, unless the peace was to be a general one, it was useless to enter into it, inasmuch as, if hostilities continued between the Spaniards and any of the tribes, the rest could hardly fail, sooner or later, to be involved in them. The majority, however, only anxious to share at once the presents which they understood the Spaniards to have brought with them, and of which they probably feared that any co-operation of the Ranqueles tribes would deprive them of a portion, called aloud for an immediate treaty, and the commissioners were conducted, almost by force, to the place of deliberation, where a scene of great confusion took place, every one desirous to speak at once, and calling for the presents. The circle was broken, and, the Indians rushing in upon them, the officers with difficulty extricated themselves from the press.

After a time the authority of the Caciques was restored, and the conference resumed; the sole result of which was, that the majority present insisted upon treating at once with the Buenos Ayreans on their own account, after which they said the commissioners might proceed to negociate, as they could, separately with the Huilliches, or southern tribes, and with the Ranqueles. All this was rather a dictation, on the part of the Indians, than any mutual agreement; but it was evident there was to be no alternative, and the commissioners, putting the best face upon it, proceeded to distribute the greater part of the presents they had brought for the occasion,—the possession of which, it was perfectly clear, was the main, if not the sole object of the savages in entering at all into discussions with them. These Indians all called themselves *Pampas* and Aucases. The latter term, which signifies *warriors*, seems to be assumed by many of the tribes of Araucanian origin.[39] In the course of their parleys with them, so far from finding them disposed, as Garcia had flattered himself, to treat for a new and more advanced boundary-line, they vehemently complained of the encroachments already made by the Buenos Ayreans, and insisted upon their withdrawing the establishments already formed to the south of the Salado. Garcia found it useless to argue with them; and, as his personal safety would probably have been endangered by a positive refusal, he thought it better to temporize, and to promise to lay their representations before the government of Buenos Ayres on his return, contenting himself to stipulate that there should be peace in the mean time.

Having obtained all they could get, the Caciques took their leave, leading off their followers to their respective toldos. The next day they were succeeded by another and distinct party of the Huilliches or southern people, who, though summoned to the general conference, had not been able to arrive in time to take part in it. This tribe presented even a more martial appearance than the others, and Colonel Garcia, describing them, says, no regiment of cavalry could have made a more regular or better figure than these strikingly fine men. They were naked from the waist upwards, and wore a sort of helmet surmounted by feathers (a distinguishing feature in the dress of this tribe), which added to their extraordinary stature. Their Cacique Llampilco, or the *black*, was upwards of seven feet high, and many others were equal to him, and even taller. Most of them were armed with very long lances, and, like the pampas tribes, had their faces bedaubed with red and black paint; but their language was different, and, Garcia says, identical with that of the people from the southern part of Patagonia, from whom he imagines them to have sprung, and to the old accounts of whose height he refers.[40] He speaks of them as a superior and finer race of men in every respect than the others; admirable horsemen, and brave in war, without the cruelty of the pampas tribes, sparing their prisoners, and treating strangers with kindness and hospitality. They had come from the lands south of the Ventana, about the rivers Colorado and Negro, where they had located themselves, according to their own account, to avoid collision with the Spaniards, with whom they professed their great desire to establish a solid peace. They spoke with contempt and detestation of the marauding habits of the pampas tribes and of the Ranqueles, and offered at any time to assist in chastising them. This party

consisted of 420 fighting men. They conducted themselves very differently from the others, and with great propriety, receiving thankfully what was given to them.

After their departure, the commissioners removed to the lake where the Cacique Lincon's people were located, and which bore his name. Its situation was about five leagues from the mountain-range beyond, something more than three to the west of that on which the conferences had been held, and about five and a half from one named after Pichiloncoy, another friendly Cacique, of whom more hereafter. From this place, looking to the north-west, one boundless plain presented itself to the eye. The Ventana mountain bore south-west, extending its lesser ramifications to the west-south-west, as far as the Curumualà, a small group of hills which may be seen running west to the more elevated range of Guamini; an extensive plain running between them. The highest part of the Guamini bore west 10° north, and was lost in the boundless pampas beyond.

A stay here for a few days gave them a tolerable insight into the manners and customs of the natives. Nothing could exceed the laziness and brutality, in general, of the men, who, looking upon the women as inferior beings, treated them as the most abject slaves. Not only were they obliged to attend to all the ordinary duties of the family, but upon them also, devolved the care of their husbands' horses, and even the tending of the sheep and cattle. Polygamy was permitted, and, according to his means, it appeared that a man kept more or less wives, which, so far from causing jealousy, seemed generally a source of satisfaction to the ladies themselves, inasmuch as it led to the lightening by subdivision of their domestic labours. Unless engaged in some predatory excursion, or in hunting deer and guanacoes, and other smaller animals, for their skins, the men seemed to pass their whole time in sleeping, drinking, and gambling, the habitual vices of all the tribes:—they are passionately fond of cards, which they obtain from the Spaniards, and will play for ever at dice, which they make themselves ingeniously enough, and, like gamesters in other parts of the world, will stake their all upon a throw, reckless of reducing their families to utter destitution.

In each toldo, or tent, which is made of hides stretched upon canes, and easily removeable from one place to another, five or six families, barely separated from each other, perhaps twenty or thirty persons in all, were closely huddled together in the most horrible state of filth imaginable; indeed, in many respects, they were but little removed in their habits from the brute creation. If fuel was scarce, as was often the case in the pampas, they cared not to cook their meat, but ate it raw, and always drank the warm blood of every animal they killed:—like beasts of prey, there was no part, even to the contents of the stomach and intestines, which they would not greedily devour.

They were superstitious in the extreme, and the credulous dupes and tools of a few artful men, who are to be found in every tribe, and in reality direct all its concerns by pretending to foretell the future, and to divine the cause of every evil. They are called *machis*, or wizards, and there is no tribe without them, and which does not implicitly submit to their decisions and advice. Their word is law, and the Cacique even, equally with the rest, submits to it. The commissioners themselves were nearly made the victims of the malice of some of these wretches, who probably anticipated a share of the plunder, if they could have induced their countrymen to destroy them. The old Cacique, named Pichiloncoy, already mentioned as living near the toldos of Lincon, and whose life was of great consequence to his tribe, fell seriously ill, and, according to custom, the machis were assembled to pronounce on the nature of his complaint, and to denounce those whose evil machinations or influence could have reduced him to such a state, for in all such cases some one must be responsible, and, once denounced, his life is seldom spared if the patient dies. In this case the machis unanimously ascribed the old Cacique's illness to the presence of the Christians, who, they declared, had brought the Gualichù, or evil spirit, with them, probably deriving the notion from the report spread by their guides respecting the supernatural powers of the instruments they were known occasionally to consult. If the old man had not fortunately recovered it might have gone hard with them, for their lives would certainly have been in great peril. As Garcia observes, it would have been a pretty ending of their embassy to have been sacrificed to the manes of old Pichiloncoy by the mad machis.

Notwithstanding the excessive nastiness and filth of their general habits, the women seldom failed to perform their daily ablutions, repairing the first thing in the morning to the neighbouring lake to bathe with their children, although the cold was so intense, that the snow nightly beat through their tents during the whole time the commissioners were there. Amongst these females were some Christian girls, captives, whose fair skin was but too strong evidence of their origin, and who seemed from habit to suffer as little from the severity of the cold as their dusky mistresses. Their unfortunate lot excited the strongest feelings on the part of the commissioners, whose interposition to obtain their liberation they pleaded for, as well they might, with tears and the most earnest entreaties. Nor were the officers backward in urging upon the Caciques every argument to induce them to give them up; but it was amongst the greatest of their disappointments to find all their efforts on this point unavailing. The Caciques declared they had no power in a case touching the spoils of war, which, according to their laws, were the sole property of the individual captors, to whom they referred them to make the best bargain they could. These brutes, on being applied to, demanded in general so extravagant a ransom as to destroy at once every hope on the part of the poor women themselves of its ever being raised, their relatives in general being of the labouring classes employed in the estancias on the frontier; in many cases they too were no longer in existence, having perished in the same inroads of the savages which had deprived them of their liberty.

In expectation that the treaties to be made with the Indians would have led to the immediate liberation of all prisoners, some poor people had obtained leave to follow in the train of the commissioners, in the hope of finding their wives and daughters, and carrying them back with them; and a most affecting sight it was, as may well be imagined, to witness their meeting again, and tender embraces after so cruel a separation; but it was piteous indeed to behold their subsequent despair on finding that the interference of the commissioners was unavailing, and that the purchase-money demanded for the prisoners was totally beyond what they could ever hope to raise. The parting again of these poor people was perhaps one of the hardest trials to which human nature could be subjected. Husbands and fathers forced to leave their wives and daughters to the defilement of brutal savages, with scarce a hope of ever being able to obtain their release; it need hardly be said that force was necessary to separate them, and to restrain the men from acts of violence which might have compromised the safety of the whole party.

If slavery as carried on by Christian nations appears so revolting to all our better feelings, and excites our strongest sympathies on behalf of the negro, whose condition, after all, is often perhaps in reality ameliorated by being brought under the protection of humane laws, and within the pale of Christianity, what must it be when the case is reversed, when the Christian woman, brought up in at least the decent and domestic habits of civilised society, falls into the power of a savage, whose home is the desert, and

who, though little removed in his own habits from a beast of prey, looks down upon the weaker sex as an inferior race, only made to be subject to his brutal will and caprice?

Though the unhappy condition of these poor women excited the sensibility of the commissioners for an instant, it roused also their more manly feelings, and satisfied them that the government of Buenos Ayres owed it to its own honour, and to humanity, to act with energy, and make some effort of force to rescue these poor victims from the consequences of their own supine and too lenient policy. It was indeed evident that any attempt to secure a permanent and satisfactory state of peace would be futile without such a demonstration as would act upon the fears of the Indians, and oblige them to submit to such terms as the government might determine to impose upon them.

Under this conviction the officers would have returned at once to Buenos Ayres, had they not been earnestly solicited by the inhabitants of some other toldos about the Sierra Ventana to visit them before their departure; a request they acceded to in the hope of its enabling them to acquire some geographical information with regard to that range.

On the 2nd they set out with old Lincon, who insisted upon escorting them as far as the place of rendezvous. Their course lay west-south-west, through an undulating country, rich in pasturage, and studded with small lakes, about which were generally found small groups of Indians with their cattle. These lakes in the summer season are for the most part dry, and then the Indians remove within reach of the mountain-streams. Towards evening they pitched their tents on the banks of a stream called the Quetro-eique, the Ventana about two and a half leagues distant, where they found a large encampment of Indians, who received them with rejoicings. As far as the eye could reach the plains were covered with their cattle and sheep.

Whilst waiting for the assembling of the Caciques, the officers devoted two or three days to surveying: following up the Quetro-eique about three and a half leagues, they traced it to its sources on the side of the Ventana. The height of the principal mountain, so called, they determined by measurement to be 2500 feet above the level of the plain from which it rises.[41] To the north-west a chain of low hills extends as far as a break by which they are separated from the minor group called the Curumualá. Through this break run two small streams, the one called Ingles-malhuida, from the circumstance of an Englishman having been put to death by the Indians there, the other Malloleufú, or the White River; the course of both is from south-west to north-east, running nearly parallel with the Quetro-eique, and all, according to the Indian accounts, losing themselves in extensive marshes beyond. The rivers Sauce-grande and Sauce-chico, which fall into Bahia Blanca, rise from the southern declivities of this range, according to the same authority. Beyond the Curumualá is the group of the Guamini, the most westerly part of this range. An observation taken from their tents on the Quetro-eique gave the latitude 37° 50´; longitude from Cadiz 56° 20´; and thence a clear day gave them a general view of the whole range. The Ventana bore south 18° west, prolonging its ramifications to south 40° west. The Curumualá south 60° west, extending to 80°. The Guamini extended through 30° as far as west 10° north. The whole range may be described as running from south-south-east to north-north-west. The variation by repeated calculations was 18° 30´, at the other range it had been found as stated to be 17° 10´, and at the Lake of Polvaderas 16° 30´ east.[42]

When the Caciques and their followers were all assembled there might be about 1500 men, who were paraded by their chiefs much in the same manner as before described. The same ceremonies to drive away the gualichú, and the same preliminary discussions amongst themselves, before they commenced their parleys with the officers; and these terminating precisely in the same unsatisfactory and indefinite manner. The presents it was evident were the only objects contemplated by the savages, and, when these were not produced quite so quickly as they expected, an attempt was made to seize them by force, and the officers themselves would have been stripped, if not sacrificed, had not old Lincon bravely protected them, and killed upon the spot with his own hand two of the most forward of the assailants: cowed by the old man's intrepidity, and the preparations of their escort to defend themselves, the wretches slunk away, and so ended in blood and confusion the labours of the commissioners. To old Lincon they owed their lives, and subsequent safety on their road back to Buenos Ayres, whither they were glad to return as fast as they could, under an escort furnished by him and some of the more friendly tribes of the Huilliches.

Their route homeward was by the Sierra Amarilla, on the eastern slope of which rises the river Barancas, which they followed some way: before it emerges from the mountains it is joined by the Quetro-leufú, and both together form the Tapalquen. Beyond the Sierra Amarilla was seen that group called by the natives the Huellucalel, from which proceeds the river Azul, the waters of which, running parallel with those of the Torralnelú and Chapaleofú, are lost in the marshes sixteen or twenty leagues distant towards the Salado. Crossing the Tapalquen, they once more found the beaten track to the Guardia del Monte, which they reached in safety on the 28th of May, after an absence of about six weeks.

In reporting the results of their mission they recommended that the range of the Vuulcan should be at once adopted as the boundary of the province in that direction, and that a chain of military posts should be established upon it, extending from the sea-coast as far west as the Laguna Blanca, with a sufficient force to overawe the savages and afford efficient protection to such settlements as might be made within that line.

The government, at last roused to the conviction of the necessity of some vigorous demonstration of physical force, in order to re-establish something like that salutary fear of the superior military power and discipline of the Christians, which, in old times, had, to a certain degree, restrained and kept the savages in order, adopted the suggestion, and preparations on a considerable scale were made for carrying it into effect. The construction of a fortification on the Tandil was determined upon, and the governor himself prepared to superintend the work, and take the field against the savages with an adequate force. The little army assembled for this purpose was ready to march about the close of February, 1823. It consisted of 2500 men, seven pieces of artillery, with a considerable accompaniment of carts and waggons, and everything requisite for the establishment of a permanent military settlement.

Instead of following the track of Garcia and his companions, by the Tapalquen, after a consultation with some guides, who professed to be well acquainted with the intervening country, General Rodriguez determined upon marching direct across it to the Tandil; an attempt, as it proved, more adventurous than prudent. On the 10th of March the troops left the Guardia del Monte, and had hardly crossed the Salado when they found themselves in the midst of apparently interminable swamps, thickly set with canes and reeds higher than their horses' heads. It was with great difficulty that the waggons and artillery were dragged through; nevertheless they foundered onwards as far as a lake, to which, from the clearness of its

waters, they gave the name of Laguna Limpia; but there it became absolutely necessary to halt in order to reconnoitre the country before proceeding further. So far they had been grossly misled by their guides, whose only knowledge of the country it appeared had been acquired in excursions in quest of nutrias, which little animals are found in vast numbers in these swamps; but nutria catching and the march of an army accompanied by heavy waggons and artillery are very different things, and the wonder is that all the guns and baggage were not left behind in the bogs. The marshes themselves are formed by the streams which run into them from the hilly ranges further south, and which seem not to have sufficient power to force their way through the low lands either to the Salado or to the sea-coast. Beginning from the morass in which the Tapalquen joins the Flores, they extend far eastward, and render useless a considerable tract of country south of the Salado.

The scouts returning brought accounts that they had found the river Chapeleofú, the course of which it was determined to follow to the Tandil, where it was known to rise; but they had hardly left the Laguna Limpia when they were beset by a new danger, which, for a short time, threatened a frightful termination to the expedition. A sweeping wind blew towards them clouds of dense smoke, followed by one vast lurid blaze, extending across the horizon, and indicating but too clearly the approach of one of those dreadful conflagrations, not uncommon in the pampas after dry weather, when the long dry grass, and canes and thistles, readily igniting, cause the flames to extend rapidly over the whole face of the country, involving all in one common and horrible destruction. The gauchos, on the first indication of danger, have sometimes sufficient presence of mind to set fire immediately to the grass to leeward, by which they clear a space on which to take refuge before the general conflagration reaches them; but there is not always time to do this, much less to save the cattle and sheep, great numbers of which perish in the devouring element. Upon the present occasion the guides seem to have lost their wits as well as their way; and, but for the fortunate discovery of a small lake near them, into which men and beasts alike rushed, dragging the carts with them, the whole army would have been involved in the same tragical end. There, up to their necks in the water, they remained for three hours, during which the fire-storm raged frightfully round them, and then, for want of further fuel, subsiding, left a desolated waste as far as the eye could reach, covered with a black stratum of cinders and ashes.

After these dangers the army continued its march along the western bank of the Chapeleofú, through a country which improved every step they advanced towards the sierras beyond. Picturesque and fertile, the lands seemed only to require to be taken possession of to form a most valuable addition to the territory of Buenos Ayres. The wandering tribes of Indians usually dwelling there had, to all appearance, abandoned them, and withdrawn further south, no doubt in alarm at the preparations made by the Spaniards to occupy them.

The wild guanacoes, and the deer, and the ostriches ranged in thousands over the pastures of their native regions, and, with hares, partridges, and armadilloes, afforded abundant sport to those sent out to shoot them. For some days the army was almost entirely subsisted upon them. Vast quantities of armadilloes, especially, were caught by the soldiers. One memorable afternoon's chase is recorded, in which upwards of 400 were taken; and a more delicate dish than one of these little animals, roasted, in his own shell, I will venture, from my own experience, to say, is not to be had in any part of the world. The rivers and lakes swarmed with wild and water-fowl of every sort, named and nameless, from the snipe to the beautiful black-necked swan peculiar to that part of the world.[43]

An observation was taken on the Chapeleofú in latitude 37° 17′ 34"; shortly after which the army left its course, and marched eastward to the Tandil, where they encamped, and whence the surveying officers reconnoitred the surrounding country, and determined upon the site for the new fortification.

The position of the fort constructed there has been fixed by repeated observations in latitude 37° 21′ 43"; longitude, west of Buenos Ayres, 39′ 4"; variation 15° east. It stands upon a small eminence, one of a lower group of hills which skirts the more elevated range beyond, and from which it is divided by the bed of a streamlet, which, after passing the works, about a quarter of a league to the eastward, and being joined by another from the westward, forms the river Tandil, which runs north till lost in the marshes in that direction already spoken of. It is screened to the west and north-west by a range of hills rising 300 or 400 feet above it, the summits of which are strewed with large masses of quartzose rock, having a very remarkable appearance when seen from a distance. The highest part of the range of the Tandil, about two leagues to the south-east of the fort, was ascertained to be about 1000 feet above the level of a small stream which runs along its base. It is visible from a distance of forty miles. The height of this part of the range gradually falls off till lost in a wide plain or vale, about twelve miles eastward of the fortification.

The climate in winter was found to be very cold; the prevailing winds from the south and south-west.[44] In the month of April the thermometer was twice 1½° below freezing-point; but variations of 20° and even 30° in the course of the day were of common occurrence. In that month (April) the highest of the thermometer was 68°, the lowest 28½°; in May the highest was 61°, the lowest 31°; in June the highest was 72°, the lowest 39°; in July the highest was 79°, the lowest 41°. In the summer the heat was almost insufferable, particularly in the low lands; but in the spring and autumn, which are the best seasons, the weather was found temperate and very agreeable.

Whilst the fort was building on the Tandil, communications were opened with the Indians residing near the Ventana, proposing to them to join in active operations against the Ranqueles tribes—the Spaniards thinking, as on other occasions, to invoke the tribes in war with each other, and to profit by the weakening of both parties; but the Indians were this time upon their guard. They saw clearly enough that the march of such an army into their territory could have only one object,—the forcible occupation of their lands,—and they took their measures accordingly with their usual astuteness and cunning. Assenting, apparently, to the general propositions made to them, they invited the Buenos Ayrean general to repair with his principal officers to the neighbourhood of the Ventana, there to enter into the definitive treaties. They probably hoped by some *ruse* to get the governor himself into their hands, and were greatly disappointed at his only sending his second in command, General Rondeau, to treat with them. Rondeau marched into their territory with a force of 1000 men, passing to the west of the Tinta mountains, and, after going some distance, was met by the principal Caciques, with a large assemblage of their fighting men; and here commenced a negociation, in which the Buenos Ayrean general was fairly outwitted. The Indians, affecting distrust, proposed that some officers of consequence should be sent to them as hostages during the conferences, offering, on their part, to place some of their principal Caciques in the power of the general. Rondeau fell into the snare, and took his measures so badly, that, before the exchange was made, his officers were suddenly made prisoners, and carried off at a gallop, enveloped by a cloud of Indians, who

were soon out of sight. His cavalry was in no condition to follow the savages into the pampas, and he returned to the Tandil with the conviction that the Puelches tribes, as well as the Ranqueles, were combined in one and the same determination to have no more friendly intercourse with the Christians.

After this affair nothing further was attempted, except to send out a party to explore the continuation of the range of the Tandil to the coast, of which the following was the result.

It has been already said that the range of the Tandil gradually declines to the eastward till broken by a wide vale, which commences about twelve miles from the new fortification; the vale in question extends for a distance of forty-two miles:—many streams run through it, some few of which, inclining towards the coast, fall into the sea, though the greater part of them are lost in swamps in the low lands which intervene. It is the greatest break in the chain, and, from its rich pastures, a favourite resort of the Indians. They call it the Vuulcan, which signifies, in their language, an opening; and thence the sierra, which bounds it to the eastward, also takes its name. In many maps it is written Volcan, which has led to the erroneous idea of there being a volcano in those parts.

From the Vuulcan the range runs in a continuous line for thirty-six miles towards the sea, presenting, for the most part, towards the north the appearance of a steep dyke or wall. On the summits are extensive ranges of table-land, well watered, and with good pasturage, to which the Indians, who are well acquainted with the craggy ravines which alone lead to them, are in the habit of driving their horses and cattle, knowing that the nature of the ground requires but little care to prevent their straying. At a short distance from the coast the hills break off in stony ridges, running down to the sea, and forming the headland of Cape Corrientes, in latitude 38° 6′, and further south a line of rocky cliffs, which bounds the shore as far as Cape Andres.

Upon the borders of a lake a short distance from Cape Corrientes were discovered the remains of the settlement formed by the Jesuits in the year 1747,—a site chosen with all their characteristic sagacity, well suited for an agricultural establishment, of easy access to the sea, and with great capability of being rendered defensible. It is a striking proof of the indomitable nature of the pampas tribes that all the efforts of the missionary fathers to reduce them to habits of order and industry only ended in disappointment, and, after years of fruitless endeavours, to their being obliged to fly from an establishment where their lives were no longer safe. The Indians of the pampas, like the Arabs of the desert, inseparable from their horses, and wild as the animals they ride, were not, like the more docile people of Paraguay, to be subjected to the strict rules and discipline which it was the object of the fathers to introduce amongst them. The vestiges of their buildings, and the fruit-trees planted by them, are the only evidences remaining of their pious but unavailing labours.

Although this spot was in many respects a very inviting one for an agricultural settlement, it wanted the principal requisite of some tolerable roadstead or harbour to facilitate any direct communication from Buenos Ayres by sea with the new line of frontier, an object of great importance if possible to secure. The coast was vainly explored in search of one from Cape Corrientes some way to the south, and to the north as far as the great lake called the Mar-chiquita, which empties itself into the sea by a narrow channel, capable, perhaps, of being deepened by artificial means, so as to form a harbour for small vessels; but even this seemed extremely doubtful, and depending on a further examination and survey, which the officers were not at the time prepared to undertake.

Under these circumstances, it was thought advisable to postpone the construction of any further works till a more accurate survey of the coast should be made. This was subsequently commenced, and carried as far as Bahia Blanca, which was reported to be the only situation from the Salado on all the line of coast intervening which combined a tolerable harbour for shipping with the capability of being made a good defensible position. Although this was far beyond the line of frontier at first contemplated, which only reached to the range of the Vuulcan and Tandil, other considerations eventually determined the government of Buenos Ayres to extend their boundary to that point. Not only did it appear that Bahia Blanca was the only place capable of being made a harbour on the coast, but the want of some such harbour to the south became more than ever apparent when the war broke out with Brazil, and the River Plate was placed under blockade by the emperor's fleet; and, although that war at first necessarily diverted the attention of the government of Buenos Ayres from the completion of their original plan, it forced upon them a more enlarged view of their position, and led to the final adoption of an infinitely better boundary-line than that which was first thought of merely as a check upon the Indians.

The line in question, which was finally adopted in 1828, and which forms the present nominal frontier of the province of Buenos Ayres towards the pampas, will be found upon the map drawn about north-north-east, from the fort built on the river Naposta, which falls into Bahia Blanca, to the Laguna Blanca, another point occupied as a military position, at the western extremity of the range of the Tapalquen; thence it runs north by the fort of Cruz de Guerra to Melinqué, the north-west point of the province. It will be obvious, on reference to the map, that, whilst this line embraced within it an infinitely greater extent of country than that at first projected, it was in reality, being straight, a shorter one, and required less defences than the ranges of the Tandil and Vuulcan, supposing all the passes to be fortified.

The whole area of the territory within this line and the Arroyo del Medio, which separates the province of Buenos Ayres to the northward from that of Santa Fé, comprises about 75,000 square English miles.

The Indians would listen to no terms of accommodation, and fought for their lands; whilst, unfortunately for the people on the frontier, the civil dissensions which broke out at the close of the Brazilian war once more drew off the forces of the government, and exposed them to the inroads of the savages, before the fortifications on the frontier could be completed and sufficiently garrisoned for their defence. The devastation they committed in consequence was frightful; but it was signally avenged in 1832 and 1833 by General Rosas, who, at the head of the largest force that ever entered their territory, marched southward as far as the rivers Colorado and Negro, scoured the whole intervening country, and put thousands of them to death. Many tribes were totally exterminated, and others fled to the Cordillera of Chile, where alone they were safe from the pursuit of the exasperated and victorious soldiers.

That the Buenos Ayreans had ample cause for these hostilities may be judged from the number of Christian slaves whom they succeeded in rescuing from the hands of the savages; upwards of 1500 women and children were retaken by General Rosas' troops, who had all been carried off in some or other of their marauding incursions, their husbands, sons, and brothers having been in most instances barbarously butchered before them. Many of these poor women had been in their hands for years; some taken in infancy could give little or no account to whom they belonged; others had become the wretched mothers of

children brought up to follow the brutal mode of life of these barbarians. General Rosas fixed his head-quarters on the river Colorado, midway between Bahia Blanca and the settlement of Carmen on the river Negro. Thence he detached a division of his forces, under General Pacheco, to the south, which established a military position on the Choleechel, now called Isla de Rosas, on the Negro, which river was followed to the junction of the Neuquen. Another detachment marched under the orders of General Ramos along the banks of the Colorado as far as latitude 36° and 10° longitude west of Buenos Ayres, according to his computation, from whence he saw the Cordillera of the Andes and believed he was not more than thirty leagues from Fort Rafael on the Diamante. Unfortunately not the slightest sketch was made of the course of this river, respecting which, therefore, we have no new data beyond a corroboration of the accounts obtained by Cruz, in 1806, of its being a great river, which runs without interruption direct from the Cordillera to the sea.[45] Of the Negro, General Pacheco has been kind enough to send me a sketch, which strikingly confirms the general course of the river as laid down by Mr. Arrowsmith, from Villariño's diary.

FOOTNOTES:

[37] The latitude of the Great Salt Lake was taken from about the centre of the north side of it, where the party were encamped.

In 1786 Don Pablo Zisur, a lieutenant in the Spanish navy, had fixed the north-east angle of the lake in lat. 37° 10′, and 4° 36′ west of the meridian of Luxan (Guardia); according to him the lake of Cabeza del Buey is in lat. 36° 8′, and the Guardia de Luxan in 34° 36′. Azara fixed it in 34° 38′ 36".

[38] In the life of the *Carreras*, given in the Appendix to Mrs. Graham's account of Chile, there is an account of some of these Indian forays in conjunction with Carrera's troops, particularly of their surprisal of the town of Salto, and the carrying off from thence of 250 women and children, after butchering all the men, in spite of every effort of their unnatural allies to prevent it.

[39] Villariño found the Indians in the Cordillera opposite to Valdivia calling themselves Aucases.

[40] Garcia seems to have believed that the language and origin of this people was different from the other Indians he fell in with. There is no proof, however, adduced of the difference of language, and I suspect they were only a further-removed branch of the Araucanian family, as were the Indians Viedma found at San Julian's in 1782.

[41] Captain Fitzroy determined it to be 3350 feet *above the level of the sea*, from which its true distance is 45 miles.

[42] At Buenos Ayres the variation in 1708 was 16° 45′ east; in 1789 it was 16° 30′; and in 1818 it was 12½ east.

[43] A collection of the birds of those regions would form a most interesting addition to any museum. A large proportion of them are, I believe, quite unknown in Europe.

[44] An accident to the barometer prevented the officers making a series of observations with that instrument, which would have been of considerable interest. They made, however, good use of the thermometer, of which a daily register was preserved.

[45] I understand, however, that General Ramos has expressed his opinion that it is not navigable for more than *forty leagues* from its mouth.

CHAPTER X.
GEOLOGY OF THE PAMPAS.

Geological Features of the Southern compared with those of the Northern Shore of the Plata. The Pampa Formation, probably derived from the Alluvial Process now going on, as exhibited in the Beds of the Plata itself and other Rivers. Fossil remains of land Animals found in it, above Marine Shells. Such Shells where met with, and of what Species. Mr. Bland's Theory of the Upheaval of the Pampas from the Sea, founded on the Deposits of Salt in them:—The presence of such Salt may be otherwise accounted for. Account of the Discovery of the Gigantic Fossil remains sent to England by the Author.

I cannot leave the pampas without a few words upon their geological features, and upon the remarkable contrast exhibited in the appearance of the country on the northern and on the southern shores of the Plata. On the north side the formation is of clay-slate, gneiss, and granite, of which the islands in the river above Buenos Ayres are also composed, particularly Sola, Las Hermanas, and Martin Garcia, where the granite is quarried for the pavement of the city. On the southern side every trace of rock is entirely lost, and for hundreds of miles inland not even the smallest pebble is to be met with.

As far as we are yet acquainted with it, the whole of that vast level called the pampas, reaching from the eastern terminations of the Andes to the shores of the Plata, appears to be one immense bed of alluvium tranquilly deposited during the imperceptible lapse of ages; the delta perhaps, not of one, but of numerous rivers, originating in a once more general diffusion of the waters from the Andes before their courses were defined by their present channels. Some such process of formation appears still to be going on in many parts of the pampas, where muddy streams and streamlets, the collections from the mountains in the south and of the rainy seasons, too sluggish to force a way through the level country, inundate the plains, and gradually deposit the alluvial sediment, together with a prodigious quantity of decomposed vegetable matter, in the swamps and morasses, until accumulations of fresh soil take place in sufficient quantity to throw off the waters again in some other direction. The bed of the Plata, itself the reservoir of a hundred rivers, is, from all I could learn, gradually silting up, and, wide as it is at the present day, along its shores, and particularly above Buenos Ayres, may be distinctly traced the evidences of the waters having once occupied a bed of infinitely greater extent. Every observation tends to the inference that this now mighty estuary may, centuries hence, be reduced to similar bounds and rules to those which govern the outlets of the Amazons, the Mississippi, the Nile, and the Ganges. Nor will this require, perhaps, so long a period as might at first be imagined.[46] If we except the narrow channel between the Chico and Ortiz banks, below Buenos Ayres, the average depth of the river between that city and Monte Video does not exceed twenty feet. The prodigious quantity of mud and detritus brought down by it is well known,—the whole river, wide as it is, is at times discoloured by it. Now, if but enough of this sediment is deposited to cause the small annual increase of only half an inch in the bed of the river, it will not require 500 years to form a delta, which, in the language of the country, will be nothing more or less than an extension of the existing pampas.

Such, I conceive, may have been the origin of the far spread formation of the present pampas or plains, throughout which are to be found the fossil remains of gigantic animals of long lost species, such as the megatherium and mastodon, and other monsters yet unnamed, which in former ages may have grazed upon the abundant pastures produced in the rich loamy lands saved from the waters; whilst beneath, in strata of marine shells, are no less incontestable evidences of the ancient bed of the ocean.

It cannot be expected that, in a country so uniformly level as the pampas, sections of sufficient depth will frequently occur to exhibit the underlying strata. They must be looked for at the outlying extremities of the formation, where the upper bed thins out,—to use a geological term. Now there is nothing that I know of to interrupt the uniformity of the stratum between the southern shore of the Plata on the one side, and the eastern base of the Andes on the other, and at both these extremes marine remains are strikingly exhibited.

General Cruz, in his journey from Antuco to Buenos Ayres (noticed in chapter viii.), in passing through the valleys in the lower ranges of the Cordillera, immediately before reaching the pampas, was exceedingly struck with the abundance of marine remains thereabouts. He says, in his diary, "In all the hills and valleys under the Cordillera, as far as the river Chadileubu, a great quantity of marine remains are met with, some of them constituting a sort of limestone. Not only may these remains be observed upon the surface, but also at great depths below it, in the sections formed by the torrents as they descend from the mountains: there can, therefore, be no doubt that the waters of the sea once occupied the place of the land in those parts."

Proceeding eastward, by the base of the mountain ranges of San Luis and Cordova, which bound the pampas to the north, we have the testimony of water-worn rocks and beds of shells in that direction, from Schmitmeyer, Helms, and other travellers, at Portezuela and on the banks of the Tercero; and beyond the Sierra de Cordova, on the great river Paranã, near Santa Fé, Mr. Darwin found in the cliff which skirts the river a stratum of marine shells distinctly exposed a little above the level of the water, and with the alluvial bed over it, forty or fifty feet thick, containing bones of extinct mammalia.

Here, then, I think, we may trace, all but continuously, the northern and western shores of a gulf, which must have been nearly as large as that of Mexico, and not very unlike it, perhaps, in general outline. Travelling south from Santa Fé, along the shores of the Plata, which bounds these pampas on the east, we find, at distances varying from one to six leagues inland from the river, and from fifty to one hundred and fifty miles from the sea, large beds of marine shells, which the people of those parts quarry for lime. From these deposits I have myself specimens of *Voluta Colocynthis*, *Voluta Angulata*, *Buccinum Globulosum*, *Buccinum Nov. Spe.*, *Oliva Patula*; *Cytheræa Flexuosa*? *Mactra*? *Venus Flexuosa*, *Ostrea*, &c. In some places these shells are so compact as to form a sort of limestone, easily worked when first dug out, and hardening afterwards on exposure to the air. The church of Magdalena upon the coast is built of this material. They are generally in good preservation, and some of the species appear almost identical with those found upon the coasts of Brazil; others, on the contrary, found with them are not known. There is one, found generally by itself, unmixed with others, which is particularly interesting on this question, as strikingly proving the gradual growth of the pampas; it is the small *mya*, named *potamo-mya* by Sowerby, usually found in estuaries at the junction of the fresh and salt water, and the existing type of which is now

to be met with at the mouth of the Plata; but the bed from which my fossil specimens were taken is at the Calera de Arriola, to the north of Buenos Ayres, nearly 150 miles from its present habitat; and there (I think manifestly proved by these little shells) must have been once the mouth of the mighty estuary, which is now more than 150 miles below it.

I must not omit to state that all these marine deposits are found in situations more or less above the present level of the ocean; this, in the neighbourhood of the Cordillera, which is so continually liable to volcanic disturbances, may be accounted for; but it leads to other speculations in the flat alluvial plains towards the Plata, where the phenomenon of an earthquake is utterly unknown, and where the apparently perfect horizontality of the strata would seem to negative the idea of any violent action by which it might have been upheaved.

Mr. Bland, one of the North American Commissioners sent to Buenos Ayres in 1818, reasoning upon the quantity of saline matter found in the pampas, hazards, as he says, the conjecture that the pampa formation "may have been gently lifted just above the level of the ocean, and left with a surface so unbroken and flat as not yet to have been sufficiently purified of its salt and acrid matter, either by filtration or washing:" and undoubtedly such saline matter does exist very extensively over this formation. Many of the running waters, as their names denote, are rendered brackish by it; and lakes which have no outlet become saturated with it, and deposit it in regular beds, where in the dry season it may be collected in any quantity. But it does not necessarily follow that it has been left there by the ocean: we know that salt abounds in the Andes, and that extensive beds of it occur, particularly in those parts of them from which we may conjecture that the greater part of the waters of the pampas are derived; and if for a moment we can suppose the pampas themselves to have originated in sedimentary deposits from those mountain chains, we must I think equally admit that the alluvial soil washed down can hardly fail to be impregnated with so soluble a substance as the salt which abounds in them. In a country of more varied surface we might expect the briny particles to be carried off by the streams and lost in the sea; but in the dead levels of the pampas the greater part of the streams themselves are lost long ere they reach the ocean. The waters deposit their sediment over the surface, and the salt is left to amalgamate with the mire of the marshes, until perhaps again the rains collect it, and either partially carry it off in brackish streams, or deposit it in the basins of the inland lakes, in which it is so abundantly found. That it is a superficial deposit I think is proved by the fact that (as elsewhere noticed) in the immediate vicinity of some of the saline lakes and rivers in the pampas, and where the surface of all the surrounding country appears to be incrusted with salt, the people dig wells, and find perfectly fresh and potable water, as I understand, at a depth of from twenty to fifty feet. The same may be said to occur throughout the city of Buenos Ayres, where all the wells which do not penetrate the *tosca* produce water more or less brackish, whilst those which go below it are sweet. Some of the best water I ever tasted was from a well sunk in the sandy stratum below the clay at Mr. Brittain's quinta outside the city. Further, I imagine that the discovery of the remains of land animals so generally throughout this formation is in itself conclusive of its deposition *subsequently* to the existence of the ocean in those parts, the ancient bed of which it must very considerably overlie.

To speak of the megatherium alone, its remains have been found in all parts of the pampas, from the river Carcaraña, in the province of Santa Fé, to the south of the Salado, a distance of nearly 300 miles in a direct line, and in all the intermediate country. Such remains are much more common than is supposed, and I am satisfied might frequently be met with if searched for during the dry season, or after long droughts, either in the banks of the rivers, or in the beds of some of the numerous lakes which are then dried up. All the remains I sent home were so discovered, and so were those sent to Madrid by the Marquis of Loreto, which were found in the bed of the river Luxan, a short distance to the north of the city of Buenos Ayres. The great skeleton I obtained was discovered in the river Salado, to the south of Buenos Ayres, after a drought of unusually long continuance, by a peon in the service of the Sosa family, who, attempting to cross the river at an unfrequented spot, was struck by the appearance of a large mass of something standing above the surface of the water, and which, supposing at first to be some part of the trunk of a tree, he determined to get out if possible: in this he was assisted by some of his brother peons, who, throwing their lassoes over it, succeeded in dragging it out, fortunately without injury, for it proved to be nearly the entire pelvis of the megatherium: with it were also brought up several of the other bones, and amongst them some of the vertebræ. To the peons the pelvis luckily appeared to be useless: turn it which way they would, they all agreed that it did not make half so comfortable a seat as either a bullock's or a horse's head; but the vertebræ did not so easily escape, and in a place where not a stone is to be seen, were eagerly seized upon as excellent substitutes to boil their camp-kettles upon. The smaller ones being best suited to the purpose were the first to disappear, which may account for the deficiency of all the cervical vertebræ as well as of many of the smaller bones of the feet and other parts. After a time it was suggested that the pelvis and some of the largest bones should be sent as curiosities to the owner of the estancia on which they were found, Don Hilario Sosa, at whose house in Buenos Ayres I first saw them. He was good enough, seeing my great anxiety to obtain possession of them, after exhibiting them to his friends, to place them at my disposal, and to allow me to send people to his estancia to search for the remainder of the skeleton: by their exertions many other portions of it were saved; and but for the destruction of some by the country-people, as described, and of others which, having been taken out in the first instance, had remained exposed for some months to the sun, and had become so brittle in consequence as not to bear removal, the skeleton would have been tolerably perfect. As it is, it was very fortunate that amongst the parts preserved were some of those which are wanting in the skeleton at Madrid, especially the bones of the tail, which singularly corroborate the anticipations of Cuvier, whose description of this remarkable monster was drawn from a representation of that specimen, the only one known to exist till mine reached Europe.

M. Cuvier was not I believe aware of the grounds which now exist for supposing that the animal was covered with a coat of mail, like the armadillo, which has led other comparative anatomists to ally it to that family. There were no remains of such a shell appertaining to the specimen at Madrid, neither were any found with the bones which I have spoken of as discovered in the Salado. Portions, however, of a shelly covering in a fossil state, which must have belonged to some gigantic animal, had been at various times dug up in the pampas, which had excited the attention and speculations of the curious. Even father Falkner in his account of the country speaks of them:—he says, that he himself found the shell of an animal composed of little hexagonal bones, each bone an inch in diameter at least, and the whole shell nearly three yards over: it seemed to him to be in all respects, except its size, the upper part of the shell of an armadillo.

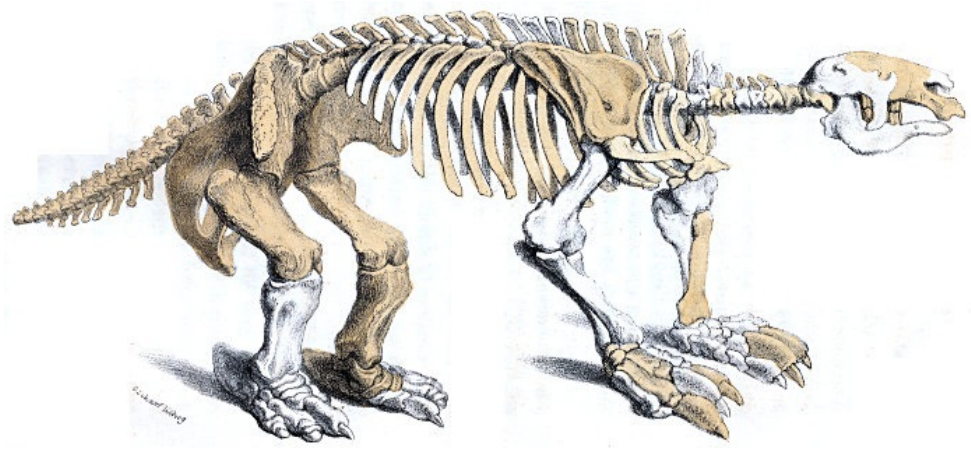
The researches I set on foot after finding the skeleton in the Salado led to fresh discoveries, which, if they do not identify these shells with the megatherium, must lead us to conclude that these regions were once

inhabited by other gigantic animals no less extraordinary. When the country-people saw the eagerness with which the big bones from the Salado were sought for, they were not backward in speaking of other places where similar remains had been met with, and were still, as they believed, to be found. Upon this information I once more despatched my agent to the south of the Salado, and the governor, Don Manuel Rosas, taking an interest in the matter, was good enough to furnish him with a letter of recommendation to the local authorities, desiring them to give him not only protection, but every assistance he might need to ensure his success. In little less than three weeks we were repaid by the discovery of two more enormous skeletons on the estancias of the governor himself, called Villanueva and Las Averias, and in both instances with the novelty of their being encased in a thick coating or shell resembling that of the armadillo. The first, found at Villanueva, though still of gigantic proportions, appears to have been very much smaller than that which had been taken out of the Salado: it was discovered in the bed of a small rivulet, and upon exposure to the air nearly all crumbled to dust. The only portions it was possible to preserve being part of a scapula, a small portion of the jaw with one small but perfect tooth remaining in it, and a fragment of a hind leg, with some of the feet bones. The shell lay, as Mr. Oakley, my agent, described it, a little below the principal mass of the bones, looking like the section of a huge cask; the form of it when first discovered appeared natural and perfect, but it would not bear to be lifted out of its bed, and broke into small pieces and crumbled away immediately.

From the account given by Mr. Oakley, and the apparent resemblance of the remains of this specimen to those previously discovered, although of a much smaller size, I was induced to believe that they belonged to a younger animal of the same species; other persons, however, who have since had an opportunity of comparing them with recent specimens of the dasypus family, have suggested that it is more probable that they belonged to a gigantic armadillo. Such is the belief entertained, I am told, at Paris, where casts of the bones in question have been sent. The other skeleton, found at Las Averias, was described to be as large as that of the megatherium. It lay in a bed of hard clay, on the side of the lake of Las Averias, partly exposed to view by the action of the water against it in stormy weather. Here a large portion of the shell appeared in a perfect state, and the country people, who took Mr. Oakley to the spot, assured him that, when first discovered, it was at least twelve feet in length, and from four to six in depth. It was very hard, but could not be got out whole. Mr. Oakley, however, brought away some considerable portions of it, which, in this instance, became harder the longer they were exposed to the external air. Not so the bones within, which, like those at Villanueva, almost immediately mouldered away on being taken out of the earth. A very imperfect fragment of the pelvis only reached Buenos Ayres.

On my return to England I exhibited these remains at the Geological Society, and afterwards made them over to the Royal College of Surgeons, whose collection of comparative anatomy is by far the finest in this country. Mr. Clift, the curator of that collection, undertook to describe them, and his paper upon them will be found in the "Transactions of the Geological Society for 1835." Casts of them, which were made at my desire, were also deposited in other museums, abroad as well as at home. Sir Francis Chantrey was kind enough to superintend the making of them, and to a simple suggestion of his, a solution of linseed-oil and litharge,[47] with which they were very thoroughly saturated, may be ascribed their restoration to a state hardly to be distinguished from that of the most recent bone.

Dr. Buckland, the learned professor of geology at Oxford, has since made the megatherium the subject of a chapter in his "Bridgewater Treatise," wherein he has fully described the remarkable peculiarities of its structure, in which, as he observes, it exceeds its nearest living congeners in a greater degree than any other known fossil animal. With the head and shoulders of a sloth, it combined, in its legs and feet, an admixture of the characters of the ant-eater, the armadillo, and the chlamyphorus: the latter it probably still further resembled in being cased with a bony coat of armour. Measuring the bones only, its haunches were more than five feet wide;[48] its thigh bone was twice the thickness of that of the largest elephant; the fore foot was a yard in length, and terminated by a gigantic claw; the tail, the width of the upper part of which was at least two feet, and which was probably clad in armour, must have been infinitely larger than that of any other known beast, amongst extinct or living mammalia. The whole body, according to the learned professor's calculations, was about eight feet in height, and twelve in length.[49] The annexed plate, carefully drawn from the original bones, under Mr. Clift's superintendence, will serve not only to give a general idea of the strange structure of this extraordinary monster, but to show the parts which are still wanting to make up the specimen. I will only add that, if any of those parts should fall into the hands of a casual collector, he will render a service to science by transmitting them to the curator of the College of Surgeons in London.



MEGATHERIUM.

Note: The Parts uncoloured are wanting.

Scale of 3 feet 3/8 of an Inch to a foot.

FOOTNOTES:

[46] With respect *to the past*, it is, I fear, useless to look for any very positive data as to the state of the river previously to the last century:—the only allusion to it which I can find is in the 'Argentina,' an historical poem by Barco Centenera, who went out in 1572 with the Adelantado Zarate, and who, speaking of its depth between Buenos Ayres and San Gabriel, off Colonia, on the opposite shore, says:—

> "De ancho nueve leguas ó mas tiene
> El rio por aqui, *y muy hondable*.
> La nave hasta aqui segura viene
> Que como el ancho mar es navigable."
>
> The river's here nine leagues or more,
> *And very deep*, twixt shore and shore;
> *So far the navigation's free,*
> *As tho' twere on the open sea*.
>
> ARGENTINA, CANTO II.

And although, perhaps, a poet's authority to not the very best for a geological fact, I have the less hesitation in quoting his couplet, as it is, to a certain extent, corroborated by the circumstance that, amongst all the dangers and disasters recorded with so much minuteness by the historians of the first discoveries of those parts, there is no instance, that I am aware of, mentioned by them of a shipwreck in the river below San Gabriel, the port to which all vessels at that time directed their course after entering it:—from this I think any one who knows the dangers of the navigation of that part of the river now, will be disposed to infer that it really must have been in former times as Centenera describes it, much more free and safe than it is at the present day:—it is probable that the Ortiz bank especially has very much increased.

[47] In the proportion of an ounce of litharge to a quart of oil.

[48] The following comparative measurements of the bones of the megatherium and of an elephant eleven feet high, are furnished by Mr. Clift:—

	ELEPHANT.		**MEGATHERIUM.**	
	Ft.	**In.**	**Ft.**	**In.**
The expansion of the ossa ilia	3	8	5	1
Breadth of the largest caudal vertebra	0	7	1	9
Circumference of middle of femur	1	0	2	2
Length of the os calcis	0	7½	1	5

[49] Mr. Clift quotes a MS. memorandum in his possession, stating the measurement of the skeleton at Madrid to be, from the front of the nasal bones to the setting on of the tail, thirteen feet seven inches, and he is of opinion that, of the two, the specimen I brought home was the older and somewhat larger individual.

CHAPTER XI.
OF THE RIVERS PARAGUAY, PARANA, AND URUGUAY.

Importance of the rivers of the United Provinces. The Paraguay and its tributaries. The Pilcomayo. The Vermejo. Soria's expedition down it from Oran, proving it navigable thence to Assumption. Periodical inundations of the Paranã, similar to those of the Nile. The Uruguay and its affluents. Surveys by the Commissioners appointed to determine the Boundaries laid down by the Treaty between Spain and Portugal of 1777. Original Maps obtained.

Before proceeding to give any account of the Upper Provinces, a brief description will perhaps here not be out of place of the great rivers which form so remarkable a feature in the physical geography of this part of the South American continent, and from the navigation of which by steam-vessels hereafter such important political consequences may be anticipated.

Of these, the Paraguay is the first. This river, which from Corrientes takes the name of Paranã, has its sources between south lat. 13° and 14°, in those ranges which, though of very trifling elevation themselves, appear to connect the lofty mountains of Peru and Brazil, and to constitute the water-shed of some of the principal rivers of South America. From their northern declivities descend some of the most important of the eastern affluents of the Madera, the Tapajos, and other great streams which empty themselves into the Maranon, or Amazons; whilst, on the other hand, all those which pour down towards the south find their way into the bed of the wonderful river I am describing.

Many navigable streams join it from the eastward, as it passes through the rich Brazilian territories of Matto Grosso and Cuyabá. Its tributaries from the opposite side are, though perhaps more important, less numerous, the surface of the country being more level; of these the Jaurú is the first of any consequence, the sources of which are close to those of the Guaporé, which runs in the opposite direction into the Madera and Amazons. The short portage which intervenes between the heads of these rivers is all that breaks a continuous water-course from the mouths of the Amazons to that of the Plata, as will be seen on reference to the map. A little below the Jaurú commences a wide region of swamps called the lake or lakes of Xarayes; which, during the periodical inundations of the rivers that descend from the mountains to the north of Cuyabá, is flooded for a vast extent, the waters forming one great inland sea, to the depth of ten or twelve feet, extending between 200 and 300 miles east and west, and upwards of 100 from north to south. As the rainy season passes away, this mass of waters is finally carried off by the Paraguay, which even here, 1200 miles in a direct line from the sea, is navigable for vessels of 40 or 50 tons. The mouth of the Jaurú is in 16° 25′ long. 320° 10′ east of Ferro:—here a marble pyramid is erected to mark the boundary determined upon between the Spaniards and Portuguese by the treaty of 1750.

Quiroga, who accompanied Flores, the Spanish commissioner, to determine this point, in descending the Paraguay fixed the latitude of most of the numerous rivers which fall into it before its junction with the Paranã.[50] On the eastern side they afford the means of communication with the gold and diamond districts of Brazil, and lower down with those districts of Paraguay proper which abound in the finest timber, and produce the yerba maté, the article perhaps most in demand of all the rich productions of that favoured country.

From the west its most important affluents are the Pilcomayo and the Vermejo, which fall into it below Assumption:—both flow through a prodigious extent of country, having their sources in the rich districts of Upper Peru. The first passes not far from Potosi, and, after a thousand windings through the chaco, or desert, falls into the Paraguay by two branches, the one called the Araquay, in lat. 25° 21′ 29", according to an observation taken by Azara; the other, about nine leagues below it. M. de Angelis has I think clearly shown that the river to the north of Assumption, which Azara has laid down as the most northern branch of the Pilcomayo, is the Fogones of Quiroga.

In 1741 Father Castañares attempted an exploration of the Pilcomayo, in the expectation that it would facilitate a communication with the Jesuit missions in the province of Chiquitos; but after many hardships and difficulties, at the end of eighty-three days, he was obliged to give it up, from the river becoming too shallow for his canoes to pass on. In 1785 Azara attempted to ascend it by the Araquay, in a small vessel; but after proceeding about twenty leagues, was obliged to return, for the same reason,—want of water; although it was at the season of the floods, and the river was more than ordinarily full.

The Vermejo, on the contrary, which falls into the Paraguay still further down, has been more than once proved to afford a navigable communication with the province of Salta: First by Cornejo, in 1790; who, starting from the confluence of the rivers Centa and Tarija, reached the Paraguay in fifty-five days; the distance by the river being, according to his computation, no less than 407½ leagues. And more recently, in 1826, by Don Pablo Soria, the agent of some spirited individuals in Buenos Ayres, who about that time formed an association for the purpose of endeavouring to open a water-communication between the capital and the rich districts of the Upper Provinces. The vessel they built for the purpose was fifty-two feet long, and drew about two feet water; which, with but little more assistance than was necessary to keep in the mid-stream, was floated down from the neighbourhood of Oran by the current, and in fifty-seven days entered the Paraguay, without any other impediment than a feeble attempt on the part of some Indians, armed with bows and arrows, to annoy them as they passed through their lands.

Once in the Paraguay, the main object of the voyage was accomplished. Unfortunately, however, for the adventurers themselves, they were there seized upon by Dr. Francia, the despotic ruler of that country, who, worse than the savages, detained them for five years.[51] He also deprived them of their papers; and thus the details of a most interesting voyage were lost, although the great and highly important fact was established beyond dispute of the existence of a safe and navigable water-communication the whole way from Oran to Buenos Ayres; a result which must sooner or later be of immense consequence to the inhabitants of the Upper Provinces.

About thirty miles below the mouth of the Vermejo the Paraguay is joined from the east by the great river Paranã, which name it thence takes till it is finally lost in the Rio de la Plata. This river, rivalling in extent the Paraguay itself, rises in the mountain-chains to the north-west of Rio de Janeiro, in latitude 21°. Turning first westward, and afterwards towards the south, it is increased by several large rivers, amongst which the most noted are the Paranaiba, the Tieté, the Paranapané, and the Curitava. On reaching the Guarani Missions, near Candelaria, in about lat. 27° 30′, it turns again westward, and runs with little

deviation from that parallel till it falls into the Paraguay. Thence these two mighty rivers, mingling their waters flow on in one vast and uninterrupted stream, gradually increased by many rivers of minor importance, which join it from either side, till they finally empty themselves through a well-defined delta into the estuary of La Plata.

The extent of the practicable navigation on the two great branches of this mighty river varies with the geological formation of the countries through which they respectively pass.

The Paranã, whilst running through the mountainous districts of Brazil, is broken by many falls above the Guarani Missions, especially one called the Salto Grande, in lat. 24° 4′ 58" (as fixed by the officers of the Boundary Commission in 1788), where the river, which immediately before is nearly a league across, becomes suddenly confined by a rocky pass not more than sixty yards in width, through which it rushes with inconceivable fury, and forms a splendid cataract, between 50 and 60 feet high, dashing down with such thundering noise that it is said to be heard at a distance of five or six leagues. For a hundred miles afterwards, as far as the mouth of the river Curitiba, in lat. 25° 41′, the river is nothing but a succession of falls and rapids.

The Paraguay, properly so called, on the contrary, may be passed up by vessels of some burthen the whole way[52] to the Jaurú, in latitude 16° 25′, presenting the extraordinary extent of an uninterrupted inland navigation of nearly nineteen degrees of latitude, calculating the straight distance north and south, throughout the whole of which there is not a rock or stone to impede the passage, the bottom being everywhere of clay or fine sand. The least depth of water is in the channels through the delta by which it discharges itself into the Plata, but in the passage called the Guazú (the great canal) there is seldom less than two and a half fathoms.

The upper part of the river is extremely picturesque, and its shores abound in all the varieties of an intertropical vegetation. The palms particularly are remarkable for the magnificence of their growth. Below the junction of the Paranã it is thickly studded with islands covered with wild orange-trees, and a variety of beautiful shrubs and parasitical plants, new to European eyes.

It has been remarked that there is a great resemblance in the periodical risings and inundations of the Paraguay and those of the Nile, and there is certainly a striking analogy between the two rivers in many respects. Both rise in the torrid zone, nearly at the same distance from the equator, and both, though holding their courses towards opposite poles, disembogue by deltas in about the same latitude; both are navigable for very long distances, and both have their periodical risings, bursting over their natural bounds, and inundating immense tracts of country.

The Paranã begins to rise about the end of December, which is soon after the commencement of the rainy season in the countries situated between the tropic of Capricorn and the equator, and increases gradually till the month of April, when it begins to fall something more rapidly until the month of July. There is afterwards a second rising, called by the natives the *repunte*; but this, though regular, is of no great consequence, the river never overflowing its banks. It is probably occasioned by the swelling of the rivers from the winter rains in the temperate zone.

The extent of these periodical risings is, of course, in some degree, regulated by the quantity, more or less, of rain which may fall during the corresponding season; but, in general, the inundation takes place with great regularity, the waters rising gradually about twelve feet in the bed of the river in four months; this is the ordinary average of the increase of the river after its junction with the Paraguay; though above it, at Assumption, where the river is much confined, the rise is said to be sometimes as much as five or six fathoms.

The year 1812 was remarkable for the greatest flood in the memory of the natives. Vast quantities of cattle were carried away by it, and when the waters began to subside, and the islands which they had covered became again visible, the whole atmosphere for a time was poisoned by the effluvia from the innumerable carcases of skunks, capiguaras, tigers, and other wild beasts which had been drowned on them. On such occasions it frequently happens that the animals, to save themselves, swim off to the floating masses of canes and brushwood (called by the Spaniards "camelotes"), and are thus carried down the river, and landed in the vicinity of the towns and villages upon the coast. Many strange stories, are told of the unexpected visits of tigers so conveyed from their ordinary haunts to Buenos Ayres and Monte Video. One in my time was shot in my own grounds near Buenos Ayres, and some years before no less than four were landed in one night at Monte Video, to the great alarm of the inhabitants when they found them prowling about the streets in the morning. In the swampy region of Xarayes, where the inundation commences, the ants, which are in vast numbers there, have the sagacity to build their nests in the tops of the trees, far out of reach of the waters; and these nests are made of a kind of adhesive clay, so hard that no cement can be more durable or impervious to the weather.

During the inundation the river is exceedingly turbid, from the great quantity of vegetable substances and mud brought down by it:—the velocity of the stream in the higher and narrower parts of the river at first prevents their deposition, but as it approaches the lower lands, or pampas, where it overflows its bed, these substances are spread over the face of the land, forming a grey slimy soil, which, on the abatement of the waters, is found to increase vegetation in a surprising degree.

A calculation has been made by Colonel Monasterios, author of an excellent paper on this river, printed in the Statistical Register of Buenos Ayres for 1822, that no less than 4000 square leagues of country are annually covered by the waters during the periodical inundations of the Paranã.

From the almost uninterrupted level of the country which intervenes between the eastern ranges of the Cordillera and the Paraguay, many rivers which descend from them are either partially or entirely lost, after long and tortuous meanderings, in swamps and lakes, the waters of which are absorbed by evaporation during the heats of summer. This is strikingly exemplified in the river Pasages, or Salado, which, from the great extent of its course, and the many other streams it collects in its long course from the province of Salta to Santa Fé, would be a river of the first importance, were not the greater part of its waters lost in the level plains through which it runs. The Dulce, which, passing by Tucuman and Santiago, runs parallel to it, is lost in the great lake called the Porongos, in the pampas of the province of Santa Fé. The Primero and Segundo, which rise in the province of Cordova, disappear in the same plains. The Tercero, the most important river of that province, with difficulty finds its way during part of the year to the bed of the Carcaraña, which falls into the Paranã, near San Espiritu, below Santa Fé. The Quarto and the Quinto, and, still further south, the waters of the rivers from Mendoza and San Luis, are lost in the

swamps and lakes which form so striking a feature in the maps of that part of the continent.

The Uruguay, which contributes with the Paranã to form the great estuary of La Plata, takes its name from the numerous falls and rapids which mark its course. The whole extent of its course is little less than 300 leagues. It rises in latitude 27° 30′, in the mountains on the coast of Brazil, opposite the island of St. Catharine's, and for a long distance runs nearly due west, receiving, besides many rivers of less importance, the Uruguay-Mini (or Little Uruguay) from the south, and the Pepiry-Guazú (or Great Pepiry) from the north. As it approaches the Paranã it changes its course, inclining southward through the beautiful territories of the old Jesuit Missions. Opposite to Yapeyú, the last of those establishments, it receives, in latitude 29° 30′, the Ybicuy, a considerable stream from the east. In 30° 12′ the Mirinay pours into it from the west a great part of the drainage of the great lake or swamp of Ybera. Its principal tributaries afterwards are the Gualeguaychú, from the province of Entre Rios, and the Negro, the largest river of the Banda Oriental, soon after the junction of which it falls into the Plata with the Paranã, in about 34° south latitude. Flowing through a country the geological formation of which totally differs from that through which the Paraguay takes its course, its navigation is broken by many reefs and falls, only passable when the waters are at their highest, during the periodical foods, or by portages in the dry season. Of these the Salto Grande and Chico (the great and small falls), a little below the 31° of latitude, are the first and worst impediments met with in ascending the river. The former consists of a rocky reef running like a wall across its bed, which at low water is at times crossed by the gauchos of the country on horseback, though during the floods it is passable in boats, by which, and canoes, the river is navigable without further danger as high up as the Missions.

Beautiful specimens of silicified wood and variegated pebbles are found in the upper parts of the bed of this river, of which I brought many to this country.

The Negro, which runs into it from the Banda Oriental, derives its name (the black river) from the sarsaparilla plant, which, at a particular season, rots upon its banks, and falls into the stream in such immense quantities as to discolour its waters, which are found to be highly medicinal, and much in request in consequence. The little village of Mercedes, near its mouth, has of late years been much resorted to by invalids from Buenos Ayres to drink these waters.

The river Paraguay, as high as the Jaurú, was carefully laid down after the treaty of 1750; and the Spanish officers appointed to determine the boundaries, in virtue of that subsequently signed in 1777, surveyed the Paranã as high as the Tieté, as well as the whole of the Uruguay, and determined the courses of all their most important affluents in the course of the eighteen years during which they were employed in laying down the southern division only of this survey. The results of their labours, which were only stopped by the renewal of war, may justly be ranked amongst the most beautiful and perfect geographical works ever produced. Copies of the whole existed at Buenos Ayres during my time in the hands of Colonel Cabrer, one of the officers originally attached to the commissioners; and the Government of Buenos Ayres were in treaty for the purchase of them for the use of the topographical department of the state, where, it is to be hoped, they will not be buried in unprofitable obscurity.

When the war with Brazil for the Banda Oriental broke out, in 1826, Colonel Cabrer drew a MS. map from these materials for the use of General Alvear, the Buenos Ayrean Commander-in-chief, which he was afterwards kind enough to present to me. By a curious coincidence, about the same time, I obtained possession of one upon a large scale of the southern provinces of Brazil, drawn, by the Emperor's order, from the best data to be collected at Rio de Janeiro, for the Marquis of Barbacena, who commanded the Brazilian army, and lost it at the battle of Ituzaingo. They have, I believe, afforded Mr. Arrowsmith data for materially improving his last maps of that part of South America.

FOOTNOTES:

[50] His positions will be found in the tables of fixed points given in the Appendix.

[51] The following wording of Francia's decree upon first hearing of Soria's having arrived at Nembucú, within the jurisdiction of Paraguay, is a fair sample of his mode of doing business:—"Soria is a bold, insolent, and shameless fellow for having come here without any previous permission, by a river which he has no business upon, and by which he may return as he came, if he can, for downwards neither he nor his vessel shall pass."

[52] Vessels of 300 tons burthen have been built above the city of Assumption, and floated down the river to Buenos Ayres.

PART II.
THE PROVINCES.

CHAPTER XII.
THE LITTORINE PROVINCES.
SANTA FÉ—ENTRE RIOS—CORRIENTES—THE OLD JESUIT MISSIONS—PARAGUAY UNDER DR. FRANCIA.

De Garay founds *Santa Fé*, and meets with Spaniards from Peru. His subsequent Deeds and Death. The Government of the Rio de la Plata separated from that of Paraguay, and Santa Fé annexed to Buenos Ayres. Its former prosperity, and great capabilities, especially for Steam Navigation. *The Entre Rios*—constituted a Province in 1814, its Extent, Government, and Population—chiefly a grazing Country. *Corrientes*—its valuable natural Productions—mistaken ideas of the people as to Foreign Trade. The Lake Ybera—Pigmies, Ants, Ant-Eaters, Locusts, and Beetles. *The Missions* now depopulated—their happy and flourishing state under the Jesuits. *Paraguay*—some Account of its former Prosperity and Trade, and the establishment of the tyrannical rule of Dr. Francia.

PROVINCE OF SANTA FÉ.

The first discoverers of La Plata, as has been already observed, fixed themselves in Paraguay, and established the seat of their government at Assumption, the capital of that province. In his way up the river, Sabastian Cabot built a fort, called Sancti-Espiritu, at the junction of the Carcarãna with the Paranã; Ayolas, a few years after, built another not far from it, to which he gave the name of Corpus Christi; but these, like Mendoza's settlement at Buenos Ayres, were very soon destroyed by the warlike nations which then inhabited the whole of the right bank of the river; and, for the first half-century, with their views solely fixed on making a nearer approach to Peru, the Spaniards concerned themselves but little about the conquest of the poorer lands they had left behind them. The ships, which during that time continued to arrive in the River Plate, with fresh adventurers from Spain, with an inland navigation before them, to Assumption, requiring as much time as the whole voyage out from Europe, were entirely dependent for the refreshments they required on the accidental good will of the natives. Once in the Paranã, if any accident befell them, for nearly a thousand miles there was not a single Christian port in which they could take refuge.

It was under these circumstances that Don Juan de Garay, a Biscayan hidalgo (in 1573), who had already greatly distinguished himself amongst his companions at arms in those parts, solicited and obtained permission to make a sally from Assumption, to endeavour to re-establish Cabot's fort at the mouth of the Carcarãna, and to found other settlements upon the right bank of the Paranã.

The whole force he could muster for this enterprise, when ready, consisted only of eighty men, a small party wherewith to attempt to seize upon lands defended by a numerous and warlike people, already elated by former victories over the Spaniards, though probably as large a one as his own means would allow him to equip; for in those days the whole charge of such undertakings devolved upon the projectors:—they were obliged to raise the means as they could, and their ultimate success of course were mainly depended upon the extent of their personal credit.

De Garay landed, in the first instance, with his followers, thirty or forty miles to the north of the river Salado, and, finding the natives disposed to be friendly, and the aspect of the country inviting, he determined there to make his first settlement, naming it Santa Fé de la Vera-Cruz.

The site originally fixed upon was where Cayestá now stands, upon an inferior branch of the Paranã; but, at a subsequent period, the Santa Fecinos removed lower down to the banks of the Salado.

Whilst part of his people were employed upon the works, De Garay embarked with the rest in a small brig which attended him, and descending the Paranã entered the Salado, and opened a communication with the natives established upon its banks. There an adventure attended him, which he little looked for. Just as he flattered himself he had established a friendly understanding with the Indians, their conduct was observed suddenly to change:—a great stir took place amongst them, and they began to betake themselves, to their arms, and to gather together in such numbers that the Spaniards, alarmed, and expecting to be attacked by them, were glad to get on board their little vessel, and make the best preparations they could for defence. From the mast-head fires were seen lighting in every direction, the well-known signal for war; and the man placed there to look out gave notice that the savages were pouring down towards them in vast numbers, not only by land, but by the river, in their canoes, apparently to attack them in their ship.

De Garay, pent up in a little creek, into which he had run his vessel, and believing his situation desperate, was exhorting his people at any rate to defend themselves to the last, when suddenly the man called out that he saw a cavalier, presently another, and another, and then several more, charging the Indians in their rear; nor was it long before they saw the whole host dispersed, routed, and flying before a party of horsemen. The Spaniards were as much astonished at this unlooked-for encounter as the Indians, nor could they imagine to whom they were thus indebted for their preservation at the moment they expected to have been overwhelmed without a chance of succour, though that they were some of their countrymen they could not doubt after seeing the horses.

The strangers were not long in making themselves known; they were soldiers from Tucuman, who, under their leader Cabrera, having founded the city of Cordova on the same day that De Garay had commenced his settlement at Santa Fé, were then scouring the country to take possession of it as belonging to his jurisdiction; De Garay in vain resisted this pretension, and claimed it as belonging to Paraguay, in right of prior possession and settlement: the others insisting with a superior force, he had no alternative but to temporise, and submit himself to Cabrera's orders, trusting to the higher powers to order the matter differently.

Fortunately for the settlement of this question ere it led to more serious consequences, the Adelantado Zarate opportunely arrived from Spain with a grant from the King, explicitly including in his government all settlements, which might be founded on either shore of the river for the distance of 200 leagues: he not only confirmed De Garay in his command at Santa Fé but took him into such especial favour, that, dying soon afterwards, he left him guardian of his only daughter; she, by his advice, married Don Juan de Vera

and Arragon, who in consequence succeeded to the Adelantasgo, which greatly increased the influence of De Garay, who was immediately appointed lieutenant over all the Rio de la Plata, and furnished with full authority to carry into effect his own plans for reducing the Indians to subjection upon its shores. Armed with these powers he conquered some of the most warlike of the native tribes, and established the fame and power of the Spaniards far and wide throughout all those regions:—the last of his deeds was the foundation, in 1580, of the present city of Buenos Ayres, as has been before stated. Alter passing three years in superintending the laying out of the future capital of all those provinces, upon his return to Assumption, going incautiously on shore one night to sleep, he was surprised and killed by the savages. Paraguay lost in him one of her wisest and most valiant captains, whose death was greatly lamented, by the poor especially, to whom his beneficence was unbounded.

The importance of the settlements he founded was soon apparent; and in 1620 they were formed into a government independent of that of Paraguay, under the name of the Government of La Plata; it comprised all south of the junction of the rivers Paranã and Paraguay. Santa Fé in consequence became a dependency of Buenos Ayres; an arrangement confirmed in every territorial settlement subsequently made by any competent authority.

In the domestic dissensions, however, which succeeded the establishment of the Independent Government at Buenos Ayres, Santa Fé took an active part, and disputed the right of the newly-constituted authorities to interfere in the nomination of the provincial administrations. Under these circumstances, in 1818, Lopez, a military officer who had particularly distinguished himself in his resistance to the Central Government upon this point, obtained the command of the province, in which he has ever since been continued. Various circumstances have concurred to leave him not only in undisturbed possession of this local authority, but to render him in later times a personage of some importance in the political history of the Republic. The jurisdiction he lays claim to for the soi-disant province of Santa Fé extends as far south as the Arroyo del Medio, to the west to the lakes of Porongos, and to the north as far as the lands of the Indians of the Gran-chaco, or Great Desert, against whom he has enough to do to defend himself.

In old times Santa Fé under the protection of the Central Government, which spared no expense in constructing forts and maintaining the forces requisite to keep the Indians in check, was the central point of communication not only between Buenos Ayres and Paraguay, but between Paraguay and the provinces of Cuyo and Tucuman: the wines and dried fruits of Mendoza and St. Juan were brought there to be carried up to Corrientes and Paraguay, which in return supplied the people of those provinces, as well as those of Chile and Peru, through the same channel, with all the yerba-maté they required, of which the annual consumption in those provinces alone was calculated at from 3,000,000 to 4,000,000 lbs.

The *estancieros* were amongst the richest in the Vice-Royalty; and their cattle-farms not only covered the territory of Santa Fé, but large tracts on the eastern shores of the river in the Entre Rios; from which they furnished by far the greater part of the 50,000 mules yearly sent to Salta for the service of Peru.

Their situation is now a very different one: the stoppage of the trade with Paraguay and Peru has reduced them to a wretched state of poverty; and their estrangement from the capital having left them without adequate means of defence, the savages have attacked them with impunity, laid waste the greater part of the province, and more than once threatened the town itself with annihilation.

The population has greatly diminished;—perhaps in the whole province there are not now more than 15,000 or 20,000 souls, a large proportion of which is of Guarani origin, the descendants of emigrants from the Jesuit missions in Paraguay, who abandoned them after the expulsion of their pastors in 1768.

This state of things is the more lamentable as Santa Fé might, under a different system, become one of the most important points of the Republic: once more under the decided protection of the Government of Buenos Ayres, not only might its own particular interests be vastly advanced, but the greatest benefits might result to the rest of the union.

Its situation offers striking facilities for carrying on a more active transit-trade between Buenos Ayres and the provinces north of Cordova. The river Salado, on which it stands, is known to be navigable for barges as high up as Matara, in the province of Santiago, and at no great distance from that city; if it were made use of there would be a saving of upwards of 250 leagues of land-carriage in conveying goods from Buenos Ayres to Santiago; but, even if this should turn out not to be so practicable as it is said to be, a direct road is open from Santa Fé which, passing by the lakes of Porongos, skirts the river Dulce, and falls into the high road from Cordova a few posts south of the city of Santiago; which, at the lowest computation, would still be 100 leagues short of the over-land route now used from the capital to the Upper Provinces by way of Cordova.

In any part of the world such a saving of land-carriage would be a considerable object; but in a country where the roads are just as nature has made them, and where the only means of transport for heavy goods are the most unwieldy of primitive waggons, drawn by oxen—the slowest of all conveyances,—not to speak of its expense, and the risks, independently of the wear and tear necessarily attending it, it becomes of the greatest importance. That it has not hitherto been available, is owing to the difficulties attending the navigation of a large river, not only against the current, but against a prevalence of contrary winds, which have rendered the passage of the Paranã up to Santa Fé even more tedious and expensive than the long over-land journey. But the introduction of steam-boats would at once obviate this, and enable the people of Buenos Ayres to send their heaviest goods to Santa Fé by water-carriage in less time than a horse can now gallop over the intervening country, for there is no reason in the world why the ordinary voyage thither should exceed at the utmost three days. I can hardly imagine a greater change in the prospects of a people than this would open to the Santa Fecinos.

There is, however, another point of view, of serious consequence to Buenos Ayres, in which for her own sake it concerns her to look to the advantages, if not to the necessity, of taking speedy measures to introduce steam-navigation upon the Paranã. Since the erection of the Banda Oriental into an independent state, the yearly imports into Monte Video have increased out of all ratio to the scanty population of that state:—it is very evident what becomes of the excess, and that not only the people on the eastern, but those on the western, shores of the Uruguay, are supplied through that channel. The government of Monte Video takes care so to regulate its duties as to make this a profitable trade:—whilst it cannot be denied that the inhabitants of Entre Rios and Santa Fé have quite as much right to traffic with their neighbours as those of Mendoza and Salta have to trade with Chile and Peru.

Buenos Ayres has already suffered a great loss of revenue in consequence, and this loss will yearly

increase, to the great detriment of the national credit, for which she is responsible, and to the still further estrangement of the provinces from each other, unless she takes active means to counteract the evil:—those means are in her own hands. The introduction of steam-navigation, by establishing a cheaper communication between her own port and the Littorine provinces, will soon put an end to the profits of the over-land trade which is at present carried on through the Banda Oriental. It may, perhaps, be necessary, in the first instance, to grant some remission of the ordinary duties, in the shape of drawback or otherwise, upon goods reshipped for other parts of the republic in steamers, as well as upon all produce of the country received by the same conveyance in exchange:—but, whatever apparent sacrifice Buenos Ayres may make to promote this object, she may be assured she will be repaid a hundred-fold by the results.

If the confederation of these provinces is to be a real one, and for joint benefit, they must pull together, and help one another. They possess, in a singular degree, within themselves, the means of mutual aid and support, and, if properly applied, they can hardly fail to insure them a great increase of individual prosperity and national importance.

The reverse of the picture has been foretold in words which no man can gainsay:—"*if a kingdom be divided against itself, that kingdom cannot stand.*"

PROVINCE OF ENTRE RIOS.

The Entre Rios territory, bounded on three sides by the Paranã, and on the east by the river Uruguay, like Santa Fé, formed part of the intendency of Buenos Ayres till the year 1814, when the general government divided it into two distinct provinces, called the provinces of Entre Rios and Corrientes:—the separating line between them, for the present agreed upon, is that formed by the little river Guayquiraro, which falls into the Paranã in about latitude 30° 30′, and the Mocoreta, which runs in the opposite direction into the Uruguay.

The Villa del Paranã, or Bajada, opposite to Santa Fé, is, nominally, the capital town of Entre Rios;—which province is subdivided by the river Gualeguay into two departments, that of the Paranã and that of the Uruguay.

According to the Provisional Reglamento or Constitution drawn up in 1821, in imitation of that of Buenos Ayres, the governor should be chosen every two years by a provincial junta, composed of deputies from the several towns or villages, the principal of which, after the capital, are the Villa de la Concepcion on the Uruguay; and Nogoya, Gualeguay, and Gualeguaychú, on the rivers of the same name.

The population may be about 30,000 souls,—very much scattered,—and almost entirely occupied in the estancias or cattle-farms, in which the wealth of the province chiefly consists. Many of them belong to capitalists in Buenos Ayres:—they have the advantages of a never-failing supply of water, and of being safe from any inroads of the Indians,—the two great desiderata for such establishments in that part of the world,—whilst their proximity to Buenos Ayres ensures a ready sale for the produce.

These advantages made it a great cattle-country in the time of the Spaniards, but it was devastated and depopulated in the first years of the struggle for independence by the notorious Artigas and his followers, and became the scene of much bloodshed and confusion:—from that it had hardly begun to recover when the war, breaking out between the Republic and Brazil for the Banda Oriental, again made it the theatre, as a frontier province, of military operations, and unsettled the habits of the population. The years which have elapsed since the conclusion of that war have sufficed once more to cover the province with cattle, and there are gauchos enough to take care of them.

PROVINCE OF CORRIENTES.

The population of the province of Corrientes in 1824 was estimated at from 35,000 to 40,000 inhabitants. It is ruled by a governor elected by a junta of deputies,—how they are chosen I know not. His official acts are countersigned by a secretary, and in law matters he is assisted by an officer termed the assessor,—a point of form common, I believe, to all the provincial administrations, and derived from the practice of the intendents in the time of the Spanish rule.

The city of Corrientes was begun in 1588, soon after De Garay founded his settlements at Santa Fé and Buenos Ayres. Its position is in latitude 27° 27′, at the junction of the rivers Paranã and Paraguay, and it may also be said of the Vermejo, the mouth of which is not more than ten leagues distant from it:—it affords, in consequence, every facility for an active commercial intercourse with the most remote parts of the republic. The natural productions in these latitudes are similar to those of Brazil, and cotton, tobacco, rice, sugar, indigo, and many other articles of the first demand in the markets of Europe, may be produced there in any quantity:—but the same difficulties to which I have already alluded, in speaking of the navigation of the Paranã, aggravated by increased distance, have hitherto prevented the people of Corrientes from profiting, as might have been expected, by these advantages, and have checked all inducement to industry; although they themselves, in their simplicity, ascribe the non-cultivation of their lands to different causes:—they think, with their neighbour Dr. Francia, that foreign ships might just as well go to them as to Buenos Ayres, and that they do not do so they ascribe to the policy of the metropolitan government, which they ungratefully reproach with refusing to throw open the navigation of the river to foreign trade in order to appropriate to their own purposes the revenue resulting from it,—regardless of the fact that the collection of those duties is the only means by which Buenos Ayres can ever expect to discharge either interest or capital of the heavy debts she has incurred in securing the independence, and in since upholding the honour and credit of the republic.

There can be no doubt that it will always be the true policy of the governors of Buenos Ayres to render those duties as light as possible, and especially to reduce, as far as they can, all charges upon the native produce from the provinces of the interior; but if they are to be placed, as they always have been, and from their geographical position always must be, in the vanguard of the republic, to bear the brunt of foreign wars, and all those expenses which must naturally arise out of their intercourse with other nations, they can never give up their right to avail themselves of the ordinary resources for meeting such exigencies which are placed within their reach.

If the expenses of the war with the mother country for their independence, and afterwards of that with Brazil for establishing that of the Banda Oriental, could be fairly apportioned amongst the population of the provinces, the people of Corrientes, as well as of all other parts of the interior, would soon see that the

custom-house duties now levied at Buenos Ayres which affect them would go but little way to meet anything like the share of that national expenditure which might be justly charged against them.

It is, however, useless to enter into this discussion, when the truth is, that, whether Buenos Ayres chooses or not to declare the navigation of the Paranã free, the people of Corrientes may rest assured it will never answer to the shipping of foreign nations to avail themselves of it:—foreigners will purchase the productions of Corrientes and of Paraguay if placed within their reach at low prices, but they will not unnecessarily incur the risks and expenses of sending their own ships a thousand miles up a river against wind and tide, in quest of a cargo which may at all times be had in the seaports of Brazil.

Steam-communication will enable the Correntinos to compete with the Brazilians, and it is perhaps the only means by which they will be enabled to find any sale for their produce at such a rate as will make it worth the while of foreigners to seek for it, even in the market of Buenos Ayres. They have every facility for establishing it,—navigable rivers communicating with the farthest extremes of the republic,—and an endless abundance of wood of every kind for fuel.

A remarkable physical feature in this province is the great lagoon of Ybera, extending in width about thirty leagues parallel to the course of the Paranã, from which it is supposed to derive its waters by some underground drainage, for no stream runs into it. Spreading far and wide to the south it occupies the enormous space of about a thousand square miles, and supplies four considerable rivers—the Mirinay, which runs into the Uruguay; and the Santa Lucia, the Bateles, and the Corrientes, which discharge themselves into the Paranã. It was Azara's opinion, from the general aspect of the country, that the Paranã itself at some former period took its course through this lake, and might again resume its ancient channel. At present it is hardly possible to explore any part of it from the prodigious quantity of aquatic plants and shrubs by which it is for the most part covered.

What a store of lacustrine deposits is here forming for the examination of future geologists!

Connected with this lake is the tradition, which has been handed down by early Spanish writers, of a nation of *pigmies* who were said to have lived in islands in the midst of it, a tale which the first discoverers, who were generally as ignorant as they were brave, seem to have as implicitly believed as that a race of giants once occupied other parts of the same continent.

Both tales are easily traceable to their true origin, and neither of them is without a plausible foundation.

The bones of extinct animals of monstrous size, so frequently met with, gave rise, as well they might, to the story of the giants. The *pigmies* are a race unfortunately not yet extinct, and are palpably the *ants*, whose marvellous works (especially in the part of the country I am speaking of), vying with those of man himself, are no less calculated to have occasioned at first sight, amongst credulous people, the most far-fetched conjectures as to their origin. I have made some allusion, in speaking of the course of the river Paraguay, to their ingenious contrivances in the lakes of Xarayes (where also the pigmy tribes were said to have dwelt), but those are nothing compared to the works of the ants of Corrientes and Paraguay, where whole plains are said to be covered with their buildings of dome-like and conical forms, rising five and six feet and more in height, and formed of a cement hard as a rock, and impervious to the wet. Man's vanity might easily prompt him to mistake them for works of his own kind in miniature; but, all-presumptuous as he is, nothing he has ever yet constructed in all the plenitude of his power is comparable to the works of these little insects. The Pyramids of Egypt do not bear one half the relative proportion to his own size which the ordinary habitations of these ants do to theirs.

Their works under ground are no less extraordinary: Azara has described with his usual minuteness the various species which he fell in with. There is one amongst others which is winged, and the swarms of which are so prodigious, that he says he rode for three leagues continuously through one of them. This was in about the latitude of Santa Fé, where they particularly abound, and where the people catch them and eat them. The hind parts it seems are very fat, and they fry them into a sort of paste or omelette, or, mixed up with sugar, make sweetmeats of them.

They are a sad pest to the agriculturist and a great nuisance when they get inside the houses. At Buenos Ayres they are very troublesome: I tried myself every means in vain to get rid of them; their ingenuity always baffled us; no contrivance could keep anything in the shape of sweetmeats or dried fruits or such things out of their clutches; and as to the quantity of sugar they would carry off in a very short time, it was incredible: we thought to escape them by placing our stores upon tables, the legs of which were surrounded by water, but they threw straws and sticks into the water, and so made themselves bridges to cross by. If we hung them from the ceiling they climbed the walls and descended by the ropes which suspended them. In our garden they committed terrible depredations; and in the summer-season it was always necessary to keep a couple of men constantly employed for the sole purpose of destroying their nests. We observed that they could not exist in the sun; so that, if a basin of sugar were half filled with them, as was constantly the case, by putting it into the sun it was presently cleared of every one of them.

The Jesuit father Guevara, in his account of Paraguay, speaks of a species not noticed by Azara, found about Villa Rica, which deposits upon certain plants small globules of white wax, which the inhabitants collect to make candles of. The utility they are of in this respect, he says, in some measure compensates for the damage they do to the husbandman. Against their depredations, St. Simon and St. Jude, and St. Bonifacio[53], have been by turns elected in due form to be the special guardians and protectors of all good Catholics.

Fortunately, however, in those regions where these insects most abound, an all-wise Providence has also placed a most remarkable animal—formed, as it would appear, expressly for the purpose of destroying them and preventing their overrunning the land—the tamandua, or, as we call it, the ant-bear.

I hardly know any animal which exhibits more striking evidence of design on the part of the Creator: slow and sluggish in all its movements, without power of escape, and apparently without the ordinary means of self-defence, its long trumpet-shaped snout solely formed to contain the singular prehensory organ with which it is furnished for the purpose of taking its diminutive prey, being entirely destitute of anything like the teeth of other animals; it would be speedily exterminated by the beasts of prey which abound where it is found, were it not—as if to compensate for these deficiencies—providentially supplied with strong sharp claws, and such courage and muscular power to use them, as enables it to defy every assailant. When attacked it throws itself upon its back, and in that posture will make so desperate a resistance, that it is a match either for the jaguar or tiger, its fiercest enemies.

The ants are not the worst plagues in these countries: destructive as they are, they are not to be compared with the locusts; though, happily (and indeed were it otherwise, all man's labour would be vain), they are only occasional visitors. When they do come they lay the land utterly desolate.

I once witnessed one of their visitations, and, but that I had myself seen the extent of the devastation caused by them, I certainly would not have believed it.

They made their appearance at first in a large dense cloud, hovering high in the air, as if hesitating where to descend. All the shovels and pots and pans in Buenos Ayres were put in requisition to make a clatter to affright them, but in vain; down they came, to the consternation of the owners of every quinta, or garden, in the neighbourhood of the city. They soon spread for several miles over the surface of the land, and so thickly that it was like driving over gravel to go amongst them;—that, I well remember was just my impression upon going out upon the high road in a carriage whilst they were on the ground. They had then been at their work of destruction two or three days, and were for the most part so gorged as to be quite incapable of moving; in a day or two more they had literally not left a blade of grass or a green leaf to be seen; some of those that were not then dying of satiety began to devour one another. This was early in the year 1826. Though they were always as thick as grasshoppers, I never saw at Buenos Ayres what was termed a flight of locusts but that once, in nearly nine years.

It was succeeded a few days afterwards by a flight of small black beetles, which came down like hail, and were swept up by shovels-full in our balconies: it was a small insect, about the size of an earwig, and was said to have the same habits; they worked their way into the house in great numbers, where they fell into a sort of torpid state, in which they became an easy prey to the ants, who upon this occasion were our active allies, and helped us to get rid of them.

THE OLD MISSIONS OF THE JESUITS.

To the eastward of Corrientes are the depopulated ruins, all that remain, of the once famed Missions of the Jesuits, the greater part of which were situated on the shores of the Paranã and Uruguay, where the courses of those rivers nearly meet.

When the order was expelled from South America in 1767, there were a hundred thousand inhabitants in the thirty towns in those parts under their control. In those situated east of the Paranã, not a thousand souls remained in 1825, according to an account I received from the officer who was in command there at that period, and they were I believe shortly afterwards swept off during the war with Brazil for the occupation of the Banda Oriental. The other towns beyond the Paranã, being within the jurisdiction of Paraguay, have fared little better under Dr. Francia.

This was that *Imperium in imperio* which once excited the astonishment of the world and the jealousy of princes: how little cause they had to be alarmed by it was best proved by the whole fabric falling to pieces on the removal of a few poor old priests: a more inoffensive community never existed.

It was an experiment on a vast scale, originated in the purest spirit of Christianity, to domesticate and render useful hordes of savages who would otherwise, like the rest of the aborigines, have been miserably exterminated in war or slavery by the conquerors of the land. Its remarkable success excited envy and jealousy, and caused a thousand idle tales to be circulated as to the political views of the Jesuits in founding such establishments, which unfortunately gained too easy credence in a credulous age, and contributed, there is no doubt, to hasten the downfall of their order.

Their real crime, if crime it was, was the possession of that moral power and influence which was the natural consequence of their surpassing knowledge and wisdom in the times in which they lived.

With respect to their Missions in South America, nothing could be more inconsistent than the allegations made against them:—whilst accused, on the one hand, of aiming at the establishment of a powerful and independent supremacy, they were, on the other, at the same time, reproached with having systematically kept the Indians in a state of infantine tutelage.

What would have been the consequences of the opposite system? How long would the Spanish rule in those countries have lasted had the Jesuits trained up a hundred thousand of the proper owners of the soil in any practical knowledge of the rights of man? How long would the Jesuits themselves have preserved their influence with them?

The Indians loved the Jesuits, and looked to them as to their fathers, and great were their lamentations when they were taken from them, and replaced by the unprincipled Franciscan friars sent to them by Bucareli, the Captain General of Buenos Ayres:—the following memorials, addressed to him from the Missions of San Luis and Martires, will serve to throw some light on the true feelings of the people with regard to their old and new pastors.

I have given a copy of one of the originals in Guarani in the Appendix, as a specimen of a language, which, of all the native tongues, was, perhaps, the most diffused in South America, and which, to this day, may be traced from the Paranã to the Amazons:—

No. I.

Translation of a Memorial addressed by the people of the Mission of San Luis to the Governor of Buenos Ayres, praying that the Jesuits may remain with them instead of the Friars sent to replace them.

(J. H. S.)

"God preserve your Excellency, say we, the Cabildo, and all the Caciques and Indians, men, women, and children, of San Luis, as your Excellency is our father. The Corregidor Santiago Pindo and Don Pantaleon Cayuari, in their love for us, have written to us for certain birds which they desire we will send them for the King:—we are very sorry not to have them to send, inasmuch as they live where God made them—in the forests,—and fly far away from us, so that we cannot catch them.

"Withal we are the vassals of God and of the King, and always desirous to fulfil the wishes of his ministers in what they desire of us. Have we not been three times as far as Colonia with our aid!—and do we not labour in order to pay tribute!—and now we pray to God that that best of birds—the Holy Ghost—may descend upon the King, and enlighten him, and may the Holy Angel preserve him!

"So, confiding in your Excellency, Señor Governor, our proper father, with all humility, and with tears, we beg that the Sons of St. Ignatius, the Fathers of the Society of Jesus, may continue to live with us and remain always amongst us. This we beg your Excellency to supplicate of the King for us for the love of God:—all this people,—men, women, and young persons, and especially the poor,—pray for the same with tears in their eyes.

"As for the friars and priests sent to replace them, we love them not. The Apostle St. Thomas, the minister of God, so taught our forefathers in these same parts,—for these friars and priests have no care for us. The Sons of San Ignatius, yes,—they, from the very first, took care of our forefathers, and taught them, and baptized them, and preserved them for God and the King:—but for these friars and priests, in no manner do we wish for them.

"The Fathers of the Society of Jesus know how to bear with our weaknesses, and we were happy under them for God's sake and the King's:—if your Excellency, good Señor Governor, will listen to our prayer, and grant our request, we will pay larger tribute in the *yerba caa-mini*.[54]

"We are not slaves, and we desire to say that the Spanish custom is not to our liking,—for every one to take care of himself, instead of assisting one another in their daily labours.[55] This is the plain truth which we say to your Excellency, that it may be attended to:—if it is not, this people, like the rest, will be lost. This to your Excellency, to the King, and to God,—we shall go to the Devil!—and at the hour of our death where will be our help?

"Our children, who are in the country and in the towns, when they return and find not the Sons of San Ignatius, will flee away to the deserts and to the forests to do evil. Already it would seem that the people of San Joaquim, San Estanislaus, San Ferdinand, and Tymbo, are lost,—we know it well, and we say so to your Excellency:—neither can the Cabildos ever restore these people for God and the King as they were.

"So, good Governor, grant us what we ask,—and may God help and keep you. This is what we say in the name of the people of San Luis, this 28th of February, 1768.

"Your humble servants and children." (Signed by the members of the municipality.)

No. II.

Complaint of the people of Martires of the conduct of the priests sent to them after the expulsion of the Jesuits.

(J. H. S.)

"To our most excellent Governor:—

"Blessed and praised be the holy sacrament! God our Lord grant you a long life and health on earth, and happiness hereafter in heaven. So we pray him,—we, the Corregidor, Cabildo, and Caciques of the people of the Holy Martyrs,—who, casting ourselves with all humility at your feet, give praises to God and to our King, and to you, Señor Governor, for having come by his command, as his deputy, amongst us.

"Holding you in the highest reverence, we make known to you that all this people are perfectly obedient to the orders of our Catholic King, trying to esteem and respect the spiritual pastors sent to us, in nothing failing in our duties towards them, with all due respect, as they are the ministers of God.

"But, although this is our behaviour, they are not satisfied with us:—for two or three days they were pleased with our humility, and no longer.

"It has happened that the Corregidor, wishing to execute the orders of the Governor, the Curate has said,—'This man wrongs you:—in what light do you look upon his authority compared with that of your priests? The King himself is only a superior governor, and shall be food for the worms, and nothing more:—I fear no one.' Saying so he ordered fifty stripes to be given to an Indian; and a poor woman he ordered to be tied to a post, and flogged. He goes about with a stick in his hand to beat us, and a few days past he punished an Indian with blows in the church itself, before all the people:—another he beat in the square, saying,—'If I kill him I shall do no great harm.'

"The Administrator alone sometimes protects us from these punishments, saying to him, with proper respect,—'Father, you have no business to interfere in temporal matters,'—and for this he is not well with him. This officer endeavours to observe the commands of God and of the King for the good of this people, and in nothing have we to complain of him. He helps us on all occasions, and much we stand in need of it, Señor Governor.

"But God and the King have appointed you for our comfort, and so we make known to you our difficulties. We are fearful lest the people should lose their obedience and respect for the King's orders, when they hear the priests call the mandates of the King, and of his Governor, words of no consequence:—and so for your guidance we tell you the truth, which God knows, and is testified to by all this people. Santos Martires, 16th April, 1768."

(Signed by the Cabildo, &c.)

Bucareli, on receipt of the first of these simple documents, sent it to Spain, with the ridiculous announcement that he considered it as the forerunner of a rising in favour of the Jesuits, and had, in consequence, ordered a chosen body of troops to proceed immediately from Paraguay and Corrientes to the neighbourhood of the Missions to be in readiness to put down the expected insurrection: thither too he proceeded himself to take the field in person against the rebels.

He found them not in arms but in tears:—the Jesuits, though he could not believe it, had brought up the Indians in obedience, and in the love of their King as well as of God,—and, having said their say, they resigned themselves submissively to the orders of their newly-appointed superiors,—giving thanks to the King for having sent a personage of such importance as Bucareli to take care of them. Bucareli met, in fact, with not the slightest opposition from the Indians, in substituting his own system of administration for that of the Jesuits, which he had been amongst the foremost to find fault with.

The efficacy of his own measures may be judged by their result:—he sent them civil governors, and appointed Franciscan friars for their spiritual pastors:—the misrule of the first, and the little respect inspired by the latter, compared with the uniformly exemplary lives of their predecessors, brought about in little more than a quarter of a century, the entire ruin and depopulation of these once happy and

prosperous communities. The Indians, as they themselves predicted in their letter to him, when there was no longer sufficient wisdom in their governors to prevent it, were lost both to God and the King.

In saying this I do not pretend to dispute that the institutions of the Jesuits were not, in many points, defective, like all others of man's creation; they were, however, framed under very remarkable and novel circumstances, for which great allowances must be made in any comparison of them with the social systems of Europe; if we look at the good they did, rather than for the evil which they did not, we shall find that, in the course of about a century and a half, upwards of a million of Indians were made Christians by them, and taught to be happy and contented under the mild and peaceful rule of their enlightened and admirable pastors,—a blessed lot compared with the savage condition of the unreclaimed tribes around them.

PARAGUAY,

strictly speaking, has no place in this book, being, as it is for the present, a distinct and separate Republic; but, like the Missions, it is impossible to pass so near it without some allusion to its former prosperity, and to its present very singular condition under the despotic rule of Dr. Francia.

It was in Paraguay that the first conquerors of the country fixed their abode and the seat of their government:—it was there also, attracted by the same inducements of a genial clime and a profusion of natural productions to satisfy all man's wants, that the Jesuit fathers laid the original foundations of their celebrated establishments just spoken of. Its population, before it ceased to be a province subject to the government of Buenos Ayres, was estimated at 200,000 souls, and the yearly value of its surplus produce, exported for consumption to Buenos Ayres and the interior provinces, fell little short of a million and a half of dollars. Eight millions of pounds of Paraguay tea were annually sent to Santa Fé and Buenos Ayres, besides a million of pounds of tobacco, large quantities of timber for every purpose, cotton, sugar, molasses, spirits, and a variety of other articles.

The yerba-maté, or tea, which forms the principal article in the list, is as much in general use and demand throughout all the provinces of La Plata, Chile, and many parts of Peru, as the teas of China are in Europe. The plant which produces it (the *Ilex Paraguayensis*) is an evergreen about the size of an orange-tree, which grows wild and in great abundance in the dense forests in the northern and eastern parts of the province, whither the people repair yearly in numerous gangs to collect it. The difficulties of penetrating the woods to reach the yerbales, as they are called, are considerable, but they are amply repaid by the certain profits of the adventure. The whole process of preparing and packing it for market is performed on the spot. The tender branches and twigs, being selected, are roasted quickly over a fire till the leaves are crisp; and then, after being partially crushed or pounded, are rammed into hide bags, called serrons, containing 200 lbs. each, which, when sown up, are ready for sale.

The Jesuits cultivated the plant, of which there are three species, in their Missions; and by attention produced a better quality of tea, called *caa-mini*, than that from the wild plant collected in the woods.

From the practice of reducing the leaf nearly to dust probably originated the general custom in South America of sucking the infusion when made through a tube, at one end of which is a strainer, which prevents the small particles of the tea-leaves from getting into the mouth: it is usually made very strong, very hot, and very sweet with sugar; its properties seem to be much the same as those of the China tea. The Spaniards learned to use it from the Guarani Indians.

When the Viceroy's power was overthrown in 1810, the province of Paraguay refused to acknowledge the central government set up at Buenos Ayres to succeed him, and an army was in consequence sent to reduce it to obedience; but the Paraguay troops defeated the Buenos Ayrean general, Belgrano, who was glad to capitulate, and be permitted to return whence he came. Emboldened by this success, which gave them an idea of their own consequence beyond any they had before entertained, they proceeded at once to assert their absolute independence, not only of Buenos Ayres, but of the mother country, and to declare Paraguay a free and sovereign state, a step beyond any at that time contemplated, perhaps even by the rulers of Buenos Ayres themselves, who, though self-elected, continued to act in the King's name up to 1816, the date of their declaration of independence at Tucuman.

This proclamation of the independence of Paraguay was followed in the first instance by the setting up of a triumvirate government, of which Francia was the secretary, and soon became the secret mover of the whole machine. A sort of Mephistopheles, he was not long ere he set the members of the government by the ears, and by his intrigues brought about their resignation.

Then came the convocation of a general assembly of deputies from all the towns and villages of the province, to consider what was to be done under the circumstances. By these poor ignorant people thus dragged from their homes, Francia, a person in authority, a lawyer, or learned man,—for the terms are synonymous in the language of Paraguay,—living like an ascetic, and affecting a sort of cabalistical knowledge, was looked upon with a kind of reverential awe, as a person of wonderful acquirements and sagacity, whose opinions were eagerly sought to guide them in the weighty matters they were called upon to discuss, whilst on his own part he was not behindhand in maturing his plans and securing his influence.

When the Congress met he laid before it the following project for a government, which, as he anticipated, was regarded as the *ne plus ultra* of wisdom, and was adopted by acclamation (*por acclamacion*). I give the document entire, not only because it has never before appeared in English, but as the best evidence of the low cunning of the projector, and of the extreme simplicity and subserviency of those who adopted it, believing all the time that they were a free and independent people.

Plan for a Constitution proposed by Dr. Francia to the General Congress of Paraguay, and adopted by acclamation.

"Article I.—The two citizens Don Fulencio Yegros and Don José Gaspar de Francia shall alone constitute the government, with the title of 'Consuls of the Republic of Paraguay.' They shall have the rank and honours of Brigadier-Generals, and their commissions as such shall be signed by the President of this Congress.

"Art. II.—They shall wear, as the insignia of their Consular dignity, a hat bound with blue, and the tri-coloured scarf of the Republic. They shall have the like and equal jurisdiction and authority, which they shall exercise uniformly and conjointly. In consequence, all acts of the Government shall be signed by both.

"Art. III.—Their first duty shall be the preservation, security, and defence of the Republic, with all the

vigilance, judgment, and activity required under existing circumstances.

"Art. IV.—There shall henceforward be no Presidency.

"Art. V.—All the forces of the Province shall be under the joint command in chief of the two Consuls.

"Art. VI.—Nevertheless, all the active and effective troops of every grade, as well as all the arms and ammunition, shall be equally divided, and placed at the disposal, half and half, of each Consul, and each shall have his own separate barracks and magazines under his own command.

"Art. VII.—There shall be two battalions of infantry, each to consist of three or four companies for the present, or of more if necessary; so that each Consul shall have his separate battalion, of which he shall be the chief and commandant exclusively: he shall also have the command of one of the two companies of artillery; Consul Yegros shall command the first, and Consul Francia the second; the latter shall form his own battalion, towards which he shall be at liberty to take the fifth part of that commanded by Consul Yegros.

"Art. VIII.—The officers and men of these corps shall be approved of by their respective Chiefs, the said Consuls; but all officers' commissions shall be signed by both jointly, though they may be proposed by their own commanders respectively: in like manner, if it should be necessary to try them for any offence, it shall be before the two Consuls jointly.

"Art. IX.—The Consuls shall preside over the tribunals in turn for four months at a time each, with the title of 'Consul in Turn,' and not 'Consul Presiding,' lest that designation should give rise to mistakes. Consul Francia shall take the first turn, and in all cases, when the turn comes round, a notice of it, signed by both, shall be inserted in a book, and sent to the Cabildo of the city for their information.

"Art. X.—A chamber shall be set apart in the Government House for the Tribunal of the Consuls: it shall be open during the hours of office, and its forms shall be regulated by the Consul in Turn for the time being.

"Art. XI.—The Secretary shall take cognisance of such cases on which doubts may arise, and which are not hereby provided for.

"Art. XII.—It is left to the will and prudence of the two Consuls to regulate by common accord all that may be requisite for the due despatch of the business of the State, in all its branches; as well as to appoint one or, if necessary, two secretaries; also to create a superior tribunal of appeal, to determine, according to law, as a Court of Last Resort, such cases as it may be necessary to refer to it.

"Art XIII.—If either of the two Consuls should die or resign, the other shall proceed within a month to call together the General Congress of the Province, which shall consist of *one thousand Deputies*, chosen, like the present, by popular election; and it shall be a fundamental, general, perpetual, and invariable law and rule, that henceforward such General Congress of the Province shall assemble every year, convoked in the same manner, and to consist of the aforesaid number of one thousand representatives; and the day for their meeting shall always be on the 15th of October: and the necessary convocation and summonses shall be issued in consequence by the middle of every month of September, in order that the Province may duly, and at least once a year, meet as a free and sovereign people, to deliberate on what may be most conducive to the general good, to improve, if necessary, its government, to provide remedies for abuses, and to take all such measures as may be suggested by the wisdom of experience.

"Art. XIV.—These rules shall be observed until altered by any future Congress, and shall be copied into the Book of the Resolutions of Government.

"Art. XV.—The Consuls shall immediately appear before the present Sovereign Congress to swear to observe faithfully, and to cause to be observed, these rules and regulations. The same oath shall be also forthwith administered by their order to all the officers of the troops, and by the officers to the soldiers, whereof a proper record shall be inserted in the archives of the Congress; and whoever shall refuse to take the said oath shall be dismissed the service, and punished as though he had broken it.

"Art. XVI.—The Province adopts the forms, as well as the number of Representatives assembled in the actual Congress, and the Government shall make no change in either one or the other.

"*Done and Signed at Assumption,*
the 12th October, 1813."

Francia, having thus obtained one-half the power he aimed at, was not long ere he secured the other. When the thousand deputies met, in virtue of the 13th article of the Constitution, it was intimated to them that the substitution of one Governor for a pair of Consuls would be a great improvement; and Don Gaspar was, as a matter of course, elected sole Dictator, of the Republic of Paraguay.

His nomination in the first instance was for three years; at the expiration of which time he took care to have his power confirmed for life. The Deputies who passed this act, in their simplicity, returned to their homes exulting in an arrangement whereby they were saved all further trouble, whilst the tyrant they had set up commenced a reign which, for systematic selfishness, cruelty, and unrestrained despotism, is almost unparalleled in the history of any country.

His first object, as may be supposed, was to put down all opposition; and this he did by imprisoning, banishing, or putting to death every individual of wealth or influence who could in any way interfere with him in the exercise of his despotic sway:—his spies were in every house, the most trivial expression of dissatisfaction was construed into treason, and ere long no man dared to speak to his neighbour for fear of being denounced: thus he silenced by terror all opposition from within; and, lest any should be attempted from without, he proceeded to restrict the communication with the adjoining provinces, and at last to establish a system of non-intercourse which for nearly twenty years he has rigorously enforced, and will doubtless continue to do so as long as he lives. The only trade, if trade it can be called, which of late years has been carried on, has been upon his own account, and such as has been necessary to further his own policy of habituating the lower classes to look to him, and to him only, for the supply of all their wants. His mode of managing this business is as singular as all the rest of his proceedings. When he wants an assortment of foreign goods, a permit is sent over to the adjoining province of Corrientes for a vessel to proceed to the opposite port of Nembucú; on her arrival there, the invoice of the cargo is immediately forwarded to him at Assumption, from which, after selecting such articles as he requires, he orders a quantity of yerba-maté to be put on board in payment. There is no appeal from his own valuation: no one is allowed to go on shore, and the ship is sent back as soon as the yerba is delivered:—the article itself is in such demand, from his having stopped the trade in it, that the people of Corrientes are glad to get it upon

his own terms. He is the owner of several shops or stores, in Assumption, from which the goods are afterwards retailed, by his permission, to those who may stand in need of them.

In the same manner for a short period he allowed a peddling traffic to be carried on between the Brazilian Missions beyond the river Uruguay and the port of Ytapua, opposite to Candelaria, but that he altogether stopped about ten years ago.

His revenue chiefly arises from properties confiscated by his own arbitrary judgments, and from tithes in kind upon all articles of produce, the right to levy which is yearly sold by the government to the best bidder in each department; the contractors generally underlet them to others, and they are in consequence rigorously exacted.[56] The principal expenditure is in the maintenance of a large militia force, in which every person capable of bearing arms is enrolled and called upon to do duty in turn. Francia is of course commander-in-chief of the army, as he is the head of the church, the law, and every other branch of the administration.

When I arrived in the River Plate, in 1824, I found that many British subjects had been for several years detained in Paraguay by this monster against their will; and it became my duty in consequence to make a representation to him upon the subject, and to apply for their liberation. This I was fortunate enough to obtain, together with the release of many other Europeans, whom, that it should not appear that he was granting any special favour to the English, he allowed at the same time to depart; amongst the rest Messrs. Rengger and Longchamps, two Swiss gentlemen, who have since published a highly-interesting account of their detention, and of the state of the country.[57]

He made, however, an exception of M. Bompland, the well-known companion of Baron Humboldt, whom he had some years before caused to be seized and carried off by an armed force, sent across the Paranã for the purpose, whilst engaged in his own inoffensive pursuits in the province of Corrientes. As there was no accredited French agent at Buenos Ayres at the time, I took upon myself to make another application to Francia, specially in favour of an individual in whose fate I could justly say that all the scientific world was interested; and I further offered to guarantee the fulfilment of any promise M. Bompland might himself choose to make, in case of his liberation, to return at once to Europe. I wrote in the same sense to M. Bompland, and enclosed my letter, open, to the Dictator, to forward to its destination if he approved of it. But, instead of doing so, he returned it to me, with a rude intimation that that must close our correspondence.[58]

I believe he was disappointed at finding that I could not concur with him in his notion of opening a direct trade between Great Britain and Paraguay, on which it appeared he had long set his heart, the rather as he expected thereby to be able to show to his own subjects his independence of his neighbours, and especially of the Buenos Ayreans.

That so extraordinary a state of things should so long have existed is I believe entirely to be ascribed to the miserable weakness of the adjoining provinces, which, had they been able to make the slightest combined effort, might long ago have put an end to the tyrannical rule of this crazy old despot. Nature will probably do this ere long, when it may be expected that Paraguay will once more join the confederation of her sister provinces.

FOOTNOTES:

[53] The same saints are invoked to keep down the rats—another plague of these countries—attracted, no doubt, by the smell of beef everywhere, as they are in the *abattoirs* of Paris. The eleven thousand Virgins were the guardian angels against the locusts.

[54] The best sort of tea, in which the Indians paid their annual tribute to the Crown.

[55] The Indians, under the system of the Jesuits, had been accustomed to work *in community* for a common stock, out of which all the wants of every individual were regularly and adequately provided for.

[56] A commutation of these tithes for a fixed revenue was agreed upon between the church and the municipal government of Assumption at an early period of the Spanish rule in that country.

[57] The Reign of Don Gaspar de Francia in Paraguay, being an account of a six years' residence in that Republic, by Messrs. Rengger and Longchamps, translated, 1827.

[58] M. Bompland has since obtained his liberty, after a detention of nine years.

CHAPTER XIII.
THE CENTRAL PROVINCES.
CORDOVA, LA RIOJA, SANTIAGO, TUCUMAN, CATAMARCA, SALTA.

CORDOVA. Government. Pastoral Habits of the People. Productions. LA RIOJA. Population, &c. Famatina Mines. Evils arising from the present subdivision of the Provincial Governments. SANTIAGO DEL ESTERO. The Sandy Desert or Traversia. Quichua Language. Productions, &c. The Salado navigable to the Paranã. The Chaco. Mass of native Iron found there. Theory of its Meteoric Origin questionable. Account of the native Iron from Atacama. TUCUMAN. Delightful Climate. Mines—little worked. Richness of the Vegetation. Declaration of Independence of the Provinces made there in 1816. CATAMARCA. Population, &c. Original Inhabitants—their long Wars with the Spaniards. SALTA. Divisions, Population, Government, Climate, Rivers. The Vermejo, and its Affluents from Tarija and Jujuy. Valuable Productions of this Province. Labour of the Mataco Indians obtainable, and preferable to that of Europeans in such Latitudes. Importance of inland Steam Navigation urged.

In proceeding now to give such information as I have been able to collect respecting the state of the provinces on the road to Peru, and to the westward of it, I shall take them in their geographical order, although it may be as well to observe that they were not, as may be supposed, originally conquered and settled by the discoverers of the Rio de la Plata. Those adventurers, following the course of the river Paraguay, reduced to subjection the warlike tribes they found upon its shores, and, navigating its higher branches, after incredible hardships and many valiant deeds, succeeded in opening a communication with their countrymen in Peru; but they made no attempt to possess themselves of the vast extent of country lying to the westward of them.

The discovery of those regions was reserved for the followers of Almagro, who, after the conquest of Peru, marched southward to take possession of Chile, in fulfilment of his agreement with Pizarro; and his successors laid claim to them as part of the jurisdiction originally allotted to him in virtue of that agreement—a pretension which gave rise to many contentions amongst the chiefs who first established themselves in those parts; nor were they put an end to until, by the king's authority, these settlements, comprising Tucuman, Santiago del Estero, the towns in the valley of Catamarca, and many others since destroyed, were erected into a distinct and separate province called Tucuman, from the chief of the Calchaqui tribes which inhabited them. This was in 1563, some years before the existence of Buenos Ayres. Nor was it indeed till nearly half a century after De Garay had founded his settlement there that they became politically connected, and were united under one and the same government.

PROVINCE OF CORDOVA.

The province of Cordova, after that of Buenos Ayres, is the most important of the Union. According to a census taken in 1822-23, the population then amounted to something more than 85,000 souls, of which from 12,000 to 14,000 lived in the city.

It is ruled by a governor, who is elective by a provincial junta occasionally convoked, and whose power is almost arbitrary; he has the command of all the forces and militia of the province, and has the power of reversing, on appeal, all decisions of the tribunals.

It is bounded by the province of Santiago del Estero to the north, and Santa Fé to the east, and on the western side by the mountain-ranges generally known as the Sierra de Cordova. From these ranges descend many rivers and streams which irrigate and fertilise the plains below; amongst which may be enumerated the Rio San Miguel, the Tortoral, the Carnero, the Primero, Segundo, Tercero, Quarto, and Quinto: of these the Tercero is the only one which reaches the Paranã; all the rest are lost in the flat intervening plains. It has been ascertained that very little is requisite to render the Tercero navigable for boats from the Paranã to within about thirty leagues of the city, whereby a water communication might be opened, which would save much of the present expensive and tedious land carriage of the productions not only of Cordova, but of the provinces of Cuyo, to Buenos Ayres.

The perpetual irrigation of so many streams gives rise to a constant supply of excellent pasturage for cattle and sheep, the facility of rearing which may in some measure account for the preference evinced by the people for pastoral over agricultural pursuits. These habits occasion the country population to be much scattered: they congregate but little in the towns; and the principal places after the capital, Conception, Ranchos, and Carlotta, are at the best but wretched villages.

In travelling from Buenos Ayres after passing the post of Frayle Muerto on the river Tercero, the aspect of the country begins to change: it becomes undulated, and at last there is an end of the monotonous scenery of the Pampas, throughout which not a tree is to be seen save the solitary Umbú, standing like a giant land-mark in the boundless plain.

The traveler's eye is relieved by the appearance of woods and forests which become more dense as the Sierra is approached. The trees are for the most part varieties of the mimosa family, thickly set with thorns; and so marked is this peculiarity in those parts, that I recollect a gentleman from Cordova who came to Buenos Ayres whilst I was there, expressing something more than common surprise at finding that the greater part of the trees which grew in the gardens about the city, and which were probably chiefly of European origin, were not covered with thorns like those of his own province.

The palm-tree is scattered over the valleys in the northern part of the province, and on the road to Santiago del Estero; and it is the land of the aloe and cactus in every variety.

The city which gives its name to the province was founded by the conquerors of Tucuman in 1573; it is situated in lat. 31° 26´ 14",[59] long. from Ferro, 314° 36´ 45", in a pleasant valley upon the banks of the river Primero, sheltered from the north and south winds, which, in the more exposed parts of the province blowing alternately hot and cold, produce great and sudden variations in the atmosphere, very trying to the constitutions of the inhabitants.

By the post-road it is 172 leagues distant from Buenos Ayres.

It is related that for many years after its foundation, the inhabitants were subjected to much inconvenience from the occasional overflowings of a lake in the neighbouring hills, until an earthquake swallowed up its waters, and drained it apparently for ever. Much damage, however, is still done by the mountain-torrents which descend from the Sierra in the rainy season, and have made it necessary to build strong walls to save the city from being occasionally inundated.

Limestone and timber being to be had in the immediate neighbourhood, the houses are generally better built than in other towns in the interior.

Cordova contains many churches, and is the seat of a university, at which, in the time of the Old Spaniards, most of the better classes from all parts of the Vice-Royalty received their education: it was under the management of the Jesuits, to whom this city owes much of its importance. It was here they had their principal college (the Colegio Maximo); and they held large possessions in the neighbourhood, from whence they derived considerable revenues, the greater part of which were spent in the foundation and embellishment of the churches, and in other pious establishments. Here also they had a celebrated library, rich in manuscript records of their Missions and labours amongst the Indians, which upon their expulsion was sent to Buenos Ayres. The printed books formed the nucleus of the present public library in that city; but the greater part of the manuscripts, and amongst the rest an unpublished portion of Father Guevara's History, have never since been seen: they were probably, either sent to Spain or destroyed by Bucareli, who was charged with the expulsion of the Order; a duty which he fulfilled with a harshness and illiberality never to be forgotten in a country which owes all it possesses in the shape of civilization, to the indefatigable zeal and enlightened spirit of that community.

Out of their confiscated property the university of Buenos Ayres was subsequently founded; and being more conveniently situated for the rising generation, it has in proportion diminished the importance of that of Cordova, which, though still kept up, has dwindled to the scale of a provincial school.

From the year 1699 Cordova was also the residence of a bishop (removed from Tucuman), but the see has been vacant since the first years of the revolution.

The effects of the preponderating influence of the monastic establishments are still visible in the habits of the generality of the people; and though the ladies are not all nuns, their manners are a vast deal more reserved than those either of the capital or of the other principal provincial towns. As an instance of this, a fair lady of Buenos Ayres told me she had caused no little scandal whist on a visit to some of her Cordova relations, by insisting on dancing at a ball with a male partner, instead of with one of her own sex, an innovation which greatly horrified the mamas. Captain Andrews, too, has given a lively account of the alarm he unwittingly occasioned by a like breach of decorum in offering his arm to a young lady on going to dinner. These scruples, however, have I believe, since been much modified, and I am told that ladies and gentlemen now dance country-dances together at Cordova, much as they do in other parts of the world, in spite of the fears of the mamas and the frowns of the priests.

Living is very cheap and provisions abundant, the wants of the people few, and their hospitality unbounded; their kindness, indeed, to strangers, is spoken of by all who have been amongst them.

Cordova at present forms a sort of centre of communication between the Upper Provinces and Buenos Ayres. Its own produce, consisting chiefly of hides and wool, is all sent to the capital, whence it receives European manufactured goods in exchange.

If steam navigation were established on the Paranã between Buenos Ayres and Santa Fé, Cordova, as well as the provinces further north, would share in its advantages, and would be more easily supplied through Santa Fé, by the road which runs nearly in a direct line between the two cities; whilst the shorter line of communication thus opened between the provinces of Cuyo and those on the Paranã, passing necessarily through Cordova, would fully compensate to the people of that place for any loss they might sustain in consequence of the transit trade from Buenos Ayres to the Upper Provinces being turned in another direction.

The people of Cordova and Santa Fé would also once more have a joint interest in checking the inroads of the Indians from the Chaco, and by a better combination of their joint means might be enabled to protect their frontiers more effectually and perhaps at less expense than either province is now at for the maintenance of the militia which is requisite for its separate defence.

Cordova, owing to the miserable weakness of the adjoining governments of both Santa Fé and San Luis, is obliged at present to support a large armed force to protect her frontiers, not only from the savages of the Chaco, but from those of the Pampas.

PROVINCE OF LA RIOJA.

To the west of the province of Cordova, across the Sierra, lies La Rioja, formerly a dependency of that government, but now dignified with the title of an independent province, divided into four departments, viz., Arauco, Guandacol, the Llaños, and Famatina. It is nominally under the rule of a governor and a municipal junta of five members. The city from which it takes its name was founded in 1591, at the foot of the Sierra de Velasco, a granitic range, and is situated, according to a MS. in my possession, in latitude 29° 12´, though I know not upon whose authority. In 1824 the population did not amount to more than 3500 souls, though the whole province may contain from 18,000 to 20,000. Arauco, which is the most northern department, contains about 3000, chiefly occupied in the cultivation of vineyards, from which they make 8000 or 10,000 small barrels annually, of a strong sweet wine, which is sent to Cordova and the neighbouring provinces.

Guandacol, which lies to the westward, beyond the range of Famatina, and along the base of the Cordillera of Chile, contains about 1500 inhabitants,—chiefly congregated in the towns of Guandacol and Vinchina. They are employed in agriculture, and, at a particular season, in hunting the vicuñas in the Cordillera, the wool of which forms a valuable article of trade:—the flesh is an article of food.

The Llaños, which lie to the south of La Rioja, constitute a rich grazing district, in which about 20,000 head of cattle are annually bred. The inhabitants are calculated to be about 6000.

The department of Famatina, of which Chilecito is the principal place, lies to the west of La Rioja; it contains 5000 or 6000 inhabitants, who, like those of Arauco, are much engaged in the cultivation of their

vineyards, from which they make 6000 or 8000 barrels of wine yearly. It takes its name from the famous mineral range of Famatina, distant from La Rioja about thirty leagues:—this range is described to extend for fifty leagues; in the centre is the Nevado, a lofty peak covered with perpetual snow,—its geological formation is chiefly gneiss and clay-slate; but it is specially celebrated for the richness of its silver ores, which are said to surpass in intrinsic value those of Potosi,—the extreme remoteness and inclemency of their situation, however, accessible only by rugged and difficult mountain paths, has been a constant bar to their being worked to any extent, and as yet they may be said to be only superficially known: nevertheless a mint was established at La Rioja, at which some gold and silver coins have been struck; and, in 1824 and 1825, during the rage for mining speculations in South America, companies were formed for the working of those of Famatina:—those schemes, however, only ended in disappointment to all concerned in them, not from any scarcity, I believe, of the precious metals, but from miscalculations and mismanagement, and an entire ignorance of the political state of the country. In such remote parts it has been but too sadly proved how little foreigners can calculate upon any effectual protection either for their property or their persons. It is idle to talk of contracts or title-deeds where the only real law is the will of some petty despot, whose necessities or interests, direct or indirect, will always overrule all other considerations. That such should be the state of La Rioja is not surprising, when its geographical position is considered, which cuts it off from almost all intercourse with the more civilised parts of the republic. The roads which lead to it, if roads they can be called, which are hardly passable by mules, are as bad as they can be, whilst the distances by these circuitous paths to the nearest of the other provincial towns are enormous. From La Rioja to Cordova it is 114 leagues, to Mendoza 159, and to Buenos Ayres by the nearest beaten route 287. To Guasco or Copiapo, the nearest towns in Chile, the length of the route by the Cordillera of Guandacol is 130 leagues:—this pass is said to be easy of transit, and has been often used to convey goods across the Cordillera from Chile, when the communication with Buenos Ayres has been closed.

The people, as might be expected, are in a lamentable state of ignorance. The governor himself, in sending me an account of his province, confessed that the only school in it was one established in the town of La Rioja, where the instruction was entirely limited to reading and writing, and that, for want of support, was often closed.

If the establishment of the present federal system be found of any real advantage, or gratifying to the ambition of some other provinces, the local situation and means of which may induce them to look forward with any confidence to improving their social condition; on the other hand I fear it must be fatal to those which, like La Rioja, are necessarily thrown by it upon resources which are palpably inadequate either to ensure them any tolerably efficient government for the present, or any likelihood of an improvement in their condition hereafter. It seems to me that the only means of saving them from lapsing into a state of semi-barbarism is to make them, as before, dependencies of their more powerful neighbours:—nor would they alone benefit by such an arrangement; a concentration of the Republic into half-a-dozen instead of twice the number of provincial governments (as was originally contemplated when it was divided into provinces in 1813 and 1814), would render each in itself infinitely more respectable, and better able to maintain its own independence, whilst it would vastly facilitate the management of all their national interests and affairs by the government of Buenos Ayres.

The provinces to the north of Cordova and La Rioja originally formed only two governments, according to the division established by the National Congress in 1814:—that of Tucuman, which included Santiago del Estero and Catamarca; and that of Salta with Jujuy, Oran, and Tarija; but these have since subdivided themselves, and instead of two now form five distinct governments,—viz., Santiago, Tucuman, Catamarca, Salta, and Tarija,—the latter of which has become united to Bolivia: of the others, the first, after leaving Cordova, is Santiago del Estero.

SANTIAGO DEL ESTERO.

The distance from the city of Cordova to that of Santiago del Estero is 110 leagues by the post-road. Portezuela is the first station beyond the jurisdiction of Cordova, shortly after which commences what is called the Travesia, a vast sandy zone thirty to forty leagues in breadth, for the most part covered with a saline efflorescence, and producing a salsola, from the ashes of which the inhabitants extract soda. It borders the Sierra de Cordova to the north, and extends west as far as La Rioja, running southward nearly to San Luis. In this arid district the sultry heat of the north wind, which is very prevalent in the summer season, is almost insufferable.

My intelligent correspondent Dr. Redhead, who has lived for more than a quarter of a century in the upper provinces, and to whom I am indebted for some of the most valuable of my information respecting them, speaking of its geological appearance, observes in one of his letters how forcibly he had been led to conjecture that the southern part of the province of Santiago must once have been a sea-coast. "Its sandy hillocks, he says, always reminded him of those on the shores of Flanders:"—certain it is, that throughout the whole extent of this sandy zone, from Ambargasta to Noria, the level of the country becomes very much depressed, and falls very nearly to that of Buenos Ayres; thus in the very heart of the continent, at a distance of 700 miles direct from the sea, we have a considerable tract of land hardly elevated above its immediate shores.

The following table of barometrical observations, taken by Dr. Redhead, will not only show the variations in the height of the country intervening between Buenos Ayres and Santiago, but also of that to the northward, along the high road, as far as Tupiza in Peru:—

Barometrical Observations, made on the road from Buenos Ayres to Potosi, by Dr. Redhead:—

Distance from one place to another Post leagues	Point of Observation	Barometer	Thermometer	Date	Hour
134	Rio Tercero from Buenos Ayres	28·945	86	Feb. 11	11 a.m.
3	Cordova	28·400	86	20	4 p.m.
14	Sin-Sacate	27·990	75	Mar. 12	11 a.m.
22	San Pedro	26·990	60	17	6 a.m.
4	Durasno	27·300	73	—	9 a.m.
4	Piedritas	27·500	72	—	Noon.

4	Pozo del Tigre	27·550	71	—	5 p.m.
6	Portezuela	27·860	69	18	Noon
6	Ambargasta	28·875	67	19	9 a.m.
6	Punta del Monte	29·260	82	—	4 p.m.
6	Salinas	29·600	68	20	6 a.m.
14	Noria	29·400	76	—	2 p.m.
24	Santiago del Estero				
40	Tucuman	27·563	75	Feb. 10	
100	Jujuy				
30	Humaguaca	21·415	57	June 2	4 p.m.
8	Cueba	21·200	54	1	
3	Abra de Cortaderas				
3	Colorados	19·350	50	May 31	8 a.m.
6	Cangrejos	19·625	32	30	6 p.m.
9	Quiaca	19·300	50	29	4 p.m.
5	Cumbre del Cerro de Berque	19·100	60	28	11 a.m.
4	Berque	19·975	54	27	4 p.m.
5	Talina	20·800	56	26	9 a.m.
8	Tupiza	26·260	60	25	9 a.m.

Note.—At Buenos Ayres the mean of the barometer for the month of March, 1822, was 29·61.

In the upper parts of the Sierra de Cordova granite everywhere breaks through the surface, and innumerable fragments of it may be traced in the descent to the Travesia, whilst beyond that sandy zone there is not a vestige of it throughout the rest of the road to Potosi, the formation the whole way being of blue argillaceous schist and slate, with occasional strata of limestone and red sandstone. In the neighbourhood of Potosi, however, and on the tops of some of the highest mountains in its vicinity, Helms tells us that he fell in with a pretty thick stratum of granite pebbles rounded by the action of water. How, he says, could these masses of granite have been deposited here? Have they been rolled hither by a general deluge, or by some later partial revolution of nature? His astonishment would have been infinitely greater had he known that marine shells are to be found on the lofty mountain of Chorolque (about twelve leagues north-west from Tupiza, between Salta and Potosi), the summit of which has been determined by Dr. Redhead to be 16,530 feet above the level of the sea.

The word Chorolque is corrupted from Churucolque, signifying in the Quichua tongue that the mountain contains silver and shells. The Spaniards, however, little suspected that the latter were to be found there, till, in 1826, an enterprising Frenchman ascended the mountain and brought down specimens which established beyond doubt the fact.

A further study of that language might lead the scientific inquirer to many an important discovery. The disposition of the Peruvians for observation is well known, and their nomenclature of places is generally expressive more or less either of the nature of the soil, or some peculiarity attached to it: thus a person well versed in Quichua is beforehand aware of what he is to see. Peutocsi, for instance, difficult to be properly pronounced by an European, and corrupted into Potosi, signifies, "*It is said to have burst forth*:" such must have been their tradition, which the very appearance of this singular cone, standing alone and distinct from the system of mountains which surrounds it, and the hot springs in its vicinity, would seem to corroborate.

It is in the province of Santiago that the Quichua is first met with. The Jesuits reduced it to a written language, and published a grammar and dictionary of it in Peru.

The city of Santiago is a miserable ill-built place, containing not more than 4000 souls. It is situated in lat. 27° 47´, according to Azara, upon the banks of a considerable river which rises in the territory of Tucuman, and running south through this province is finally lost, under the name of the Rio Dulce, in the great lakes called the Porongos, to the west of Santa Fé. The whole population of the province it estimated to be about 50,000; the greater part of which is much scattered in small villages built along the courses of this river and of the Salado, which runs parallel to it, and separates the province on that side from the gran-chaco, or desert, the low lands along their banks being better suited for the pasturage of cattle and for cultivation than the other parts of the province. The soil there is well adapted to the growth of wheat, which is said to yield eighty for one.

In most parts of the province the cactus may be seen growing to an unusual size, and the cochineal gathered from it used to form one of the most valuable productions of this part of the country: from 8000 to 10,000 lbs. of it were annually sent to Chile and Peru. Large quantities of wild beeswax and honey were also collected in the woods and sent to the other provinces, in which they were always in demand; but the civil dissensions which have of late years been so frequent in these provinces have checked the industry of the people, who have almost entirely abandoned their old pursuits, and given up their yearly gatherings of these once valued productions. This is the more to be regretted as they are said to be naturally an enterprising and intelligent race, less given to habitual indolence than some of the other inhabitants of these latitudes. The women manufacture ponchos and coarse saddle-cloths, or blankets, which are sold in great numbers to the people of Tucuman and Salta.

To the eastward of the river Salado lies the vast region commonly called the Gran-chaco, or desert, which extends to the Paranã, and reaches north as far as the province of Chiquitos, solely inhabited by Indians of various tribes, who, safe in their own forests and jungles, have there found a refuge from Spanish domination and persecution. It is through this territory that the rivers Pilcomayo and Vermejo wind their tortuous courses to the Paranã from the most remote parts of the interior of the Upper Provinces.

Some way beyond the Salado, about seventy leagues east from Santiago (in lat 27° 28´), was found that very remarkable specimen of native iron which I sent to this country some years ago, and which is now deposited in the British Museum. Its existence was first made known by some of the people of Santiago, who had passed through that part of the country in their journeys to the forests beyond to collect honey; and their reports, which were transmitted to Buenos Ayres, induced the Viceroy, in 1788, to send Don Reuben de Celis, an officer in the King's service, to examine it. His report upon it was published in the Philosophical Transactions of the Royal Society of London for 1788, and excited much speculation at the time.

As in those times the working of iron was forbidden in South America, after sundry specimens of it were forwarded to Lima, to Buenos Ayres, and to Spain, the remainder lay neglected for many years in its original site.

In the beginning of the struggle for independence, however, when the Spanish ships of war blockaded Buenos Ayres, iron, amongst other necessaries, becoming extremely scarce, the people recollected De Celis's account, with the reports of the Indians, that in the same parts there were extensive veins of the same mineral; and at a great expense the mass in question was sent for and brought to Buenos Ayres. By the time it got there the blockade was over; and as it was evidently much easier to procure iron from Europe than by a cart-carriage of 1000 miles from the uninhabited wilds of the Chaco, no further trouble was taken to determine whether or not the Indian reports of its being procurable in larger quantities were true or not. By way of experiment a pair of pistols were manufactured from it, which were sent as a present to the President of the United States, and what remained was placed at my disposal by the Minister of Buenos Ayres on the occasion of my signing the treaty with him in 1825, which recognised on the part of Great Britain the political independence of his country. I sent it to Sir Humphrey Davy to be placed in the British Museum, hoping that he would himself have analysed it, and given his opinion respecting its supposed meteoric origin. The analysis I believe was never made, owing to his death, which occurred very shortly after the arrival of the iron in this country.

It seems, however, to have been assumed here that this iron, as a matter of course, is meteoric, because it contains those admixtures of nickel and cobalt which accompany other known meteoric productions. It appears to me that the hypothesis is not very satisfactorily or conclusively made out.

The mass I sent home weighs about 1400 pounds, and, making allowance for what may have been taken from it at Buenos Ayres, may probably when it arrived there have been not much less than a ton weight. Now De Celis estimates the mass he examined to have been about fifteen tons weight, and of much larger dimensions: either this therefore is only a fragment of what he particularly described, or it is another which has been found in the same part of the country, and if so, is corroborative of the Indian accounts of there being more in the vicinity. This was the opinion of Dr. Redhead, who, in writing to me on the subject, says, "The native iron found in Santiago is not a single mass, as has been said; there are several, and the most recent accounts describe them as huge trunks with deep roots (I use the expression of the natives), supposed to communicate with each other."[60]

Dr. Redhead's observation was caused by a discussion which arose here upon some other specimens of native iron, which he had forwarded to me, from the desert of Atacama, in Peru, and which were described by the late Mr. Allan in the Transactions of the Royal Society of Edinburgh for 1828. They were analysed by Dr. Turner, who found them to contain—

Iron	93·4
Nickel	6·618
Cobalt	0·535
	100·553

a result which he considered decisive concerning their origin, because, he says, it differs from any compound hitherto described in the earth, and corresponds exactly both in appearance and composition with other meteoric iron.

But these opinions differ entirely from the belief of those who procured the specimens.

That iron is found scattered in large quantities over a plain at the foot of a mountain a little to the south-west of a small Indian village called Toconao, ten leagues from San Pedro, the capital of Atacama, and about eighty from Cobija, on the coast. The tradition there is, that the fragments have been thrown out by some volcanic explosion from the side of the neighbouring mountain, in which the people of Toconao say there is a large *veta* of pure iron. The Indian who collected the specimens which I sent to this country was employed to *catear*, or search for mines; and the nature of his occupation rendered it requisite for him to be particular in his observations: his account was, that "they were taken from a heap of the same nature, estimated at about three hundred-weight, and that they existed at the month of a *veta*, or vein of solid iron, situated at the foot of a mountain; he called them '*reventazones*,' or explosions from the mine, or *veta*. He had been charged to bring a piece of the *veta* itself, and some of the rock in which it is embedded, but this he said he could not effect for want of tools; he therefore contented himself with picking up some of the pieces that were at the foot of the hill, where the mouth of the vein opens."

Dr. Redhead says, that in giving him this account the man endeavoured to give him also some idea of the direction of the vein in the mountain.

Further inquiries were subsequently made, the result of which corroborated his testimony. The alcalde of Toconao, who had been at the place, stated that the fragments had issued from a cavity of about fifteen feet diameter, which, from the nature of the soil, was filling up. This is sandy, and for three leagues round there is neither wood nor water nor pasture of any kind. Several persons in San Pedro, and amongst others one named Gonzales, who had likewise seen the cavity, gave a similar account.

The Atacama iron is certainly remarkably similar to the specimen of that met with by Pallas in Siberia, which is to be seen in the British Museum, but what proof is there of that being meteoric?

The Santiago iron differs from them both in appearance. The Atacama and Siberian specimens are full of cavities, looking like large sponges or scoriæ. That from Santiago, on the contrary, is more like a solid lump of well-kneaded dough.

So long as such specimens were supposed to be of very rare occurrence, and differing as they do from the character of all other known minerals, it was not extraordinary that they should have been ascribed to an extraneous origin; but now that further discoveries have proved their existence in all parts of the world, and that enormous masses of similar iron have been met with in the northern parts of America, in Mexico, Columbia, Peru, Brazil,[61] and the provinces of La Plata, to speak of that continent alone, I think we may begin to doubt whether they may not be *bonâ fide* productions of our own planet, instead of bringing them from the moon, or elsewhere. On this I shall only quote another passage from the letters of my excellent correspondent, who took the trouble to institute the inquiries for me as to the origin of the specimens from Atacama. "Time," he says, "may perhaps justify the tradition or opinion of the Indians relative to the origin of this iron; nor do I know why we should refuse to Nature the power of reducing in her laboratory a metal so easily separated from its combinations by the efforts of man."

PROVINCE OF TUCUMAN.

Forty leagues (post distance) beyond Santiago del Estero is situated the city of San Miguel de Tucuman. It

stands (in lat. 27° 10′) on an elevated plain in a position from which the prospect on every side is delightful; indeed all accounts agree in describing it as the best situated town in the republic. The climate, though hot, is dry and salubrious; and Nature has been so prodigal of her choicest gifts, that the province of Tucuman well merits its appellation of the garden of the United Provinces. The population amounts to about 40,000 souls, of which 7000 or 8000 reside in the city.

After leaving the travesia of Santiago, the road ascends a slightly inclined plane the whole way to Tucuman, the jurisdiction of which commences after crossing the river Santiago, there called the *Rio Hondo*, or deep river, which separates the two provinces, and is formed by the confluence of many streams which rise in the mountains to the west. To the eastward the Salado continues to be the general boundary-line separating it from the Chaco: to the north the river Tala divides it from the territory of Salta; and to the west and south-west the lofty mountains of Aconquija separate it from Catamarca. The highest peak of this range is covered with perpetual snow, and is said to be above 15,000 feet above the level of the sea. It abounds in mineral treasures, and contains ores of gold, silver, copper, and lead; but the toil and difficulty attendant upon mining operations in those parts of the sierra where they are to be found have caused them to be much neglected, and the mining, if mining it can be called, is now confined to a few wretched people scattered amongst the hills, who occasionally collect small quantities of silver, which they bring down to the city for sale. I have had some of the specimens of silver so collected, which are singularly rich and beautiful.

The *mita*, and other oppressive enactments have will nigh destroyed the unfortunate race whose forced labour brought to light the mineral wealth of these regions. The *mamelucho*, as the gaucho of Tucuman is called, the horseman of the plains, with the help of his wife, who makes the greater part of his clothing, has almost everything he wants about him. He knows not, and therefore needs not, those comforts which become wants in less genial climes, and where civilization is more advanced. Free as the air he breathes, he gallops over boundless plains unfettered by the slightest restraint upon his own inclinations. He has no temptation to quit such a life for the fatigues and dangers of an occupation which he considers as degrading,[62] to bury himself under ground, and to seek by the sweat of his brow treasures of which he does not stand in need. His cattle are the finest in the republic; and the least possible cultivation and labour is sure to yield in return not only the necessaries, but what in his opinion are the luxuries of life.

Nothing can be more luxuriant than the vegetation in this province; whilst the plains yield corn and maize, and rice and tobacco, in the greatest abundance, the base and slopes of the mountain ranges in the west are covered with noble trees in every variety, interspersed with innumerable shrubs, and hung with the most beautiful parasitical plants. Extensive groves also of aroma and orange-trees produce a fragrance which adds to the delights of this favoured region. The sugar-cane grows naturally in the low lands, and might be turned to valuable account; the demand for it, however, at present, is not sufficient to induce the country people to attend to it. Not so with the tobacco-plant, which they cultivate and find a ready sale for in all the adjoining provinces. The people are a well-disposed hardy race, proud of their beautiful country, and always ready to take up arms in defence of *La Patria*.

It was at Tucuman, in 1816, that a Congress of Deputies from the several provinces solemnly declared their independency and separation from Spain. From 1810 to that period the ruling authorities set up had been avowedly merely provisional, and all their acts had been in the King's name, the people vainly looking forward to the King's restoration for a redress of their grievances. It is useless now to say that if the Spanish government had treated them with kindness and conciliatory measures, they would have found the colonies abounding in the same loyal and affectionate feelings for the mother country of which in other times they had repeatedly given such striking proofs.

The King was otherwise advised; and the natural consequence ensued, that the South Americans, who had acquired a knowledge of their own strength and importance, simultaneously with the conviction that they had nothing to hope, and all to fear, from a return to the rule of the mother country, declared themselves the arbiters of their own destinies.

PROVINCE OF CATAMARCA.

Catamarca, divided from Tucuman by the sierras of Aconquija, is one of those subordinate provinces which, like Rioja, owes its independence rather to its insignificance and secluded situation than to any pretensions which the people can have to govern themselves; properly it should be a dependency of the government of Tucuman, to which the Congress annexed it in 1814.

When I applied to the Governor for some general statistical information as to the extent and resources of his province, he fairly confessed his own ignorance and utter inability to answer my queries; much less was it possible to obtain any satisfactory topographical data.

The inhabitants of the province are estimated at 30,000 to 35,000, of which about 4000 reside in Catamarca. The valley so called, and in which the greater part of this population is settled, runs from north-west to south-east, extending from the confines of Atacama to those of Rioja. On the eastern side it is separated from Tucuman first by the sierras of Ancasti and Ambato, and more to the north by the lofty chain of Aconquija: it is watered by a river which holds its course through it (said to have been once a much more considerable stream than at the present day), the waters of which are finally lost in the low sandy plains of the province of Santiago.

The climate is sultry, and the people, at certain seasons, are very subject to intermittent fevers. They produce corn and cattle enough for their own subsistence, and supply the adjoining provinces largely with their cotton, the quality of that of Catamarca being in higher repute than their own, for their domestic manufactures: considerable quantities of red pepper are also sent from thence to Buenos Ayres.

Catamarca, by the usual track, is about sixty leagues distant, south-west, from Tucuman. In a MS. by Dean Funes, in my possession, he places it in south latitude 28° 12′. The first Spanish settlement in this part of the country was formed by Juan Perez de Zurita, in the year 1558. He named it New England, and the principal town London, in celebration of the nuptials of his sovereign King Philip with our Mary. From thence, however, the Spaniards were shortly after expelled by the native Indians, and, removing to the valley of Conando, founded the town of Villagran. That district was subsequently abandoned from the same cause,—the continual hostility of the natives; and the population was finally settled in the valley of Catamarca.

The Calchaquis, who originally occupied those parts, were a warlike race, whose dominion extended from

the confines of Peru over all the country lying between the ranges of the Cordillera on the west and those of Aconquija on the east. They derived their name from the valley of *Calchaqui*, which, in the Quichua language is strongly significant of the fertility of the soil; and for a long period they defended themselves against the Spaniards with an obstinate bravery, unequalled perhaps in any other part of South America, excepting Araucania. The history of those parts for the first century and a half, indeed, is little more than an enumeration of their bloody wars with the Spaniards, in which the latter were often defeated with serious loss, their towns besieged and destroyed, and they themselves obliged to fly before the brave defenders of the soil, whom they drove to desperation by their wanton cruelties and oppressive treatment. Amongst other instances of the outrageous and overbearing conduct of the conquerors which are recorded, one may serve as a sample, which Funes relates of Don Philip Albornos, who, being named Governor of Tucuman, some of the Caciques of the Calchaquis, at the time on good terms with the Spaniards, repaired to Tucuman to tender to him their customary tribute upon his appointment. Upon their arrival, instead of the welcome they expected, he wantonly ordered them to be publicly flogged, to have their heads shaved, and so to be sent back whence they came. The Calchaquis swore to be avenged: they secretly sent forth emissaries to rouse all the people of their tribes, especially those of Andalgala, of Famatina, of Copoyan, and Guandacol, who were known to be smarting under the yoke of their new task-masters, for that part of the country was nominally reduced to subjection by the Spaniards; and then, with an overwhelming force, at one and the same time, fell upon Jujuy, Salta, Tucuman, London, and La Rioja, carrying everywhere desolation, and sparing not man, woman, nor child. Never were the Spaniards in those parts reduced to such shifts; in vain they endeavoured to make peace, the Indians would listen to no terms, and this war raged for ten years, with great loss to the Spaniards, and the utter annihilation of many of their settlements. Nor was it till a large force could be spared from Peru that this formidable insurrection was put down.

The Spaniards, once masters again, retaliated as usual. Many tribes were exterminated; others capitulated with their conquerors to abandon altogether their native valleys, and were removed to a distance; amongst others a people called the Quilmes, inhabiting a part of the valley of Calchaqui, being reduced to about 200 families, after a long resistance, were sent to Buenos Ayres, where the Governor settled them a short distance from the city, at the place which still bears their name.

The labours of the Jesuits, however, were eventually more successful than all the military forces which were sent against the Calchaquis. The indefatigable missionaries reduced one tribe after another to a state of comparative civilization, and eventually removed the greater part of them from their native soil to form the nucleus of the Christian settlements which they were anxious to establish upon their own plan on the shores of the Vermejo, amongst the Indians of the Chaco. There they soon lost all importance, and the hostilities of other Indian nations, and a dreadful epidemic which broke out amongst them, in the year 1718, finally put an end to the existence of a gallant people, who had not only signalized their name by their successful wars against the Spaniards, but who, in times long before, had maintained their independence in spite of all the efforts of the dynasty of the Incas of Peru to reduce them to subjection.

SALTA

is the frontier province of the republic to the north; and follows in geographical succession those of Tucuman and Catamarca, which bound it to the south and west. The river Vermejo and its tributary, the river of Tarija, constitute its limits to the east. It is divided into the four departments of Salta, Jujuy, Oran, and Tarija; the latter of which has been occupied by the Bolivians, apparently with a determination to maintain possession of it. Deducting the population of that department, the rest of the territory of Salta is estimated to contain nearly 60,000 souls. The city of Salta has between 8000 and 9000 inhabitants. It was founded in 1582, by Don Philip de Lerma, Governor of Tucuman, with a view to secure the communication between that province and Peru from being cut off by the hostile Indians. Its latitude is said to be 24° 30´. Upon the whole it has a neat appearance, and boasts of its cathedral and many churches. It is, however, badly situated in the bottom of a valley, through which flow the rivers Arias and Silleta, the latter of which has of late years abandoned its ancient bed, and seems to threaten at no distant period to burst over the low marshy grounds upon which the city stands. Shut in by the mountain ranges in the neighbourhood, the atmosphere is at certain seasons charged with miasma, giving rise to intermittent fevers and agues, which are very general at those periods amongst the inhabitants.

The form of government in this province, as in all the rest, is based upon the example of that of Buenos Ayres; consisting of a popular assembly, which has the power of electing the Governor. But though democratic in theory, it is far otherwise in practice: the lower orders have not the smallest notion of the real meaning of a representative form of government, and bow with submission to the dictates of a patriarchal coterie of influential families, which, alternately electing and elected, arrange the government amongst themselves very much as suits their own convenience and interests. If any appeal to the people is ever made, it is generally from the necessity of supporting by a demonstration of brute force the pretensions of some particular candidate for power.

Such are these governments in the infancy of society. One may serve as a sample of the rest, although local circumstances may have given rise to slight shades of difference in their appearance. Salta, as a frontier province, during the struggle for independence, was much exposed to the vicissitudes of the war; but this very circumstance roused the energies of the people, and excited in them a spirit of improvement which has placed them in advance of most of the Upper Provinces. The establishment of a printing-press, from which occasionally a newspaper is produced, and of schools, in which reading, writing, and the first rules of arithmetic are taught, are great steps compared with the state of things under the old regime. The clergy, too, either from conviction, or the force of circumstances, are daily becoming more tolerant, and opinions which in old times it would have been heresy to think of, are now as freely discussed as at Buenos Ayres, where religious toleration has become the law of the land.

From Buenos Ayres, Salta is distant 414 leagues, by the post road, and so far the journey may be gone the whole way in a four-wheel carriage; but beyond Salta this is no longer possible, and the traveller must mount his mule to traverse the regions of the Cordillera, which there may be said to begin in earnest, and the rugged and precipitous passes through which are quite impracticable by any other mode of conveyance.

The Salteños boast that within their own territory they possess every climate, from extreme heat to the most intense cold; and, consequently, that they can rear almost every production of nature; for although

directly under the tropic, the mountain ranges rise in some places to the height of perpetual snow, counteracting the sun's influence more or less according to the elevation. Thus whilst in all the department of Oran, in the east of the province, the tropical sun has its full influence, under the same latitude in the west, in the mountain districts of Rosario and Rinconada, the cold is intense. In the intermediate valleys the climate is temperate and agreeable. It is in these valleys that the population is chiefly located: they are for the most part highly fertile, being watered by many small rivers and streams, which, running eastward from the mountainous districts, fall into the Salado and Vermejo, which have already been described as the principal aqueducts of these Upper Provinces. Indeed it is in this province that both these noble rivers may be said to have their origin, of which I shall venture to give the following account, chiefly from data published by Colonel Arenales, son of the late Governor of Salta, and now at the head of the topographical department of Buenos Ayres.

As a general observation it may be stated that the tributaries of the Salado all run south, whilst those of the Vermejo will be found to the north of the city of Salta, as may be seen on reference to the map.

The sources of the Salado may be traced to the snowy ranges of Acay, where the river Cachi rises, about fifty leagues' journey westward of Salta, running nearly due south, for more than thirty leagues, through the valleys, successively named Cachi, Calchaqui, Siclantas, and San Carlos; during this course it is joined by three smaller rivers from the west. Six or seven leagues from San Carlos, the river Santa Maria falls into it from the south. This river rises in the province of Catamarca, forty leagues off, running from south to north with little variation. The road from Salta to Catamarca and La Rioja follows its course. At the junction of the Santa Maria the Cachi changes its direction from south-east to north-east, and takes the name of Guachipas, from the town so called, by which it afterwards passes. A little beyond that place the Silleta falls into it, about sixteen leagues to the south of Salta. This river rises near the lake del Toro, to the north-west of Salta, and is augmented by the Arias, from that city, and by two or three other minor streams. Thence the Guachipas turns again south, and, ten leagues below its junction with the Silleta, crosses the high road from Buenos Ayres, where it is called "El Pasage." In the summer season, when the waters are low, its breadth may be here about 100 yards, and not being then more than three or four feet deep, it may be safely forded; but at other seasons when the waters rise, it becomes a very wide and formidable river, the passage of which is rendered extremely dangerous, even to those best acquainted with it, not only from its increased depth and rapidity, but from the many large boulders and trunks of trees which are hurried down by the stream with irresistible violence, and which carry everything before them.

At those times couriers occasionally pass it swimming, or holding by the tails of their horses, which they drive before them. All carriage intercourse is for the time impossible, and the ordinary traffic between Salta and the lower provinces is therefore as matter of course suspended during the rainy season. To obviate so serious an inconvenience, in the time of the Old Spaniards, a survey was made of this part of the river, and a plan was proposed to the government for throwing a bridge over a rocky pass, which, if executed, would have enabled carts as well as passengers to cross it high and dry at any season. The materials were at hand, and the estimate of the whole expense so small that it was difficult to find an objection to it; on the contrary, it was unanimously approved; but, as nothing is done in a hurry in these countries, it was, like many other most notable projects, postponed, "*hasta mejor oportunidad*," till better times, which, unfortunately for the people of Salta, have never yet arrived.

Ten or twelve leagues below the pass, the river De las Piedras, the last affluent of any consequence, falls in; thence the course of the river is easterly inclining south, as far as Pitos, the frontier fort of Salta in that direction. In the flat saline country through which it afterwards runs, its waters imbibe a brackish taste, from which it takes the name of the Salado, or the salt river, which it preserves the whole way to its junction with the Paranã, near Santa Fé. I have before stated that this river is believed to be navigable as high as Matara, in the latitude of Santiago del Estero.

The Vermejo, the most important of all the affluents of the Paraguay, is formed by two considerable streams, which may be generally called the rivers of Jujuy and Tarija, from those two departments which they respectively drain. At their sources they are at no great distance from each other, but descending from opposite sides of a snow-capped range, the buttresses of which branch out far and wide to the south and east, they are soon hurried away in totally different directions; each, however, finally sweeping round the base of the stupendous platform above, describes, after a long course, the segment of a circle, which is rendered all but complete by the junction of their waters at a point about sixteen leagues below Oran, whence they flow together south in one mighty and navigable stream the whole way to the Paranã. The name of Vermejo, or the red river, is derived from the occasional discoloration of the waters by the red alluvial soil which is washed into them during the periodical floods.

With respect to the many minor streams which fall into the rivers of Jujuy and Tarija, they are for the most part mere mountain torrents of little importance, except as adding to their waters, which finally become navigable below Oran.

The Jujuy river rises near the Abra de Cortaderas, about three leagues from Colorados, one of the most elevated points passed by the traveller on the road to Potosi: from thence the lofty peak of Chorolque beyond Tupiza, in the north, and the snowy ranges of Atacama, in the north-west, are distinctly visible. The channel of the river in its descent from this elevated region, the whole way to Jujuy, is little more than a succession of precipitous ravines, occasionally swelling into basins, highly interesting to the geologist, as exhibiting on all sides evidences of the tremendous convulsions which at some remote period must have torn and shaken this part of the continent to its very foundations. The road to Potosi winds along it, but it would seem to be a region only suited to the wild llamas, alpacas, and vicuñas, which range in countless herds over the snowy ranges above, looking down with apparent surprise on the casual traveller, who wends his toilsome way through these rugged defiles. The favourite food of these animals is the ichú, a very coarse grass, which is only found at an elevation little short of that of perpetual snow. At Jujuy the river turns eastward through a more open and habitable region, which skirts the southern base of these mountain ranges, and about twenty leagues beyond receives the Siancas, or Lavayen, its most important tributary, which rises in the heights of San Lorenzo, to the north-west of the town of Salta:—it is afterwards joined by the Ledesma and three or four other minor streams, before it falls into the Tarija river, as before stated, below Oran.

The course of the Tarija, in the first instance, is nearly as precipitous as that of the Jujuy, running through broken mountainous passes; but when it trends to the south, and receives the Pescado (which separates the departments of Oran and Tarija), and shortly after the Senta, it opens into wide and extensive valleys, traversed by many streams, which, running down into the main river, irrigate the rich lands along its

shores, and unite with the warmth of a tropical climate to form one of the most fertile districts in the world.

These are the principal rivers of this province. Its productions are as various as its physical features. In the west the mines of the Cerro de Acay and San Antonio de los Cobres, have been at times worked with considerable success; and in the still more elevated districts bordering upon Atacama, the natives of Cochinoca, the Rinconada, Cerillos, Santa Catalina, and Rosario, employ themselves in collecting considerable quantities of gold from the alluvial deposits after heavy rains.

It is in those cold regions that the alpacas and vicuñas are found:—the guanaco also abounds there, and the beautiful little chinchilla, thousands of dozens of the skins of which are yearly collected and sent down to Buenos Ayres for exportation to Europe.

In the same part of the province, not far south of La Rinconada, are extensive plains of salt, called the Salinas of Casabindo, to which the natives of the adjoining districts resort when the salt is hard and dry, and cut out large blocks of it with hatchets, which they load upon their llamas and asses, and carry to Salta and Jujuy, and other parts of the province:—there, also, they collect, in the same manner, the snow which is used in those towns for making ices in the summer season. The eyes of travellers obliged to traverse these inhospitable wilds are said to be as much affected by the glare of the sun reflected from these fields of salt, as from the snow-capped mountains which bound them. Casabindo is about forty-five leagues east from Atacama, the intermediate distance being all Cordillera, and is situated upon the desolate road from Salta, which is appropriately called *El Despoblado*.[63]

In the valleys, further south, of Colalao, San Carlos, Calchaqui, and Cachi, watered by the streams which afterwards fall into the Salado, as already described, large quantities of corn and maize are grown, with which the rest of the province is chiefly supplied: the vine is also extensively cultivated there, from which a good deal of an ordinary wine is yearly made and drunk in those parts for want of better.

It was from their rich pastures, however, watered by the mountain streams, that the Salteños in former times derived their principal profits. Before the revolution, and when the upper provinces, which now form the separate state of Bolivia, were part of the Vice-Royalty of Buenos Ayres, a great trade was carried on by the people of Salta in mules, 50,000 or 60,000 of which were annually sold there for the service of the carriers of Peru:—these mules were chiefly bred in the provinces of Santa Fé and Cordova, and sent to Salta when two or three years old, where, after being kept for a season or two in the rich grazing grounds of that province, they were considered strong enough for the work expected of them in the severer climate of the Andes. A periodical fair was held in the neighbourhood of Salta, to which the purchasers from Peru repaired, and bought the animals in droves at the rate of fourteen or sixteen dollars each (five or six more if broken in), about a third of which was clear profit to the Salteños, who bought them of the Cordova and Santa Fecino breeders at a price seldom above ten dollars. These that reached Lima were worth double the price paid for them at Salta. A tax, called *sisa*, of three quarters of a dollar on each mule, was levied by the government, the annual amount of which was destined to the maintenance of the forts upon the frontier, kept up as defences against the encroachments of the Indians of the Chaco.

The struggle for independence stopped this traffic, for the upper provinces and the greater part of Peru being in possession of the Royalists to the last, all intercourse with Salta was cut off for many years, nor has there been any sufficient encouragement to renew it since the restoration of peace. Peru, however, must have mules, and it does not appear that she is likely to be supplied with them from any other quarter in sufficient numbers.

Proceeding eastward, through the valleys of Campo Santo, and those watered by the Lavayen and its affluents, to Oran, and throughout all that department, a tropical vegetation is found in all its natural luxuriance.[64] Forests of noble trees stud the banks of the rivers, and extend far down the shores of the Vermejo, valuable not only as timber, but as producing fruits which may be said to supply the place of bread and wine to the natives:—such, amongst others, is the algaroba tree, a sort of acacia, from the fruit of which, a large bean growing in clusters of pods, mixed with maize, the Indians make cakes; and, by fermentation, produce their chicha, a strong intoxicating spirit in very general use. The quinaquina, the palm-tree, and the plant from which the famous maté, or Paraguay tea, is made, are equally indigenous there, and many others, as yet only known to us by their Indian names, which it would be useless to recapitulate.

The cactus, bearing the cochineal insect, and the aloe are found in every direction:—from the macerated fibres of the latter, the Indians of the Chaco make yarn and ropes, which are found less liable to rot in water than hemp:—their fishing-nets are made of this material, and a variety of bags and pouches, for which there is always a demand amongst their more civilised neighbours: these articles are variously dyed in indelible colours, prepared also by the Indians. There is no doubt that this plant, which grows as commonly in most parts of South America as the thistle with us, might be turned, here as elsewhere, to very considerable account for many useful purposes. I have seen not only beautiful rope, but very good coarse cloth manufactured from it; indeed I have now in my possession some paintings done in Peru upon a canvass made from it, which could not be distinguished from any coarse linen of European make.[65]

At Buenos Ayres, where the hedgerows are generally formed of the common aloe, I had an opportunity of trying various experiments with it, and had some cordage made from it of beautiful texture and whiteness by some sailors from one of his Majesty's ships. I also tried my hand at making pulqué, after seeing Mr. Ward's account of the manner in which it is made in Mexico; but, though we obtained an abundance of the liquor, following the process described by him of taking out the stem as soon as it began to shoot, and collecting the sap as it accumulated in the socket or basin beneath, it was never sufficiently palatable to our tastes to be drinkable; but this probably was from our want of experience in the mode of preparing it: however, I have no doubt that consumers enough might be found of this or any other such beverage amongst a people who can drink so filthy a preparation as the chicha, the liquor in common use amongst the natives of the united provinces,—one of the ingredients of which is said to be maize chewed by old Indian women.[66]

In some of those saline and arid districts, where no other fresh water is to be found, there grows a species of the aloe, well known to the natives, from which, on being tapped by an incision made in one of the thickest leaves, a clear stream will spurt out sufficient to allay the traveller's thirst.

In many parts of Oran is found the celebrated cuca, or coca, plant (*Erythroxylon Peruviana*), sometimes called *El Arbol del hambre y de la sed*,—"The tree of hunger and thirst;" to the natives more necessary than bread. Hungry or weary, with some leaves of coca to chew, mixed with a little lime or alkali of his own

preparation, the Peruvian Indian seems to care for no other sustenance:—he never swallows it, but is perpetually chewing it, as the Asiatics do the beetle-nut: give him but his bag full of this, and at most a little dried maize besides, and he will undertake the hardest labour in the mines, and, as a courier, perform the most astonishing journeys on foot, frequently travelling a hundred leagues across the snowy and desolate regions of the Cordillera.

In surveying countries like these, still in their natural state, it is impossible not to be struck at every step with the infinite and wonderful variety of the works of the Almighty, and with the manifest evidences they uniformly display of an unceasing and beneficent provision for all the wants of His creatures, in every clime and under all circumstances.

In the valleys watered by the Jujuy and its tributaries, as in many other parts of the republic, the indigo grows wild, and the sugar-cane and tobacco are extensively cultivated, the two latter being produced in sufficient quantity not only for the consumption of the whole of the province of Salta, but for exportation to the rest of the upper provinces, and occasionally to Chile. Cotton, also, is grown there in considerable quantities, and of a quality which would be prized in the markets of Europe,—as indeed would be nearly all the valuable productions of this highly-favoured region.

Although in this, as in every other part of the republic, the want of population may be considered as the great drawback to the full development of its natural resources, the Salteños, and especially those in the eastern districts of the province, obtain assistance to a considerable extent in the cultivation of their lands from the Indians of the Mataco nation, who live upon the shores of the Vermejo, below the junction of the Jujuy. These Indians, now an independent people, acknowledging no other authority than that of their own Caciques, were in former times reduced, in a certain degree, to civilised habits by the Jesuits, the fruits of whose influence are still perceptible in their occasional intercourse with their Christian neighbours, amongst whom they repair at the seasons of sowing and harvest to barter their service in labour in exchange for articles of clothing, and beads and baubles for their women. They are very industrious, and in the allotment of work will undertake double the daily task of the Creoles:—the payment they receive for a month's work is from ten to fifteen yards of very coarse cloth or baize, the cost of which at Salta may be about a quarter of a Spanish dollar, or about a shilling a yard:—with this and their food they are perfectly content, and, at a similar rate, any number of them might be induced to leave their own haunts periodically to work in the sugar and tobacco plantations of the Spaniards. I was told by an Englishman, long resident at Oran, that many hundreds of them are yearly engaged at the rate above stated to get in the crops in the vicinity of that place.

When to this low rate at which productive labour may be obtained, we add the existence, now indisputably established, of an uninterrupted navigation the whole way from Oran to the Paranã, and thence to Buenos Ayres, it is impossible not to be struck with the very great natural advantages possessed by this province, and with the very small degree of energy apparently requisite on the part of the natives to turn them to the fullest account. It is their own fault alone if the sugars and tobacco, the cotton, the indigo, and cochineal of Oran, do not vie with those of Brazil and Columbia in the markets of Europe. Let the people of these countries open their eyes to the importance of their own resources, and let them not imagine that they themselves are incapable of calling them into action:—unfortunately, such a feeling is one of those curses to the country engendered by the old colonial system of Spain, and which has the effect, to a lamentable extent, of counteracting that spirit of self-confidence and exertion which, on every account, is called for on the part of the inhabitants of these countries under their new political condition. It is this feeling which has led them to turn their eyes to the formation of companies in Europe as the best mode of bringing their fertile lands into notice and cultivation,—an erroneous notion which cannot too soon be set right. I do not say that in the temperate climate of Buenos Ayres European labourers may not be employed to advantage; but when it becomes a question of sending them into the tropical regions in the heart of the continent, whether as agricultural labourers or miners, I am satisfied that the experiment would only end in utter disappointment to all parties. In the first place, it should be borne in mind that, to ensure in Europe any sale for the productions of so remote a country, the cost of their cultivation must be extremely low, as it appears to be at present; but what labourer from Europe would be satisfied with anything like even double the ordinary remuneration for daily labour in that part of the world? Supposing him, however, to be conveyed thither, and to be contented, for a time, with the abundance of the necessaries of life around him, what does he know of the culture of tropical productions, the chances being that he never saw a sugar-cane or a cotton plant in the whole course of his life? But, what is of more consequence, how long will his physical powers last in a climate, the heat of which will be almost insufferable to him, and in which the very indulgence of his own ordinary habits will soon undermine his constitution and destroy all his energies? Of the hundreds of Beresford's and Whitelock's men, who remained in the country after the evacuation of Buenos Ayres by the British forces, how very few were afterwards to be met with who were not sunk to the lowest scale of misery and moral degradation!

In tropical climates I am satisfied that Europeans will never be able to compete in amount of daily labour with the natives: on the contrary, wherever the trial has been made, the Indian labourer has been found capable of enduring an infinitely greater degree of bodily exertion than the most robust European. It is hardly credible, indeed, what these people will go through. In the mines especially, where the amount of their daily work, and the loads they are capable of sustaining, have excited the astonishment of every one who has paid the slightest attention to the subject. The stoutest of the Cornish miners who accompanied Captain Head in his visit to the mine of San Pedro Nolasco, was scarcely able to walk with a load of ore which one of the natives had with apparent ease brought out of the mine upon his shoulders, whilst two others of the party who attempted to lift it were altogether unable to do so, and exclaimed that it would break their backs.

In these observations I allude of course to the labouring class,—I speak of hands not heads, for I fully agree in the necessity of introducing improvements in the cultivation of the native products,—which improvements will assuredly be best introduced by foreigners qualified by experience in other countries to superintend and direct those processes, both of cultivation and after preparation, which may be requisite to ensure their immediate sale in the foreign markets for which they are destined. Such persons, perhaps, would be best sought for in the East or West Indies or Brazil; and, no doubt, they would not only benefit themselves but their employers by introducing into these new countries the results of their practical experience elsewhere. It is to foreigners, also, that the natives must look to instruct them in the use of steam-vessels, upon which, after all, the future advancement of these remote countries in wealth and civilisation will so mainly depend.

I will only add to the observations which I have already made upon this subject, my conviction that if the governments of Buenos Ayres, Santa Fé, and Corrientes would but unite in a sincere determination to give a fair trial to the experiment, men would be found at Buenos Ayres who would desire no better than to be employed on such a service:—as to any opposition Dr. Francia might offer to it, it is not worth a moment's consideration.[67] Give an English midshipman, of sufficient experience, an armed steamer and a picked crew, either of his own countrymen or North Americans, to whom he might add some of the excellent sailors of Paraguay, and I am quite sure he would carry a cargo from Buenos Ayres up the Vermejo in perfect safety to Oran, despite of Dr. Francia or any such bugbear. This, however, is an object which must have the cordial support and co-operation of the ruling powers. If they shut their eyes to the importance of its success, it would be labour thrown away for any individual to volunteer the attempt.

The government of Buenos Ayres, as the authorities charged with the general interests of the Republic, from their habitual intercourse with the people of other countries, ought to be fully able to appreciate the immense benefits which steam-navigation has produced elsewhere, and how greatly it has tended to promote the prosperity and civilisation of other nations. It is in their power to extend those blessings to their own countrymen in the heart of the South American continent, and to produce a really United Confederation of the Provinces, instead of that which is now little more than nominal, from the vast distances which intervene, and operate as a bar to almost any intercourse between them.

With the establishment of steam-navigation, distance will cease to be distance, and the upper provinces will find a cheap and ready vent for an abundance of productions which are now not worth the heavy expenses of sending down by land-carriage to Buenos Ayres.

It is a grave question, deserving the most serious attention of those to whom the government of these countries is at present intrusted, and in the early solution of which, perhaps, their future political destinies are involved to an extent far beyond the comprehension of any casual observer.

FOOTNOTES:

[59] This latitude is the mean of four observations taken by M. de Souillac (in 1784) one of the astronomers attached to the commission for determining the boundary.

[60] Since this was written I have met with a gentleman who had seen the original drawings of *three* masses, with their respective measurements; which drawings, he understood, were made by the persons sent in quest of this iron by the government of Buenos Ayres when my specimen was brought down.

[61] Luccock, in his Travels in Brazil, speaks of a very singular metallic formation which he met with in the province of Minas Geraes, not far from Villarica. He says (page 490), "A hill on our left now presented a wonderful object; it was one entire mass of iron, so perfectly free from any mixture of common soil as to produce no vegetation whatever, but was covered with a complete coating of rust or oxide of iron. The hill is so lofty and steep that its top was not accessible; but from its more elevated parts nodules of corroded metal had rolled down, and greatly embarrassed the road: at the foot of the mountain the soil is red clay mixed with ponderous brown dust. As we advanced the metal seemed to become less pure, until, after an extant of two leagues and a-half, it altogether vanished, and was succeeded by the common clayey land, &c. I had often heard of this immense mass of metal, but none of the reports had presented any adequate picture of it to the imagination. The very core of the hill, as far as we could judge, appeared to consist of vast blocks of iron, in tables; and it is so free from alloy as to produce when smelted ninety-five per cent. of pure metal."

[62] As mining labour was imposed as an obligation upon the Indians by the conquerors, so it came to be looked upon as the occupation of a caste, and of a caste looked down upon by all who boasted of the slightest admixture of European blood in their veins.

[63] The "Uninhabited Region."

[64] When Soria descended the Vermejo in 1826, it was deemed a good opportunity to send a collection of specimens of the various woods of these region to Buenos Ayres that they might be examined and more properly described, and he told me he had no less than seventy-three different species with him, the whole of which were taken from him by Dr. Francia, in Paraguay, with everything else on board his vessel.

[65] In 1834 a series of trials was made at Toulon in order to ascertain the comparative strength of cables made of hemp and of the aloe (brought from Algiers), which resulted greatly in favour of the latter. Of cables of equal size, that made from the aloe raised a weight of 2000 kilogrammes, that of hemp a weight of only 400.

[66] Pulqué is described by Mr. Ward as the favourite beverage of the lower classes in some parts of Mexico. The aloe plant, from which it is prepared, is cultivated for the purpose in extensive plantations; and so great is the consumption of it, that before the revolution the revenue derived from a very small municipal duty levied upon it at the gates of the towns averaged 600,000 hard dollars a-year, and in 1793 amounted to 817,739, or about 170,000*l.* sterling.—See Ward's 'Mexico,' vol. i. p. 55.

[67] A small iron steamer, which might be had for 25,000*l.* or 30,000*l.*, would be quite sufficient to begin with.

CHAPTER XIV.
PROVINCES OF CUYO.

The town of Cuyo formerly attached to Cordova. Value of the old municipal institutions. San Luis, wretched state of the population. The miserable weakness of the Government, exposes the whole southern frontier of the Republic to the Indians. Aconcagua seen from the town. Mines of Carolina. Account of a journey over the Pampas in a carriage. Mendoza, extent, rivers, artificial irrigation, productions. Mines not worth working by English companies. Ancient Peruvian road. City of Mendoza, and salubrity of the Climate. San Juan. The productions similar to those of Mendoza, Wine, Brandy, and Corn. Quantity of Corn produced yearly. Mines of Jachal. Character of the people. Passes across the Andes. Dr. Gillies' account of an excursion by those of the Planchon and Las Damas. Singular animal found in the provinces of Cuyo named the Chlamyphorus, described by Mr. Yarrell.

The towns of San Luis, San Juan, and Mendoza, with their several jurisdictions, each of which is now considered a separate province, in the time of the Viceroys were subject to the Intendency of Cordova. In 1813, by a decree of the National Congress, they were separated from that government, and formed into a distinct province, under the denomination of the Province of Cuyo,[68] of which Mendoza was made the capital; but in this, as in the other divisions of the republic enacted about the same time, the bonds were too loosely knit to resist the shocks of party struggles and domestic convulsions; and this arrangement, though wisely planned, fell with the dissolution of the Congress at Buenos Ayres which created it.

But for the cabildos and municipal institutions which still existed in most of the principal towns of the interior when the metropolitan government was dissolved, in 1820, I believe every semblance of a legitimate authority would have ceased. They retained to a certain extent powers not only for the preservation of the public peace, but for the administration of justice; and although perhaps, under the circumstances, they afforded facilities for the establishment of the federal system in opposition to a more centralised form of government, there is no doubt they saved the insulated towns in the interior from worse consequences. Those institutions were by far the best part of the colonial system planted by the mother country, and they were framed upon principles of liberality and independence which formed a very singular exception to her general colonial policy. I doubt whether those which in most cases have been substituted for them have been so wisely cast, or are so suitable to the state of society in those countries. The people at large were habituated and attached to them, and had they been retained, with some reforms adapting them to the new order of things, they might have been made the very best foundations for the new republican institutions of the country. But the truth was, they were essentially too democratic for the military power which arose out of the change; they succumbed to that, and the people, having no real voice in their new governments, made no struggle to preserve them.

SAN LUIS.

Of all the petty governments of the interior that of San Luis is one of the most wretched. The population, estimated at from 20,000 to 25,000 souls, is thinly scattered over the estancias, or cattle-farms, at very long distances from each other, where they lead a life so far removed from anything like civilised society, that it may be doubted if their condition is really much better than that of the wild Indians, of whom they live in such continual dread, and against whose fearful inroads their miserable provincial authorities can afford them no efficient protection. Their independence and weakness is a serious evil to the whole republic, which is in consequence of it left defenceless on its most assailable side. The provinces of Cordova, Santa Fé, and Buenos Ayres, are obliged to maintain each a separate militia to protect their frontiers thus left open to the savages; and the most important of all the communications in the republic, the road from Buenos Ayres to Mendoza, is constantly unsafe from the total absence of all means on the part of the government of San Luis to make it otherwise. Every year this state of things goes on the evil consequences become more manifest; and, unless the ridiculous independence of some of these insulated townships be put an end to by their re-annexation to their old provincial capitals, not only must their own interests be annihilated, but those of the republic at large must materially suffer. It is idle to look for any improvement under the present system, which can only lead to the diffusion of ignorance and moral degradation, if the wretched population does not altogether disappear under it.

The straggling mud-built town of San Luis de la Punta, which gives its name to the province, contains about 1500 inhabitants, all miserably poor. Bauza places it in lat. 33° 17′ 30", long. 65° 46′ 30". It is prettily situated on the western slope of one of a group of hills, which appear to be the last knolls of the Sierra da Cordova. Dr. Gillies gives it 2417 feet above the level of the sea, by barometrical observation, a greater elevation than the traveller from the pampas perhaps would imagine. There is, however, a splendid prospect from it; the great saline lake of Bevedero glistening at a distance, and the interminable plains stretching away to the south, covered with a rich vegetation, brilliant with gaudy flowers, amongst which the bulbous plants are strikingly conspicuous.[69]

Towards sunset, the Cordillera, capped with snow, is often visible, though above 200 miles distant. It has been generally supposed to be Tupungato which is thus seen; but Tupungato does not rise above the limit of perpetual snow,[70] and is often entirely free from it; is it not more likely therefore to be Aconcagua, which Captain Fitzroy found to attain the enormous elevation of 23,200 feet, upwards of 2000 higher than the famous Chimborazo? The direct distance differs very slightly of either from San Luis, Tupungato is 213, and Aconcagua 216 geographical miles from it; the latter being about 50 miles to the north of the other.

The gold-mines of San Carolina are about sixty miles to the north of San Luis, in the mountains; they have long since been filled with water, and, as there are no capitalists or machinery to drain them, they are no longer worked, but the people of the hamlet wash and sift the alluvial soil collected at particular places (the lavaderos) in the neighbourhood, and so collect every year a quantity of gold in dust and small bean-like lumps, which they call *pepitas*. According to the official returns in the King of Spain's time, the produce of one year, on which duty was paid, was about 150 lbs. At present the people take little trouble to collect more than is absolutely necessary to enable them to purchase at San Luis the few articles of clothing and horse-gear which they require; if anything, they are even worse off than the gauchos upon the estancias. Captain Head paid them a flying visit, and has described the wretched poverty in which he found them.

Originally, and before the erection of Buenos Ayres into a Vice-Royalty, the province of Cuyo was subject to the government of Chile, of which San Luis was at that time the frontier-town to the eastward, and the place where the Captains-General in consequence first received the honours due to them when they crossed the pampas from Buenos Ayres to take possession of their government. It takes its name from Don Luis de Loyola, a Governor of Chile, who founded it in the year 1596.

By the post-road it is 226 leagues distant from Buenos Ayres, and 84 from Mendoza; and it is the only place that exceeds the description of a straggling village throughout the whole distance. The road which runs through it has been often described by those who have crossed the pampas in the last twenty years, and they have left little to say about it. By all accounts it seems to be a most uninteresting one; and the grand object, therefore, is to get over it with the greatest possible expedition. The more common mode of performing the journey is on horseback; but this is necessarily attended with great fatigue, and he must have an iron constitution who attempts it; but if he can live upon meat yet warm with life, or barely toasted over a gaucho fire, dispense with bread, drink brackish water, and sleep as a luxury upon the ground in the open air, in spite of bugs as big as beetles, which will suck him like vampires, his saddle for a pillow, and the sky for his covering, and with such fare gallop a hundred miles a day, he may, barring accidents, reach Mendoza in about ten days. He will find no temptation to loiter on the way, though much to make him wish to reach his journey's end.

There are post-houses, or stations, along the whole line of road, where relays of horses may be had; wretched animals in general, to all appearance, though the work they will sometimes do is almost incredible, and that of course entirely upon green food; it is true their gaucho riders never spare them, and their tremendous spurs, reeking with blood when they dismount, but too cruelly indicate in general the goad which has urged them on. Unlike the Arab or the Cossack, the gaucho seems to have no kind feeling whatever for his horse; the intrinsic value of the animal being of no importance, if he drops on the way his rider cares not, he lassoes and mounts another beast, and abandons the exhausted one to the condors and vultures, always on the look-out for such a chance, and which will tear the flesh from the poor brute's bones as soon as they find he has not strength enough left to shake or kick them off. The mares lead a better life, being kept entirely for breeding; and custom is so strong that no consideration would induce a gaucho to mount one. The pampa Indians have the same feeling, but they keep them for food as well as breeding; mare's flesh by them is preferred to all other, indeed it is their ordinary food.

But it is not absolutely necessary to go through the fatigue of riding on horseback across the pampas, and, for those disposed to consult their ease, an admirable sort of carriage may be had at Buenos Ayres, called a galera, in appearance more resembling a London omnibus than any other carriage I ever saw; it is swung upon hide ropes, and is of light though very strong construction; and in this the journey as far as Mendoza may be performed in fourteen or fifteen days without difficulty. At the same time that Captain Head started to ride on horseback across the pampas, another friend of mine, with four or five persons in his suite, who was desirous to combine as much comfort as possible with such an undertaking, left Buenos Ayres in the sort of carriage I have described; he had besides with him a cart on two wheels, for the conveyance of baggage, bedding, cooking utensils, &c., and much such a supply of *stock* as people would lay in for a voyage by sea of two or three weeks' duration. On reaching Mendoza, he sent me an account of his journey, from which I extract the following, for the benefit of those disposed to follow his example:—

"Mendoza, December, 1825.

"We reached this place on the morning of the eighteenth day from our leaving Buenos Ayres. H—d, who started on horseback at the same time, did it in nine, but with so much fatigue as to be obliged to lie up for some days afterwards to recruit. We might easily have done it in our carriage in fourteen or fifteen, for we galloped nearly the whole way, as he did, but for the tiresome stoppages we were continually obliged to make in order to repair our cart; these kept us half a day at one place, one day at another, and two whole ones at San Luis. Though you laughed, as well you might, at our set-out, and at the appearance of our galera and caratillo, stuffed with my manifold preparations for personal comfort, I can truly say, now the expedition is over, that of all carriage contrivances the galera is infinitely the best calculated for an excursion across the pampas; ours was remarkably easy over the roughest roads, capable of resisting all injury from them, and its high wheels well adapted for preventing our sinking in the quagmires, whilst it formed a comfortable bedroom at night. Of the caratillo I cannot speak favourably:—from its construction it was not suited to keep pace with the galera; two galeras would be better, especially if there were ladies of the party, in which case one might be fitted especially for their convenience, with couches for sleeping, &c. The pies and provisions might be stowed away in lockers, as the sailors would call them, made for the purpose; and the more good things in the shape of eatables and drinkables you can get into them the better, unless you have the stomach of an ostrich to digest what the gauchos offer you. The filth of the post-houses is beyond description, dirt and vermin of every kind in them, and no accommodation of any sort for the traveller; even our peons preferred sleeping in the open air, and you would not suspect them of being over nice; I never in my life saw such a set of wild devils.

"The country is more uninteresting than any I ever travelled over, in any quarter of the globe. I should divide it into five regions:—first, that of thistles, inhabited by owls and biscachas; secondly, that of grass, where you meet with deer and ostriches, and the screaming horned plover; thirdly, the region of swamps and bogs, only fit for frogs; fourthly, that of stones and ravines, where I expected every moment to be upset; and, lastly, that of ashes and thorny shrubs, the refuge of the tarantula and binchuco, or giant bug.

Its geological aspect differed somewhat from what I expected. I should say that, to the north and south of Mendoza, there have been volcanoes, the eruptions from which have covered the country (perhaps the bed of a sea) with ashes as far as San Luis: the peculiar soil so formed, combined with the effects of climate and the salt lakes, may perhaps account for the particular species of thorny plants which are undescribed and confined to this region. The mountain streams, overflowing the saline lakes, are the origin of the vast swamps between San Luis and the Rio Quarto; and the

decomposed granite and gneiss from the Sierra de Cordova, gives rise to the difference in the soil, and to its elevation along the Rio Tercero."

MENDOZA.

The province of Mendoza occupies a space of something more than 150 miles from north to south, along the eastern side of the Cordillera of the Andes, and nearly an equal distance from east to west, measured from the Desaguadero to the central ridge of the Andes. The northern boundary is formed by a line passing east and west through the post station of Chañar, about eighteen miles north of the city, which divides it from the jurisdiction of San Juan. To the south the nominal frontier line is the river Diamante, although lands beyond that river have been purchased from the Indians, which are likely, perhaps, to become some of the most valuable of the province, especially for the purposes of cattle breeding, for which those in the vicinity of Mendoza are not suitable.

The river Desaguadero is the divisional line between the provinces of San Luis and Mendoza:—this river is the drain of a singular chain of lakes known by the name of Guanacache, formed by the confluence of the river Mendoza, which runs into them from the south, and the San Juan river, which, after passing the town or city so called, is discharged into them from the north. The Desaguadero, after receiving these rivers, runs first in an easterly direction, and afterwards south, into a vast lake called the Bevedero, below the town of San Luis:—a portion, also, of the waters of the river Tunuyan are lost in the same great sack-like lake, which thus becomes the reservoir of the greater part of the streams which issue from the Andes between the thirty-first and the thirty-fourth degree of latitude. It is said that in old times the Tunuyan also, like the rivers of Mendoza and San Juan, had no other outlet, but that river, at a later period, opened for itself a new channel, and though a portion of its waters are still carried into the Bevedero, the greater part of them turn off to the south before reaching it in a stream called the Rio Nuevo by Bauza, and the Desaguadero by Cruz,[71] which runs in that direction a considerable distance, till the Diamante and Chadileubú rivers join it, and together they form another great inland water without any outlet, called the Urrélauquen, or Bitter Lake, from its extreme saltness, as described in chapter eight. The account of this lake given to Cruz by the Indians who accompanied him in his journey across that part of the Pampas in 1806, has been verified of late years by General Aldao, who personally examined it in an expedition which he commanded against the savages in 1833, when he rode round it, and ascertained that it had no outlet.

The river Tunuyan rises from the base of the mighty mountain of Tupungato, and at first runs south through a wide and rich valley in the Cordillera; passing eastward of the volcano of Maypú, or Peuquenes, it afterwards finds its way through the eastern chain of the Andes by a deep chasm or opening, which it seems to have burst for itself through the mountains seven or eight miles below the Portillo Pass, and nearly opposite to where the Maypú leaves the Cordillera on the western side: thence its course through the plains is north, and afterwards eastward, in the direction of the great lake Bevedero, as already stated.

It would seem as though Nature herself had expressly directed the course of these rivers, viz., the Mendoza, Desaguadero, and Tunuyan, in such a way as to facilitate to the inhabitants the means of artificially irrigating their lands, which, from the quality of the soil, and the rarity of rain, would be otherwise barren and unproductive[72]:—as it is, the quantity of lands artificially watered by ducts from the rivers Mendoza and Tunuyan is estimated at about 30,000 square leagues, and these lands, which are arid and barren when not so watered, become, under regular irrigation, uncommonly rich and fertile, yielding frequently, under a very rude and simple mode of agriculture, more than a hundred-fold. Wheat, barley, and maiz are thus grown; besides which there are extensive vineyards and orchards, and grounds covered with lucern grass for the fattening of cattle,—all regularly enclosed, and walled in with thick mud walls, called *tapiales*.

The products of the province are wine, brandy, raisins, figs, wheat, flour, hides, tallow, and soap, which last is made from a species of barilla, which abounds in most parts of it:—a considerable portion of these is exported to Chile and to the provinces of Cordova, San Luis, and Buenos Ayres. The quantities so disposed of will be best understood by the following official return of the exports for a single year:—

Account of Exports of Produce of Mendoza for other parts during the year 1827.

Where sent.	Brandy.		Wine.		Corn and Flour.[73]	Dried Fruits.	Hides.	Soap.	Tallow.
	Pipes.	Loads.	Pipes.	Loads.	Loads.	Loads.	No.	Loads.	Loads.
Buenos Ayres	336	2144	290	3120	1098	520	670	—	—
San Luis	—	70	—	488	1634	85	—	60	—
Cordova	—	95	—	355	125	49	—	—	—
Santa Fé	—	81	—	172	469	39	—	—	—
Chile	—	12	—	—	—	—	8700	571	88
	336	2402	290	4135	4452	693	9370	631	88

In addition to these native products, the mineral riches of the province are various and valuable. The silver mines of Uspallata have at times been very productive, and in other parts of the same range veins, both of silver and copper, are known to exist, though want of capital and labourers has hitherto prevented their being opened. With respect to the working of these mines by English companies, and in the English manner, the best opinions seem to agree that it would not answer to make the attempt.

Mr. Miers carefully examined the mines at Uspallata, and has given a particular account of the mode in which they are worked by the natives, and of the process resorted to for separating the silver from the ore. At the time he visited them they were not yielding more than two marks per caxon:[74] a very low average, upon which he has taken the trouble to make calculations to show that the English mode of smelting can never be brought into competition with the process of amalgamation as practised in South America. He says,—"To ensure economical results the aid alone of the people of the country, as well as the application of their peculiar habits and management, must be resorted to: wherever English improvements are attempted to supersede the old methods, such trials would be attended with loss. "No one," he adds, "can doubt but that in the barbarous mode of operation followed in Chile great loss of product is occasioned; but when this loss is placed in competition with the increased cost of labour, materials, and management necessary to ensure a greater amount of produce, the inference is irresistible that it is better to put up with this loss than to expend a sum of money far beyond the value of what can be obtained by adopting the improved methods used in countries where facilities abound which can hardly be procured at any price in Chile and La Plata."

Captain Head, after seeing them, came to a similar conclusion: he considered that, although they might yield a liberal return under the more economical plan of employing native labourers properly directed, and at the ordinary low rate of wages paid for such labour in that part of the country; from the want of water, wood for fuel, and pasturage for cattle throughout the region in which they are situated, they would not repay the cost of working them by machinery, or by an English establishment.

In all this part of the Cordillera is to be found an abundance of limestone, gypsum, alum, mineral pitch, bituminous shales with appearances of coal in many places, slates, and a variety of saline deposits, amongst others common and Glauber salts.

The same metalliferous chain of the Andes extends, according to Gillies, with little interruption, from Chile to Peru, and contains the greater part of the gold and silver mines yet known on the eastern ranges of the great Cordillera, including, besides those of Uspallata, the mines of the province of San Juan, and further north those of Famatina in La Rioja. It is separated from the central ridge of the Andes by an extensive valley, or succession of valleys, running northwards from Uspallata, through which it is said that an ancient road of the Peruvians is to be traced at the present day nearly to Potosi; a point well worth the attention of the antiquarian, and of great interest, as connected with the state of civilization which the aborigines had attained before their conquest by the Spaniards.

The population of the province of Mendoza is calculated to be from 35,000 to 40,000 souls, about a third of which is resident in the city and its immediate vicinity. The executive power is vested in a Governor, periodically chosen, as in the other provinces, by the Junta, or Provincial Assembly.

A visible improvement has taken place in the condition of this people in the last twenty years; for, although at so vast a distance from the Capital, like Salta, its position as a frontier town has given it some special advantages: it has led to communications with foreigners, and to a traffic with Chile and with Buenos Ayres, which, by teaching them the value of their own resources, has roused a sort of commercial spirit amongst the inhabitants, and has stimulated them to more industrious habits. The government has taken pains to establish schools for the education, of all classes, and the setting up of a printing press, from which has issued an occasional newspaper, has been of great use, not only in opening the eyes of the people at large to the proceedings of their own rulers, but in furnishing them with some notion as to what is going on from time to time in other parts of the world.

They are, in general, a healthy and well-conditioned race: descended many of them from families originally sent from the Azores by the Portuguese government to colonise Colonia del Sacramento on the river Plate, and made prisoners and settled in those remote parts by Cevallos, during the war which preceded the peace of 1777. It is probably much owing to them that the cultivation of the vine has been so extensively introduced in this part of the Republic.

The city of Mendoza, which, according to Bauza, is in south latitude 32° 52′, west longitude 69° 6′; at an elevation of 4891 feet above the sea, and at the very foot of the Andes, is shut out from any view of the great Cordillera by a dusky range of lower hills which intervene. Its appearance is neat and cheerful: the houses, for the most part, built of sunburnt bricks, plastered and whitewashed; and the streets laid out at right angles, as usual in that part of the world. It boasts of an Alameda, or public walk, said to equal anything of the kind laid out, as yet, in South America:—it is nearly a mile long, neatly kept, and shaded by rows of magnificent poplars:—there are seats and pavilions at either end for the accommodation of the inhabitants, by whom it is much frequented as a lounge, especially of an evening.

The climate is delightful and salubrious, and is remarkably beneficial to persons suffering from pulmonary affections. The only ailment to which the people seem more liable here than in the interior is the goitre, which I suppose may be attributed to the same causes, whatever they are, which seem to produce it in almost all alpine districts.

SAN JUAN.

The province of San Juan, which adjoins that of Mendoza, occupies the space between the great Cordillera and the mountains of Cordova, as far north as the Llaños, or plains, of La Rioja. It is said to contain about 25,000 inhabitants, governed, at present, like those of Mendoza, and occupied very much in the same manner, in the cultivation of their vineyards and gardens, and in agricultural pursuits. Their exports of brandies and wines to the other provinces are little short of those from Mendoza, and the quantity of corn they annually grow has been estimated at from 100,000 to 120,000 English bushels. The same lands produce yearly crops under the process of artificial irrigation from waters highly charged with alluvial matter. The ordinary crops are 50 for 1, in better lands 80 to 100, and in some, as at Augaco, about five leagues to the north of the city of San Juan, they have been known to yield 200 and 240. The price in the province is from one and a half to two Spanish dollars for a fanega, equal there to about two and a half English bushels. The wages of a day labourer are from five to six dollars a month, besides his food, which may be worth a rial a day more.

In times of scarcity corn has been sent from San Juan to Buenos Ayres, a distance of upwards of a thousand miles; but this can never answer under ordinary circumstances, from the great expense attending the land carriage. It is different with the wines and brandies, which, after all charges, can be sold in most of the provinces of the interior, and even at Buenos Ayres, at a fair profit. They are in general demand amongst the lower orders, and, if pains were taken with them, might be very much improved. I have had samples of as many as eight or ten different qualities, all of them good, sound, strong-bodied wines, and only requiring more care in their preparation for market.

In the northern part of this province, in the lower ranges of the Cordillera, is the district of Jachal, in which are what are called the Gold Mines:—they are, as far as I could learn, much in the same state as those of La Carolina in the province of San Luis, already spoken of. Their yearly produce was estimated, in 1825, at 80,000 dollars, the greater part of which was sent to Chile to be coined at the mint of Santiago. The accuracy of this calculation has been disputed, but, men if true to its fullest extent, the amount is of no great consequence.

The situation of the city of San Juan is in latitude 31° 4′, according to Molina. Mr. Arrowsmith has placed it in longitude 68° 57′ 30".

The climate is described as truly heavenly, and the people as a well-disposed race, extremely anxious to improve both their moral and political condition. In this they have had chiefly to struggle with the

countervailing influence of an ignorant, vicious, and bigoted priesthood, which has been greatly opposed to all innovations:—the political power, however, of this class of persons is fast on the wane at San Juan, as in most other parts of the Republic.

PASSES OF THE ANDES.

I shall conclude this chapter with a list of the passes across the Andes from the several provinces of this republic of which I have any account: they are twelve in number:—

First.—The most northerly is a continuation of the road called the Despoblado, which crosses the mountainous districts of the north-western part of the province of Salta by the mines of Yngaguasi to Atacama.

Second.—A pass from the province of La Rioja communicates with Guasco and Copiapo in Chile.[75]

Third.—Another, further south, leads from the province of San Juan to Coquimbo.

Fourth.—That called Los Patos on the north flank of the great mountain of Aconcagua, descending into Chile by the valley of the Putaendo, a small river which joins the larger one of Aconcagua in the plains below, near the town of San Felipe. It was by this road that General San Martin made his celebrated march over the Andes with the army of Buenos Ayres in 1817, which led to the liberation of Chile from the Spanish yoke.

Fifth.—The pass of the Cumbre by Uspallata, the road most usually taken by travellers proceeding from Mendoza to Santiago de Chile, and which has been very particularly described by several Englishmen, who have gone that way. Of the published accounts that of Mr. Miers is, perhaps, the best, as he had the most opportunities of making it so, having crossed it no less than four times, once with his wife, who was taken in labour upon the road. Lieutenant Brand's is particularly interesting, from his having crossed at the season when the Cordillera was covered with snow, which obliged him to proceed on foot a great part of the way, and to encounter fearful risks, which he has very graphically described. The whole distance from Mendoza to Santiago is 107 post leagues; and the highest part of the Andes crossed is (by barometrical measurement), according to Dr. Gillies, 12,530 feet above the sea:—Mr. Miers says about 600 feet less. From the commencement of November to the end of May, occasionally a few weeks sooner or later, this road is passable the whole distance on mules:—for the rest of the year it is generally closed to all but foot-passengers, and the crossing is then attended with considerable danger; many lives have been lost in attempting it.

A striking object on this road is the splendid arch called the Inca's Bridge, seventy-five feet over, which nature has thrown across a ravine one hundred and fifty feet deep, through which runs the river of Las Cuevas. There are natural hot springs about it, which some persons suppose to have contributed to its formation:—it is evident, however, that some infinitely more powerful agency has been at work, from the appearance of beds of fossil shells there at an elevation of 8650 feet above the level of the present sea.

Sixth.—About half way over, near the station called the Punta de las Vacas, a road branches off to the valley of Tupungato, and afterwards crosses the Cordillera to the north of the peak so called, descending on the opposite side into Chile by the valley of the little river Dehesa, from which it is called the Dehesa Pass: it is very little used.

Seventh.—South of the mountain of Tupungato is the Portillo Pass, which falls into the valley of the river Maypú in Chile with the Rio del Yeso. By many travellers it is preferred to the high road by Uspallata, being the shorter way of the two by twenty leagues:—it is, however, seldom open longer than from the beginning of January to the end of April, the greater elevation of that part of the Cordillera causing it to be longer blocked up by the snow.

The way to it from Mendoza runs southward, parallel to the mountains as far as the estancia of Totoral, upon the north bank of the river Tunuyan, distant about sixty-five miles from that city, and some twenty from the base of the Cordillera:—thence the pass bears west-south-west, distant about thirty-six miles; the breach in the mountains through which the Tunuyan runs being plainly visible to the south of it. This part of the Andes seems to consist of two great parallel ridges running nearly north and south, and separated from each other by the valley of the Tunuyan, the width of which is about twenty miles, and its elevation above the sea, where crossed by the road, about 7500 feet. Of the two ranges the eastern one is the highest, being, where the road crosses it, 14,365 feet above the sea:—this chain extends with little interruption from the river of Mendoza, southwards, to the Diamante, a distance of about 140 miles:—the western, or Chilian range, where crossed by the road, is not above 13,200 feet high.[76]

In this part of the Cordillera is situated the volcano of Peuquenes, or Maypú, eruptions from which have been frequent since the great earthquake which produced such disturbance in 1822:—they generally consist of ashes and clouds of pumice-dust, which are carried by the winds occasionally as far as Mendoza, a distance little short of 100 miles. In crossing from the eastern to the western side of the valley of the Tunuyan travellers have, at first, the summit of the volcano concealed from them, but about half way between that river and the pass of Peuquenes there is a good view of it eight or nine miles distant to the south:—the summit is generally covered with snow, and cannot be much less than 15,000 feet above the sea. It is from the pumice-rock found in this neighbourhood that the people of Mendoza make basins for filtering the muddy water of their river.

Eighth.—To the south of this volcano is situated a pass called De la Cruz de Piedra, which enters the Cordillera where a small stream, the Aguanda, issues from it, about two leagues to the north of the fort of San Juan:—it unites with the road by the Portillo pass on the opposite side of the Andes in the valley of the Maypú.

Ninth.—Further south one little frequented unites the valleys of the rivers Diamante and Cachapoal: this is previous to reaching the volcano of Peteroa, beyond which are situated the passes of Las Damas and of the Planchon.

Tenth.—Of these the Las Damas, or ladies' pass, enters the Cordillera from Manantial in the valley of the river Atuel, and descends by that of the Tinguiririca, which issues from the mountain of San Fernando:—this was the pass which M. de Souillac, in 1805, reported might, at a very small expense, be rendered passable for wheel-carriages.[77]

Eleventh.—The road by the Planchon leads to Curico and Talca, following the courses of the rivers Claro and Teno:—on neither of these roads does the elevation exceed 11,000 feet, or the vegetation ever cease.

The twelfth pass is that of Antuco, from which Cruz started in 1806 to cross the Pampas to Buenos Ayres:—the road by it to Conception in Chile follows the valleys of the rivers Laxa and Biobio. To the south of the volcano in the vicinity of this pass, which Cruz could not get up, but which has since been ascended by M. Pæppig, a German naturalist (who nearly lost his life in the attempt), lies a ridge called the *Silla Velluda*, rising, according to his estimation, to the height of 17,000 feet, on the rugged sides of which, below the snow and glaciers, are to be traced ranges of basaltic columns.

Of the most frequented of these passes, viz., those by Uspallata and the Portillo, there are, as I have already said, several accounts in print, but, as I know of no other Englishman except the late Dr. Gillies who has examined those of Las Damas and the Planchon with any attention, I shall here quote part of a letter which he wrote to me in 1827, giving an account of a short excursion he made by them in that year; and I do so the rather because it also gives some account of the intervening country, which has never, as far as I know, been described by any one else:—

"About the middle of May I returned from an excursion of ten weeks to the south which I had long meditated. After reaching the river Diamante, the southern boundary of the province of Mendoza, I crossed that river and ascended the Cerro del Diamante, and at every step found ample evidence of its volcanic origin: the ascent was covered with masses of lava, and near the summit with loose pumice. The upper part of the mountain consists of a ridge elevated a little at each of the extremities into a rounded form, on the north side of which, a little below the summit, is a plateau about 400 yards in diameter, which undoubtedly has been formerly the crater of a volcano. The whole mountain appears to rest on an immense bed of pumice-stone. On the steep banks of the Diamante opposite to it such strata are laid open on both sides:—at one place on the south bank I traced one great mass of pumice-rock, 100 feet long and 145 wide, the whole forming distinct basaltic pillars.

"From this interesting spot we proceeded towards the mountains of the Andes, and amongst the first low hills examined several springs of petroleum, about which it is curious to observe the remains of a variety of insects, birds, and animals, which, having got entangled there, have been unable to extricate themselves:—so tenacious is this substance that (as I was assured by an eye-witness) some years ago a lion was found in the same situation, which had made fruitless attempts to escape. Following the base of this lower range southward, after a few leagues we reached the banks of the river Atuel, a copious stream much larger than either the river of Mendoza or the Tunuyan:—its bed, very unlike that of the Diamante, is very little lower than the surrounding plains, which gradually slope off to the eastward for twelve or fourteen leagues, as I had an opportunity afterwards of observing.

"The north bank, where we crossed it, seems admirably adapted for an agricultural settlement: it is there that the several roads diverge across the Cordillera to San Fernando, Curico, and Talca, in Chile; and to the south into the country of the Indians. We proceeded from thence towards the Planchon, along a succession of valleys rich in pasturage, but very bare of shrubbery: in several places we saw immense masses of gypsum, and passed a mountain from which is obtained an aluminous earth, much used in Chile as a pigment for dyeing. The pass of the Planchon is along the north shoulder of a lofty mountain, apparently composed of sonorous slaty strata. My barometer unfortunately got out of order before I reached the highest elevation; but, as vegetation extends to the top of the pass, it must be considerably lower than the passes of the Portillo and of Uspallata, on both of which all vegetation ceases long before reaching the higher points of the road. The descent from the Planchon is very rough, and in many places steep: at a distance of three leagues from the top we reached our resting-place, surrounded by luxuriant vegetation, and thence descended to Curico, along a valley with steep mountains on either side, and through a continuous thicket of lofty trees and shrubs, amongst which I may enumerate the Chilian cypress, the quillay, the canelo or cinnamon-tree, the caustic laurel, a variety of myrtles, a beautiful fascia, and others no less interesting.

"From Curico we went to Talca, a considerable town, and thence explored the river Maule, with a view to its capabilities for navigation. We returned by Curico to San Fernando, where we re-entered the Cordillera by the valley of the Tinguiririca to ascend the pass of Las Damas: the road was very similar to that we had previously descended from the Planchon to Curico; but, being much less frequented, it was in many places difficult and dangerous. In the upper part of this valley we examined some hot springs, the temperature of which reached 170° of Fahrenheit. Thence we were induced to devote two days to visit a volcano,—which was described to us as being in an active state,—about ten leagues distant: thither we proceeded by a most rugged and dangerous path, and reached within half a league of the summit, when so serious a snow-storm came on, that we had the mortification of being forced to return without accomplishing our object; nor had we any time to lose, for the snow had so completely obliterated all traces of the way, that our guide was completely lost, and, but for the observations I had taken with my compass, I know not how we should have got back at all. On reaching our mules again, the weather was so unpromising that we made all haste to recross the mountains, lest they should be closed against us by the heavy snow which was falling; this we happily accomplished, and three days brought us back again to the place where we had first crossed the Atuel river. After visiting the extensive saline lakes in that vicinity, from which the province is supplied with salt, we bent our way back to Mendoza.

"In this journey I had an opportunity I had long desired of examining on the Cordillera the plant from the root of which the natives of Chile obtain their admirable red dye."

Dr. Gillies, the writer of this letter, passed many years at Mendoza, where he recovered from a severe pulmonary affection, and was himself a striking instance of the beneficial effects of the climate under such circumstances. Botany was his favourite pursuit; but he did not confine himself to this, and never lost an opportunity of collecting useful information on every other point which fell under his notice.

His botanical acquisitions were, I believe, chiefly communicated to Professor Hooker, of Glasgow, through whom they were occasionally made known to the public. His collections of the ores of Uspallata and other parts of the Cordillera were given to the College Museum at Edinburgh. I am myself indebted to him for the best part of my information respecting the provinces of Cuyo. It was through him I obtained, amongst other curiosities from those parts, the very remarkable little animal which is figured in the annexed plate, and which is now in the collection of the Zoological Society of London. It has hitherto been only found in the provinces of Cuyo, and even there but rarely: it burrows in the ground, and in its habits somewhat resembles the mole, lying dormant during the winter months; the natives call it the Pichi-ciego. Dr. Harlan,

of New York, was the first to give an account of it, from an imperfect specimen sent to him from Mendoza; and he gave it the name of *chlamyphorus truncatus*.

European naturalists, however, doubted its existence till the point was settled beyond dispute by the arrival of my specimen, which fortunately was perfect, and in an excellent state of preservation. At the request of the council of the Zoological Society, Mr. Yarrell drew up a particular account of its osteology, which was published in the third volume of their Journal, and from which, with his permission, I extract the following observations upon its comparative anatomy.

"From the representation of the skeleton and its different parts it will be perceived that the *chlamyphorus truncatus* has points of resemblance to several other quadrupeds, but that it possesses also upon each comparison many others in which it is totally different.

"It resembles the beaver (*castor fiber*) in the form and substance of some of the bones of the limbs, in the flattened and dilated extremity of the tail, and the elongation of the transverse processes of the lower caudal vertebræ, but no further.

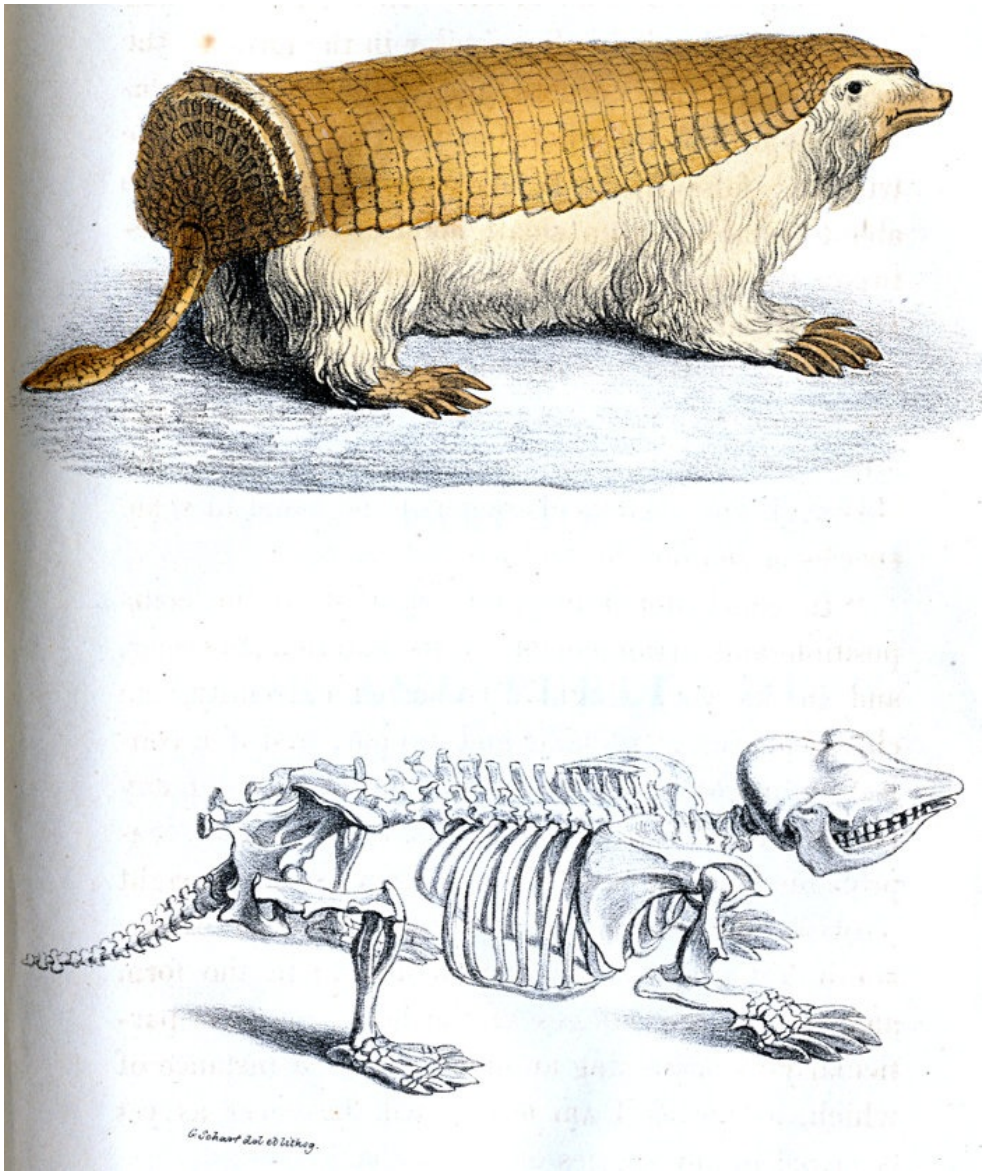
"It has much less resemblance to the mole (*talpa Europea*) than its external form and subterranean habits would induce us to expect. In the shortness and great strength of the legs, and in the articulation of the claws to the first phalanges of the toes, it is similar; but in the form of the bones of the anterior extremity, as well as in the compressed claws, it is perfectly different; nor do the articulations of the bones, nor the arrangement of the muscles, allow any of the lateral motion so conspicuous in the mole; the hinder extremities of the chlamyphorus are also much more powerful. It resembles the sloth (*bradypus tridactylus*) in the form of the teeth and in the acute descending process of the zygoma; but here all comparison with the sloth ceases.

"The skeleton of the chlamyphorus will be found to resemble that of the armadillo (*dasypi species plures*) more than any other known quadruped. In the peculiar ossification of the cervical vertebræ, in possessing the sesamoid bones of the feet, in the general form of all the bones, except those of the pelvis, as well as in the nature of the external covering, they are decidedly similar; they differ, however, in the form and appendages of the head, in the composition and arrangement of the coat of mail, and particularly in the posterior truncated extremity and tail.

"There is a resemblance to be perceived in the form of some of the bones of the chlamyphorus to those of the *orycteropus capensis* and *myrmecophaga jubata*, as might be expected in animals belonging to the same order. To the *echidna* and *ornithorhynchus* it is also similar in the form of the first bone of the sternum, and in the bony articulations, as well as the dilated connecting plates, of the true and false ribs. It becomes interesting to be able to establish even small points of similarity between the most extraordinary quadrupeds of New Holland and those of South America; that continent producing in the various species of *didelphis* other resemblances to the *marsupiata*. In the form of the lower jaw, and in other points equally obvious, the chlamyphorus exhibits characters to be found in some species of *ruminantia* and *pachydermata*.

"In conclusion I may remark that in the composition and arrangement of its external covering, and in its very singular truncated extremity, the chlamyphorus is peculiar and unique; and if a conjecture might be hazarded, in the absence of any positive knowledge of the habits of the animal, it is probable that it occasionally assumes an upright position, for which the fattened posterior seems admirably adapted. It is also unique in the form and various appendages of the head, and most particularly in possessing an open pelvis, no instance of which, as far as I am acquainted, has ever as yet occurred in any species of mammalia."

Since Mr. Yarrell's observations Dr. Buckland, in his description of the *megatherium*, has further pointed out the resemblances of the chlamyphorus to that fossil monster.



CHLAMYPHORUS.

2/3 the Natural Size.

FOOTNOTES:

[68] The word *Cuyo*, according to Angelis, in the Araucanian language signifies *arena*, or sand, which is the general character of the soil.

[69] The cactus, which is found in every variety throughout the province of Cuyo, abounds in the neighbourhood of San Luis, and the natives collect the cochineal from it, and make it into cakes, which they use in dying their ponchos.

[70] Although from June to December it is either wholly or partially covered with snow, I have seen it in the month of May wholly bare, when only a few days before there had been heavy falls of snow on the Cumbre, or central ridge, &c. I mention these facts to show that Tupungato cannot attain a higher level than that assigned to the limit of perpetual congelation, which in this latitude to about 15,000 feet, though, from the known height of the Cumbre, and its supposed elevation above the central ridge, I am disposed to conclude that its actual elevation cannot be far short of 16,000 feet (Miers).

[71] Dr. Gillies says where the Diamante joins it, it is called the Salado.

[72] In the more southern parts of the province, in the direction of the Diamante, corn may be grown without the labour and expense of artificial irrigation, the rains which fall there being sufficient to render it unnecessary.

[73] The dried fruits of figs, peaches, apples, nuts, olives, &c.

Between 300 and 400 mules were sold for Chile in the same year. The load or carga is equal to about 200 lbs.

[74] The mark is eight Spanish ounces, or seven ounces, three pennyweights, fourteen grains, troy, English. The caxon is fifty quintals, or 5000 lbs. of ore.

[75] According to Myen, a recent traveller, this part of the Cordillera is not so elevated as more to the south:—he says it is passable at several points of the province of Copiapo.

[76] These heights are given on the authority of Dr. Gillies.

[77] Zamudio, an officer in the service of Buenos Ayres, who examined it the year before M. de Souillac, is said to have actually passed it with a two-wheel cart. Dr. Gillies does not give so favourable an account of its present state.

PART III.
TRADE AND PUBLIC DEBT.

CHAPTER XV.
TRADE.

Advantages of the situation of Buenos Ayres in a commercial point of view. Amount of *Imports* into Buenos Ayres in peaceable times. From what Countries. Great proportion of the whole British Manufactures. Articles introduced from other parts of the World. The Trade checked by the Brazilian War, and subsequent Civil Disturbances. Recovering since 1831. Proportion of it taken off by Monte Video since its independence. Comparative view of *Exports*. Scarcity of Returns. Capabilities of the Country. Advantage of encouraging Foreigners. The Wool Trade becoming of importance owing to their exertions. Other useful productions which may be cultivated in the interior. Account of the origin and increase of the Horses and Cattle in the Pampas.

In a commercial point of view we have only to look at the map to be satisfied of the great importance of the geographical position of Buenos Ayres. From the Amazons along a line of coast upwards of 2000 miles in extent, the River Plate affords the only means of communicating with all those vast regions in the interior of the continent comprised between the Andes and the mountainous districts which bound Brazil to the west. Not only the provinces of the Argentine Republic and of Paraguay, but the now independent states of Bolivia and Peru, are as yet only accessible from the Atlantic through the Rio de La Plata.

If there is but little intercourse between these states at present, it must be ascribed to political causes alone, and to such confined and restrictive notions as are, perhaps, to be expected from governments in their infancy.

The people of Bolivia and the eastern districts of Peru, whose wants from Europe were formerly supplied through Buenos Ayres, are now under separate governments of their own, which seem anxious to display their commercial as well as political independence of their old connexions by endeavouring to force the trade through other channels more immediately under their own control; but, however desirous those governments may be, under present circumstances, to establish a direct intercourse with Europe through their own ports in the Pacific, and however well adapted those ports may be for the supply of the provinces upon the west coast of America, there can be no doubt, so far as regards all those which lie to the eastward of the Cordillera, that, whenever the intermediate rivers shall be navigated by steam, for which they are so admirably calculated, the people of those vast countries will be much more easily supplied with all they want from Europe by inland water-carriage direct from Buenos Ayres than by the present circuitous route round Cape Horn, and the subsequent expensive conveyance by mules across the sandy deserts of Atacama, and the precipitous passages of the Andes.

As these young states acquire some practical knowledge of their real interests, and advance in the science of political economy, it may be expected that they will naturally make such arrangements amongst themselves for an interchange of commercial advantages as cannot but prove to their mutual benefit. And what could be of more importance, either to Buenos Ayres or Bolivia, or the back provinces of Brazil, than the establishment of an internal communication with each other by means of steam-navigation?

In the mean time, however, the trade of Buenos Ayres is limited to the supply of the people of her own provinces. If I may so call those in more immediate political connexion with her,—the *soi-disant* republic of the Rio de La Plata.

In order to show what may be the extent of that trade in times of peace and domestic quiet, it is necessary to go some years back.

From 1821 to 1825 the Republic was in a state of comparative tranquillity, and the government of Buenos Ayres in the hands of a provincial administration, wise enough to see how mainly the prosperity and importance of their country depended upon the fostering of its trade, and the establishment of a commercial intercourse with the rest of the world upon the most liberal principles. It was during that interval of repose and prosperity that I first landed in Buenos Ayres, and found all classes of the people rejoicing in the blessings of peace.

All the information which it was my duty to collect tended to show the great commercial capabilities of the country, and the facilities afforded by Buenos Ayres as an emporium for the trade with a very great part of the population of the interior of South America.

From a variety of documentary evidence in confirmation of this, which was furnished to me at the time, both by the British merchants and by the local authorities, I shall in the first instance quote the returns for the year 1822, as exhibiting the nature and amount of the trade of Buenos Ayres under the circumstances of undisturbed peace to which I have referred—that is, the trade of Buenos Ayres independently of the supply of any part of Peru, Bolivia, or Paraguay.

And first, with regard to the import trade:—

From a return furnished by the custom-house at Buenos Ayres of all their imports from foreign countries in the year 1822, it appears that they amounted to 11,287,622 Spanish dollars, according to their official valuation, which, generally speaking, may be considered to be about twenty per cent. below the wholesale prices in the market.

This amount was computed to be made up from the several foreign countries as under, viz:—

1st.	From	Great Britain to. the value of	5,730,952
2nd.	"	France	820,109
3rd.	"	the North of Europe—Holland, Germany, Sweden, and Denmark	552,187
4th.	"	Gibraltar, Spain, and Sicily	848,363
5th.	"	the United States	1,368,277
6th.	"	Brazil	1,418,768
7th.	"	China	165,267
8th.	"	the Havana	248,025
9th.	"	Chile and Peru	115,674
		Spanish Dollars	11,267,622

of which about 1,323,565 dollars were afterwards reshipped for ports on the neighbouring coast of Brazil, Monte Video, Chile, and Peru.

The important proportion of the British trade in this statement is very manifest; it amounts in fact to as much as the trade of all other foreign countries with Buenos Ayres put together. Comparing it with the importations in the most liberal period of the Spanish colonial system, it is more than double the average value[78] of the whole yearly imports into the Vice-Royalty, for the supply, not only of the provinces immediately attached to Buenos Ayres, but of all Upper Peru and Paraguay, containing a population numerically threefold that of the present republic of the Provinces of La Plata.

At that period British cotton manufactures were unknown at Buenos Ayres; silks from Spain, and French and German linens, alone were in use, the high prices of which generally confined them to the rich, the poorer classes being miserably clad in the coarse manufactures of the interior. It is true that in some parts of Peru and Paraguay the native manufactures were brought to some perfection, but it was by so tedious a process, that if they reached any degree of fineness they were rather articles of luxury and curiosity than of any advantage to the people at large for their domestic purposes. But when the port opened, and British manufactures became known, the low prices at which they were sold at once occasioned a great and general demand for them, and this has gone on yearly increasing, till, amongst the country population especially, the manufactures of Great Britain are become articles of primary necessity. The gaucho is everywhere clothed in them. Take his whole equipment—examine everything about him—and what is there not of raw hide that is not British? If his wife has a gown, ten to one it is made at Manchester; the camp-kettle in which he cooks his food, the earthenware he eats from, the knife, his poncho, spurs, bit, all are imported from England.

I am tempted here to go further, and to ask, who enables him to purchase those articles? who buys his master's hides, and enables that master to employ and pay him? who but the foreign trader? Stop the trade with foreign nations, and how long would it be ere the gaucho would be reduced to the state of the Indian of the pampas, fed on his beef and horse-flesh, and clothed in the skins of wild beasts? I put the question to those people in Buenos Ayres, for there are still some such there, who continue to look with jealousy on foreigners, and would fain have the lower orders believe that the country has been ruined since they were allowed freely to come amongst them.

To return, however, to our subject. By far the greatest part of the British imports into Buenos Ayres consist of the plain and printed calicoes and cloths, which, as I have just stated, are become of the first necessity to the lower orders in this part of South America: the cheaper we produce them, the more they will take; and thus it is that every improvement in our machinery at home, which lowers the price of these manufactures, tends to contribute (we hardly perhaps know how much) to the comforts of the poorer classes in those remote countries.

In the sale of most of these articles no other foreign country can compete with Great Britain, from the low cost of their production; and as to any native manufactures, it would be idle to think of them in a country as yet so scantily peopled, where every hand is wanted, and may be turned to a tenfold better account, in augmenting its natural resources and means of production, as yet so imperfectly developed.

Besides our cotton, linen, woollen, and silk manufactures, we also send to Buenos Ayres considerable quantities of ironmongery and cutlery, coarse and fine earthenware, glass, foreign brandies and wines, and a variety of other articles, the nature and value of which, in detail, is fully exhibited in the general return given in the Appendix of the principal articles of British growth and manufacture which have been exported from this country to the River Plate in all the several years from 1830 to 1837 inclusive.

The total amount of the produce and manufactures of the United Kingdom alone (exclusive of foreign and colonial produce), exported direct from Great Britain to the River Plate to the last sixteen years, has been as follows:—

Year.	Declared Value.	Observations.
1822	£981,047	Years of peace; average £909,330.
1823	664,436	
1824	1,141,920	
1825	849,920	
1826	371,117	Buenos Ayres blockaded by the Brazilians.
1827	154,895	
1828	312,389	
1829	758,540	Average from 1829 to 1837, £643,291.
1830	632,172	
1831	339,870	
1832	660,151	
1833	515,362	
1834	831,564	
1835	658,525	
1836	697,334	
1837	696,104	

To these amounts may be yearly added about £40,000 more for the value of foreign and colonial produce sent direct from Great Britain.

This will give some idea of the general nature and amount of our direct trade with the River Plate, and it will be evident how mainly Great Britain contributes to all the essential wants, as well as domestic comforts, of the people of that part of the world.

The trade of *France* is different;—whilst we administer to the real wants of the community, France sends them articles rather of luxury than necessity, such as superfine cloths and linens, merinos, cashmeres, silks and cambrics, lace, gloves, shoes, silk stockings, looking-glasses, fans, combs, jewellery, and all sorts of made-up finery.

In 1822 it has been shown that the imports into Buenos Ayres from France were calculated to amount to 820,109 Spanish dollars, or about 164,022*l.* sterling. By official returns since published in the latter country it appears that, from 1829 to 1836, the imports and exports were as follow, calculated in English sterling, viz.:—

Year.	Exports from France.	Imports from the River Plate.
1829	£184,732	£182,861
1830	69,378	155,838
1831	92,675	128,732
1832	187,486	186,100

1833	201,348	187,053
1834	154,219	234,116
1835	178,766	215,809
1836	231,373	198,787

From *Germany* and *Holland* the imports, generally speaking, are of a more substantial kind again. German cloths and linens, and printed cottons from the Rhine, were at one period introduced in considerable quantities. A branch of the Rhenish Manufacturing Company was set up in Buenos Ayres in 1824, for the sale particularly of the latter articles, and the low prices at which, for a time, they were sold threatened to interfere with the demand for similar goods of British manufacture; it turned out, however, that the prices in question did not remunerate the company, and the establishment, not answering, was broken up:—the German printed cottons have been quite driven out of the field by British goods of the same description.

From the *Netherlands* arms, especially swords and pistols, are brought; and *Holland* sends gin, butter and cheese, and Westphalia hams, for all which there is a large demand amongst the natives. This trade is chiefly from Antwerp, which is the principal market for the sale of the Buenos Ayrean hides on the continent.

The importations from the *Baltic* consist of iron, cordage, canvas, pitch and tar, and deals.

The *Mediterranean* trade is principally in Sicilian and Spanish produce, of which the most important items are the cheap red wines of Sicily, the common wines of Catalonia, brandies, olive oil, maccaroni, and dried fruits, and used to be chiefly carried on in British shipping, and through British houses at Gibraltar:—latterly, however, a great part of these importations have been in Sardinian vessels, from twenty to thirty of which now visit Buenos Ayres annually, instead of three or four, as was the case ten years ago; in amount this trade is fully equal to that from France, or from the north of Europe. Had Spain at an earlier period recognised the independence of the new states, she, instead of foreigners, would undoubtedly have reaped the advantages of this trade. Nor would this have been all: the habits of the people, the customs they had been brought up in, not to speak of international ties and connexions,—all would have most forcibly tended to an active commercial intercourse between her *ci-devant* colonies and Spain, which would have been of vast importance to the latter:—as it is, she has waited till those habits, and customs, and ties have passed away, and till a new race has grown up destitute of those kindred feelings which naturally animated the last generation, if not hostile to her from the disastrous effects produced by her long and obstinate refusal to recognise their political existence.

Spain must now take her chance in competing with other nations, with the disadvantage of being the last in the field. The cheapness, however, of her wines will always ensure a large demand for them, especially the common red wines of Catalonia. There is also still some demand for Spanish serges, and silks, and velvets, the sewing silks of Murcia, and Spanish snuff; but, as most of these articles can be imported from France of as good quality, and at lower prices, the sale of them is very limited:—great quantities of paper also were formerly introduced from Spain, but it is now brought from other countries, especially from Genoa, of a quality which is preferred, and at lower prices. The annual importation of Spanish and Sicilian wines is from 10,000 to 12,000 pipes, and about 1000 of brandy.

The trade with the *United States* was long a very unnatural one, the principal article of import from thence being flour, of which the average importations for several years amounted to above 50,000 barrels.

It is not, perhaps, to be wondered at that the larger profits of cattle-breeding should for a time have superseded the pursuits of agriculture, but the inconvenience and evils of an habitual dependence upon any foreign country, particularly upon one at such a distance as North America, for the daily bread of a whole population, became at last so manifest that the legislature found itself called upon to interpose to put an end to it, and to pass such enactments as were necessary to foster and protect the agricultural interests of the native proprietors. The consequence has been that the province of Buenos Ayres, which is capable of producing as good wheat as any country in the world, has again commenced growing not only a sufficiency for the consumption of its own population, but for exportation; and in the last two or three years both flour and corn have been articles of shipment from the River Plate, chiefly to Brazil.

If we except the flour, the principal articles of import from the United States for several years were the coarse unbleached cloths of their own manufacture, called "domestics," of which, for a time, very large quantities were sent to the Spanish-American markets; indeed the very low prices at which these goods were long sold brought them into great demand in almost every part of the world where they were admitted, although now, I believe, like the printed goods from Germany, they can with difficulty compete with similar manufactures made at Manchester. Their other imports into Buenos Ayres consist of spirits, soap, sperm candles, dried and salted provisions, tobacco, furniture of an ordinary though showy description, and deals.

From the returns laid before Congress it appears that the amount of the direct trade between the United States and the river Plate from 1829 to 1836 was as follows, calculated at the rate of five dollars per pound sterling:—

Year.	Exports from the United States.	Imports from River Plate.
1829	£125,210	£182,422
1830	125,977	286,376
1831	131,956	185,620
1832	184,608	312,034
1833	139,945	275,423
1834	194,367	286,023
1835	141,783	175,723
1836	76,986	210,700

Besides their direct trade, the North Americans have at times found a profitable employment for their shipping in carrying Buenos Ayrean produce (jerk beef) to the Havana, and in the coasting trade between Brazil and the River Plate, though the latter is now for the most part taken out of their hands by the Brazilians themselves, who of late years have become the carriers of their own produce.

This trade (with *Brazil*) has been even more disadvantageous to Buenos Ayres than that with the United States. The only article of native produce to any amount which Brazil takes from the River Plate is the jerk beef; whilst there is hardly an article of Brazilian produce sent there which might not be grown within the republic itself. The tobacco, the sugars, the coffee, and the rice sent from thence, might all be produced in any quantity in the northern provinces of La Plata:—even the yerba-maté, or Paraguay tea, once so fruitful

a source of profit to the Vice-Royalty of Buenos Ayres, is now introduced from the southern provinces of Brazil. It is true that Paraguay Proper, where the greater part of it was grown, has been closed for some years, but there is no reason why it should not have been cultivated in Corrientes or the Missions with just as much success as in the Brazilian province of Rio Grande:—as it is, owing to the inferior method of preparing it, the Brazilian yerba-maté is not equal to that of Paraguay, and its use is, in consequence, very much confined to the lower orders, whilst the higher classes are imbibing a very general taste for the teas of China as a substitute.

The imports from *China*, which appear in the account quoted at page 337, consisted of assorted cargoes of teas, silks, crapes, nankeens, wearing-apparel, tortoise-shell for ladies' combs, earthenware, matting, and a variety of minor articles, introduced principally on British account, though under the American flag, in consequence of our own restrictive regulations not allowing at that time the employment of British shipping in such a speculation. Cargoes of a similar description have since occasionally been introduced, but I believe it has been found to answer better to import the articles into Buenos Ayres as they may be wanted, either from the United States, or from Rio de Janeiro, or from England, than to freight ships expressly to introduce cargoes direct from China. A certain quantity of Chinese goods will always find a ready sale in the Buenos Ayrean market.

The *Havana* trade has been an important one to Buenos Ayres. Besides large shipments of mules which are sent there, it takes off the greatest portion of the jerk beef made in the country. It is used there and in Brazil as an article of food for the slave population; and the method of preparing it having of late years been greatly improved, there is a constant and increasing demand for it. If permitted to be equally imported into the British West India colonies it would probably find a large sale amongst the same class of persons. I have been given to understand that the best quality might be delivered there under twopence a-pound, allowing for a moderate duty:—its wholesomeness may be estimated from the fact that, during the prevalence of the cholera a few years back at the Havana, it was observed there was a much less mortality among the slaves fed upon jerk beef than on those plantations where they were kept on other diet.

With respect to the trade with *Chile* and *Peru*, it is of very trifling importance, and, whenever it has been otherwise, has mainly consisted of re-exports from Buenos Ayres of surplus stocks of European goods, for the favourable sale of which there may have been an occasional opening in the ports of the Pacific. There is no sale for Buenos Ayrean produce on the western coast, since the stoppage of the supply of yerba-maté, of which, in old times, an immense quantity was sent across the Andes to Chile and Peru, and paid for in the precious metals.

From 1821 to 1826 the trade between Buenos Ayres and foreign countries underwent little change, but the breaking out of the war with Brazil then interrupted it, and for nearly three years Buenos Ayres was blockaded by the naval forces of the Emperor, during which time the only foreign goods imported were by such few vessels, chiefly North American, as broke the blockade:—hardly was that war concluded, when the troops returning from the Banda Oriental, elated with their successes against the Brazilians, revolted, overturned the government, and threw the whole republic into confusion; in the long struggle to put them down which ensued, the country population, taking part, abandoned their industrious pursuits, amongst the consequences of which were a loss and destruction of property infinitely greater and more ruinous to the nation than all the waste and cost of the war with Brazil. Public confidence was shaken to its foundation, and, although it is true that, after a time, the constitutional authorities were re-established, it was at an enormous sacrifice of public and private wealth.

The commercial interests of the community were greatly depressed by these events. When the blockade of the river was raised at the close of 1828 there had been by no means such an influx of foreign goods as might have been expected; and, when civil dissensions shortly afterwards broke out, it was evident that the mercantile houses in Buenos Ayres had suffered too severely from the consequences of the war, and the ruinous depreciation of the currency, to encourage their correspondents in Europe to recommence extensive speculations in a country which, to all appearance, was destined to be sacrificed to the passions of contending factions.

Whilst the republic was grievously suffering from these evils, the results also of the newly constituted independence of the Banda Oriental began to develop themselves in a manner very detrimental to the interests of Buenos Ayres.

So long as Monte Video was in the hands of the Portuguese, its trade was extremely insignificant; but no sooner was it freed from that yoke than the people began to turn to account their local advantages, and in a way which it soon became manifest would greatly interfere with the trade of their old metropolis. In proportion as the domestic embarrassments of Buenos Ayres increased, and led that government to raise its duties on foreign trade, so the Monte Videans lowered theirs, and offered advantages which were irresistible in the adjoining provinces, where the duties levied by Buenos Ayres on foreign goods had always been considered a grievance, and where there was no national feeling strong enough to induce the petty authorities to forego their own separate interests in order to aid in sustaining the honour and credit of the capital.

Monte Video has in consequence become a sort of entrepôt for the supply of those provinces, as well as of a portion of the neighbouring Brazilian population in the Rio Grande; and to such an extent, that the importations of foreign goods there were valued at no less than 3,000,000 in 1835, and had reached 3,500,000 hard dollars in 1836; whilst the exports were nearly equal in amount, and now constitute an important proportion of the returns in the general account of the trade with the River Plate.

The amount of the imports into the port of Buenos Ayres has been diminished in proportion. In 1837 they were barely equal to 7,000,000 hard dollars, according to the official valuation, being a falling off of nearly a third from what they were before the war with Brazil.

Making allowances for this difference in its course, the foreign trade with the River Plate has varied little in its general amount for the last five years.

So far as regards the British trade, although there may appear to be a diminution in the *value* of our exports to the River Plate, as compared with what they were in the years immediately preceding the war between Buenos Ayres and Brazil, it will nevertheless be found upon analysis that there has been a large increase in the *quantity*, especially of our most important manufactures, viz., the cottons, the *quantity* of which now sent to the River Plate is double what it was in 1825, though the total declared *value* has only increased in the proportion of from about 350,000*l.* to 400,000*l.*, the apparent discrepancy being accounted

for by the greatly reduced rate at which we can now afford to sell these goods; in the linens there is also an increase; in the woollens there is, on the other hand, a slight falling off; the silk goods sent out have varied very little in value, but their amount was never of any importance.

The following is an account, taken from the custom-house returns, of the average *quantities* of these several descriptions of goods sent to the River Plate in the four years from 1822 to 1825, inclusive, compared with the last four years from 1834 to 1837, inclusive:—

		Average Quantity from 1822 to 1825, inclusive.	Average Quantity from 1834 to 1837, inclusive.
Cottons,	yards	10,811,762	18,151,764
Linens,	do.	996,467	1,176,941
Woollens	pieces	40,705	30,428
	yards	139,037	100,183
Silks,	value	£16,612	£15,047

Upon the whole, the River Plate has been decidedly the most important of all the markets which have been opened to us for the sale of British manufactures in Spanish America. It takes off a much larger quantity of them than either Mexico, Columbia, or Peru; and although it would appear on the face of the official returns that of late years an equal or rather larger amount has been sent to Chile, the truth is, that a considerable part of those shipments were in reality destined for the southern ports of Peru, and the west coast of Mexico.

A comparative account of our exports to all those several countries during the last nine years will be found with the other returns of trade in the Appendix, and will show the relative and aggregate amount of British produce and manufactures taken by the new states during that period.

The average yearly value of them sent to the River Plate in the last five years amounted to £680,000.

EXPORTS.

The nature of the *export-trade* from Buenos Ayres may be generally gathered from the following summary, or comparative valuation of the exports from thence in 1822, 1825, 1829, and 1837; though, being taken from the Buenos Ayrean custom-house accounts, some allowance must be made for short manifests by the shippers, perhaps an addition of twenty per cent. to the amount officially accounted for in each year. The returns of specie and bullion exported are especially liable to this observation.

Comparative Return and Valuation of the principal Articles Exported from Buenos Ayres in the years 1822, 1825, 1829, and 1837.

	1822.			1825.			1829.			1837.		
	Quantity.	Price. Dollars.	Value. Dollars.	Quantity.	Price. Dollars.	Value. Dollars.	Quantity.	Price. Dollars.	Value. Dollars.	Quantity.	Price. Dollars.	Value. Dollars.
Spanish Dollars	474,633	—	474,633	1,272,745	—	1,272,745	189,581	—	189,581	258,748	—	258,743
Marks of Silver	84,690	at 8	677,520	10,559	at 8	89,751	12,699	at 8	101,592	4,881	at 8	39,048
Gold (ounces)	12,020	17	204,340	10,625	17	180,625	24,595	17	418,115	21,999	17	373,983
Gold (uncoined)	—	—	—	—	—	6,000	—	—	13,667	362	—	6,154
Copper (quintals of 100 lbs.)	145	16	2,321	175	16	2,800	—	—	—	—	—	—
Ox-hides	590,372	4	2,361,488	655,255	5	2,621,020	854,799	4	3,419,196	823,635	4	3,294,540
Horse-hides	421,566	1	421,566	339,703	1	339,703	64,563	1½	96,844	25,367	1½	38,046
Jerk Beef (quintals)	87,663	4	350,652	130,361	4	521,444	164,818	2	329,638	178,877	2½	446,192
Horns	673,000	70 per mil.	47,110	1,553,880	60 per mil.	93,228	1,500,905	60 per mil.	90,000	434,456	60	26,070
Horsehair (arobes of 25 lbs.)	38,137	3	114,411	44,776	3	134,028	26,682	3	110,046	70,372	3	211,116
Sheeps' wool (arobes)	33,417	1	33,417	—	—	—	30,334	1	30,334	164,706	2	329,412
Chinchilla skins (dozens)	9,077	4	36,308}	35,670	5	178,350	6,625	5	33,125	3,317	4	13,268
Nutria skins (dozens)	9,914	3	29,742				59,756	3	179,268	51,853	2½	129,632
Tallow (arobes)	69,400	2	124,800	12,167	1½	18,250	21,757	3	65,271	100,249	1½	150,373
Bark (lbs.)	5,824	½	2,912	5,879	½	2,939	—	—	—	—	—	—
Cotton (arobes)	—	—	—	2,000	2½	5,000	968	2	1,936	160	3	480
Sheep-skins (dozens)	—	—	—	—	—	—	—	—	—	56,188	2½	140,470
Flour (fanegas)	—	—	—	—	—	—	—	—	—	14,069	4	56,268
Corn (do.)	—	—	—	—	—	—	—	—	—	4,150	3½	14,525
Sundry Minor Articles	—	—	118,780	—	—	84,117	—	—	121,387	—	—	108,818
Totals	Value of Precious Metals	1,358,814	5,000,000	Precious Metals	1,551,921	5,550,000	Precious Metals	722,955	5,200,000	Precious Metals	677,928	5,637,138
	" Native Produce	3,641,156		Native Produce	3,998,079		Native Produce	4,477,045		Native Produce	4,959,210	

The annual account of the imports and exports, continuing to take the year 1822 as an example, may perhaps be generally stated as follows:

		Dollars.
The imports for that year, as stated at page 337 (less those re-exported), were valued at		9,944,057
From the gross value of the imports about 30 per cent. must be deducted for duties, landing charges, commission, guarantee of debts, and warehouse rent, say		2,983,217
		6,960,840
The exports are estimated at	5,000,000	
Add for short manifests	1,000,000	
For charges, 10 per cent.	600,000	
		6,600,000
		360,840

This difference, which upon the whole was of little importance, was at once accounted for by the investments of foreign capital in the purchase of every kind of property in the country previously to the war with Brazil.

Although foreigners, as has been already observed, were heavy sufferers by the events of that war, the country was benefited in a way which could hardly have been foreseen. In the impossibility of making returns to Europe during the continuance of the blockade, the greater part of the large amount of foreign property locked up in it was laid out in cattle-farms, agricultural establishments, saladeros (where the *jerk* beef is made), houses, and a variety of speculations, the general tendency of which was greatly to improve the real resources of the country. Thus, although upon the whole there was afterwards apparently a falling off in the foreign trade of the port of Buenos Ayres compared with what it was before the war, there was in reality an increase in the quantities of the staple commodities of the country brought to market.

This was encouraging, inasmuch as it is in proportion to the increase and multiplication of the native productions that we must look for the stability and improvement of this trade—the great difficulty being to collect returns for the importations from foreign countries. Hides and skins have been till lately the only articles of any importance obtainable, though it is manifest that the country is highly capable of producing a variety of other articles of great value in a commercial point of view.

Had the provincial governments been sufficiently settled, and the state of the laws in the interior been such as to have afforded any adequate security to foreigners, intelligent men would doubtless long ago have resorted to those parts, and would have given a stimulus to the industry of the native population; for it is to such persons the natives must look to teach them to what account the productions of the soil and climate of the interior of South America may be turned in other countries, as well as how they should be prepared for those markets. Foreigners would soon show them new sources of wealth, and give value to those which have hitherto been neglected or unknown. To them also the natives must look for the introduction of machinery, which may in some measure compensate for the want of hands, which at present makes labour dear, and deprives them of a hundred comforts and conveniences in the commonest use in the civilised countries of Europe. It would be folly to disguise that these new countries are in the very infancy of civilisation; studiously brought up by the mother-country in entire ignorance of all that could teach them their own value and importance, no wonder they now have all to learn.

When I state that in many of the towns of the interior a common wheelbarrow is as yet unheard of, that in the capital itself the first pump ever seen in a private house was put up a very few years ago by an Englishman, it will easily be understood how much the natives have yet to gain by the settlement amongst them of the intelligent mechanics and artificers of more civilised countries. Still greater will be the importance to the community if foreign capitalists should find sufficient encouragement and protection to fix themselves in the country.

The province of Buenos Ayres, as contrasted with the interior, has strikingly exhibited the fruits of a more liberal policy towards foreigners; and could the practical administration of the new laws keep pace with their spirit, and with the general desire amongst the people for improvement, the consequences would be still more apparent. As it is, Buenos Ayres is at least a century in advance of the provinces in general knowledge and civilisation, and her wealth and importance have increased in proportion. Amongst other improvements which she owes to foreigners, she is indebted to some enterprising Englishmen for the introduction of late years of a new source of wealth, which bids fair to rival in importance the most valuable of her old staple commodities.

It is but a few years ago that the wool of the Buenos Ayrean sheep was hardly worth the expense of cleaning it; and as to the meat, I doubt whether the wild dogs would have touched it. It is well known that their carcases, dried in the sun, were used for fuel in the brick-kilns. The great pains and persevering exertions, however, of some intelligent foreigners to introduce and cultivate a better breed has met with a success beyond all expectation, and now promises to be of the greatest importance to the future commercial prospects of the country. The rapid increase in the value of this article of production will be shown by the following comparative account of the quantities which have been imported into Great Britain alone in the last eight years:—

Imports of Wool from Buenos Ayres.

	lbs.	
1830	19,444	269,190 lbs.
1831	12,244	
1832	30,359	
1833	207,143	
1834	1,099,052	5,343,319 lbs.
1835[79]	962,900	
1836	1,073,416	
1837	2,207,951	

Mr. Sheridan and Mr. Harratt are the individuals to whom Buenos Ayres is principally indebted for this new source of wealth: the greater part of the wool sent to England in 1834 was of their production, and sold at Liverpool at very high prices compared with those obtained for the old native wools of the country, the quality of which comes perhaps nearest to the low Scotch wools, and is only suited for carpeting, and other strong descriptions of goods. In a country where any quantity of land applicable for the purpose may be had almost for nothing, it is impossible to calculate to what extent the breeding and improvement of sheep may be carried, now that the wool is known to fetch a remunerating price in foreign markets.

Nor is wool the only raw material for our manufactures which we may expect to derive from Buenos Ayres. In my notices of the interior I have stated that in Paraguay and some of the Upper Provinces, especially

Corrientes, cotton of a quality equal to the average of that of Brazil is produced:—this has been often satisfactorily shown by samples sent to Liverpool. The natives cultivate it and make cloths of it for their own domestic purposes; and we shall probably obtain large quantities of it whenever foreigners shall enjoy such security as may induce them to carry into the interior the machinery necessary to clean and pack it for the markets of Europe.

From the same part of the Republic, as well as from several of the Upper Provinces, any quantity of indigo may be obtained, of an excellent quality. M. Bonpland, the celebrated naturalist, who has spent so many years in those parts, took the trouble years ago to draw attention to the peculiarity of the indigo found in the province of Corrientes. Speaking of those parts called the Missions, he says, "The whole of this country exceeds description; at every step one meets with things both new and useful in natural history. I have already collected 2000 plants, a large quantity of seeds, &c.

"Amongst the number of interesting plants to which my attention has been called, I am of opinion that this country may hereafter derive great advantages from the three new species of indigo which I have found in these fertile regions. They are very different from the plant from which the indigo is obtained in Mexico, Venezuela, Brazil, and India; and I flatter myself that the South Americans will avail themselves of this discovery, and cultivate a plant which has hitherto been disregarded under the common name of *yuyo*. The superior quality of indigo that may be obtained from this newly-discovered plant, and the facility of its conveyance down to a port of shipment, render it an object of great importance to a country that has only a few exports, and its cultivation, if encouraged by the government, and undertaken by capitalists, will in a few years furnish an interesting and staple commodity for trade."

This account of the Corrientes indigo was copied from the Buenos Ayrean papers into the Annual Register for 1822, together with the following remarks on some other of the natural resources of the provinces of La Plata, which seem well deserving the notice of those interested in the trade with that part of the world:—"there are many other natural resources of the country to which the attention of the government of Buenos Ayres ought to be called. The *seda silvestre*, a sort of wild silk left in the woods by a certain caterpillar, is found abundantly on the banks of the Paranã, and would constitute a valuable export. Very good cochineal may be gathered in Tucuman, besides a great quantity of bees'-wax.

"The *rubia tinctoria* is found in many of the extensive forests, but the best is in Tarija, the Chaco, and the Sierra de Cordova; it yields a brilliant colour. It was not till within these few years that notice was taken of a new mode of dyeing a green colour from a production called by the Spaniards *clavillo*, from its resemblance to a little nail. Some persons consider it to be the excrement of a certain insect smaller than the cochineal; others believe it to be the insect itself. Hitherto it has only been gathered in Carquejia, and the point is found introduced into the bark of a shrub; it was first used by the poor people of the country, and it has since been proved by repeated experiments that the Vicuña and Alpaca wools, as well as cotton, after being prepared with astringents, such as alum, and previously boiled in a yellow dye, when thrown into a solution of clavillo, acquire a beautiful green colour; the shade of this simple is in itself greenish, and by keeping grows darker: abundance of it is found in the valley of Catamarca and province of Tucuman, but as yet no scientific experiments have been made with it."

A variety of valuable gums and medicinal balsams may be had from Paraguay, of the efficacy of which marvellous stories are related by those who have resided in those regions. The tree producing caoutchouc is found in abundance about the rivers in the upper part of that province, where the Indians have long known its value, and use it as a substitute for candles: the children make balls of it to play with. They obtain it by making an incision in the tree, from which the gum is run into a hide placed beneath to catch it, and when cold is wound upon large balls for use.

In addition to these, I may mention nitrate of soda, so much used now in our cotton manufactories, which may be procured in any quantity from the provinces of La Plata;—as yet, I believe, not a single bag of it has ever been brought from Buenos Ayres, although there is no reason why it should not be imported from thence at as low a cost as from Chile and Peru; from which countries alone, of late years, the annual importations have been from 50,000 to 100,000 cwt.

War in Europe will always create an increased demand for the produce of such a country as Buenos Ayres. In the last years of the general war, not only was there an enormous demand for the hides of Buenos Ayres, but considerable quantities of tallow also were shipped from thence; and, although those shipments ceased to answer when the Russian markets were reopened, they may always be calculated upon again should any stoppage take place of our ordinary supplies through the Baltic. At present, though Buenos Ayrean tallow is worth as much as Russian in the English markets, there is no great quantity of it produced, in consequence of the animals being killed for their hides as soon as they are marketable, which is before they yield tallow in any quantity worth collecting.

Corn also was an article of export from Buenos Ayres during the general war in Europe, and is again beginning to be exported to Brazil—as is shown by the account of the exports in 1837. It is of an excellent quality, and might be grown to any extent.

Mules, horses, and asses have at times been shipped in large numbers for the West Indies and for the Isle of France, and have been sold there at an enormous profit.

In the short notices given of the provinces of the interior, I have given such accounts of any other of their native productions as I could collect. The silver and gold mines of Cordova, La Rioja, Mendoza, San Juan, and Salta, may eventually become productive; and, when an intercourse is once more permitted with Bolivia through the interior, it may be expected that some portion of the precious metals produced there also will, as formerly, find their way to Buenos Ayres.

In old times, not only were the rich and populous provinces of Bolivia exclusively supplied through the Rio de la Plata with all such articles as they wanted from Europe, but they took from the lower provinces a variety of useful productions of their own, for all which they paid in gold and silver. Of mules alone upwards of 60,000 were annually sent to Potosi from the provinces of Tucuman and Santa Fé.

This internal trade, once of so much importance to the people of the intermediate provinces, was annihilated in the struggle for establishing the independency of the Republic; for, Bolivia remaining to the last in the hands of the Spaniards, of course all commercial intercourse was prohibited with the provinces of La Plata, which had thrown off the yoke of the mother-country. To this may be ascribed in great measure the extreme poverty and backwardness of many of those provinces at the present day. Salta, Tucuman, Cordova, Santa Fé, and Paraguay, lost the best markets for their native produce; whilst the people,

dragged from their pastoral and agricultural pursuits in the first instance to fight against their old masters, and afterwards to destroy one another in support of the ephemeral authorities which succeeded them, naturally contracted such unsettled and disorderly habits as it will require many a year of domestic peace and better government to wean them from. To time, and a continuance of those blessings, as I have elsewhere said, we must, I believe, look for the remedy of these evils, and for any material improvement in the condition of the interior provinces of the republic.

HORSES AND CATTLE.

In connexion with what I have said upon the trade of Buenos Ayres, a brief notice of the origin and extraordinary increase of the vast herds of horses and cattle which at present constitute so large a portion of the riches of Buenos Ayres, may perhaps be not uninteresting to some of my readers.

America is indebted to Europe for these animals, which were unknown to the people of the New World before its discovery by the Spaniards. Of the two it will easily be understood that the horses, which formed so important a feature in the military equipment of the conquerors, were the first introduced. In 1535, the Adelantado Mendoza, who was the first to effect a landing at Buenos Ayres, took seventy with him on board the expedition which accompanied him from Spain, of which perhaps half were lost on the voyage, if we may judge from the small number of cavalry—one author says twelve, another thirty—which he was able to muster in his first battle with the Indians. The few that survived, when his followers were shortly afterwards driven out of that part of the country by the warlike natives, were turned loose into the pampas, where they multiplied exceedingly, and were found in great numbers forty years afterwards by De Garay, when he re-established the Spanish settlement at Buenos Ayres.

It was in that expedition (in 1580) that De Garay carried from Paraguay the first horned cattle ever seen in the pampas. How the stock had previously reached Paraguay is thus told by Dean Funes, the native historian. He says, "In 1555 there arrived at Assumption, from San Francisco, on the coast of Brazil, a few straggling emigrants, amongst whom were two Portuguese gentlemen, brothers, of the name of Goa, having with them a bull and eight cows, the origin of that mighty stock of cattle which now forms the wonder of the provinces of La Plata." The Portuguese servant intrusted with the important charge of these animals in their long over-land journey from the coast, whose name was Gaete, was rewarded for his care of them with one of the cows, a payment thought so much of at the time, that it gave rise to a saying still in use in those parts—"Es mas caro que las vacas de Gaete" ("Dearer than Gaete's cows").

But the value then set upon all European animals carried to America was enormous, as well it might be when the difficulties are considered of safely transporting them in the crazy and inconvenient shipping of those days. In Peru, in the same year (1555), so highly were horses prized, that it was thought worth recording in the public archives of Cuzco that 10,000 dollars had been refused for one offered for sale;—in that city a boar and sow, about the same time, were sold for 1600 dollars, and European sheep and goats fetched prices nearly as high.

Of the cattle carried by De Garay to Buenos Ayres it was not long before some escaped into the territory of the Indians, where they increased and multiplied, as the horses had done before. The settlers were too few, in the first instance, to domesticate more than were necessary for their own immediate wants, neither was the extent of their lands, for some time, adequate to the maintenance of any considerable stock; the cattle, therefore, ranged at liberty in the Pampas, and, though occasionally hunted down by the Spaniards for the hides, or by the Indians for food, the destruction was as nothing compared with the prodigious increase which went on:—they also found their way into the Banda Oriental, probably from Paraguay, where they multiplied even faster than in the Pampas, from the better quality of the pasturage and the more constant supply of water; and here it was that the illicit trade established by the Portuguese appears first to have awakened the Spaniards to a notion of the future importance of these animals.

The vicinity of their establishment at Colonia, immediately opposite to Buenos Ayres, not only facilitated their smuggling across it the European goods and tobacco and slaves which were wanted, but made it a convenient station for collecting from the Spaniards the hides for which they were but too glad to find any sale under the restrictions then imposed upon all trade. The Portuguese took good care to buy them only at such low prices as insured them an enormous profit upon their exportation for other markets; but the speculation answered to both parties, and as the contraband trade of the Portuguese with Buenos Ayres increased, so we find did the cattle establishments of the Spaniards in the Banda Oriental.

Cargoes of hides were occasionally shipped for Spain, particularly after the Spaniards founded Monte Video, in 1726; but the demand was far from equal to the production, and the stock of cattle went on gradually increasing till the partial opening of the colonial trade in 1778. At that period the cattle had reached an amount which, perhaps, has never been equalled at any subsequent period, but the increased demand for country produce which then took place was well nigh exterminating the whole stock. In 1783 no less than 1,400,000 hides were officially registered for exportation, besides a vast number clandestinely shipped.

Superabundance also led to waste to an enormous extent; a gaucho would kill an ox for the tongue, or any other part of the animal he might fancy for his dinner, and leave the rest of the carcase to be devoured by the vultures, or by the wild dogs which swarmed in the country, and destroyed an incredible number of the young cattle. Little respect was then paid to this description of property, and the peons were easily bribed to kill their masters' or their neighbours' cattle to barter their hides for the tobacco and spirits offered to them by the peddling traders who wandered over the country to collect them.

The government was obliged, at last, to take strong measures to stop these evils:—they enacted heavy penalties on those found destroying or selling what did not of right belong to them; whilst, for the better identification of property, every proprietor was obliged, by a given day, to brand his cattle with his own particular mark:—all beasts found without a mark after that time were declared to be the king's, and the right to seek for and seize them was sold to or farmed by individuals. Proprietors were obliged to take out licenses to sell their hides, and the slaughter of cows and calves was entirely prohibited. War, also, to extermination, was declared against the wild dogs.

These regulations, however feebly enforced, were not without effect:—the protection, at any rate, which they promised to property was enough to induce the people to extend their cattle establishments, whilst their own experience, after a time, led them to regulate their annual sales in more due proportion to their stocks.

The annual increase on a well-regulated estancia has been ascertained to be from 30 to 40 per cent., which yields an enormous profit to the proprietor, whilst his expenses are comparatively trifling. The only serious casualty to which the cattle-owner is liable is from the effects of occasional droughts, which in these countries are, at times, attended with frightful devastation:—the cattle then rush in thousands from their own pastures in search of water in every direction, and perish for want of it in immense numbers. In the last great drought, which continued during the summers of 1830, 31, and 32, it was calculated that from a million and a half to two millions of animals died:—the borders of all the lakes and streamlets in the province were long afterwards white with their bones[80]. But for this calamity the quantity of hides brought forward in the last five years would have been much greater than it has been.

In the years immediately preceding the independency of the republic the annual export of hides from the river Plate was from 700,000 to 800,000, besides an enormous consumption of them for every conceivable purpose by all classes of the people of the country, and great destruction by waste; so that it is generally supposed that at that time the number of cattle in the provinces was not less than five millions. Azara estimated them at *twelve* millions (in 1792), but I never met with any one who would agree with him in that calculation.

By far the greater part of these animals were then reared in the Banda Oriental and Entre Rios:—nor was it till subsequently to the commencement of the struggle for their independence, when those provinces became the seat of war, and were laid waste by the Portuguese and by Artigas, that the people of Buenos Ayres began to occupy the lands south of the River Salado, which have given so much increased importance to that province. Since that period every encouragement and protection which it is possible to give to this source of national wealth has been wisely afforded by the ruling authorities.

The Pampas are no longer a vast, useless, and unappropriated waste in which the animals run wild as formerly; by far the greater part of the lands comprised within the boundary line laid down in the map having been carefully measured by the government officers, and allotted to individuals, who, as they occupy them, are obliged to set up and preserve their marks of possession, which, together with the bounds and extent of every separate estancia, are duly registered in the topographical department of the state. Of the hundreds of thousands of cattle now reared in these lands there is hardly, perhaps, a single animal of a year old which is not branded with the mark of an owner, and that mark is equally registered by the authorities, and entitles him to claim his property wherever he may find it.

It is calculated by the best authorities,—the most extensive proprietors in the province,—that the present stock of cattle in the territory of Buenos Ayres alone may be from three to four millions; and it is supposed there may be above another million in the other provinces:—from this we ought to calculate upon an annual exportation of nearly a million of hides, gradually increasing.

FOOTNOTES:

[78] The official valuation of the average imports from 1792 to 1796, inclusive, was only 2,606,754 dollars; though at that period every article sent from Spain was charged at the most exorbitant price to the colonists.

[79] In 1835 nearly a million and a half lbs. were also sent to the United States, and the demand for it was likely to increase with its production.

[80] The drought in question was one of the most destructive on record; large lakes in the south, never before known to have been without water, were entirely dried up, in which immense numbers of fish perished, the stench from which was described as enough to have produced a pestilence. Another serious consequence from it, of a different description, was the prodigious increase of all kinds of vermin, especially field-mice, myriads of which overran the country, and entirely destroyed the maize-harvest for 1833.

CHAPTER XVI.
PUBLIC DEBT.

Origin of the Funded Debt of Buenos Ayres. Receipts and Expenditure from 1822 to 1825, during peace. Loan raised in England. War with Brazil, and stoppage of all revenue from the Customhouse for three years. Pecuniary difficulties in consequence. The Provincial Bank of Buenos Ayres converted into a National one. The Government interferes with it, and, by forcing it to increase its issues, destroys its credit. Debt at the close of the war at the end of 1828. Hopes founded on the peace destroyed by the mutiny of the Army;—deplorable consequences of that event. Depreciation of the Currency. Deficit in the revenue, and increase of the Funded Debt:—its amount in 1834, and further increase in 1837. General account of the liabilities of the Government up to that year; increased by subsequent war with Bolivia, and French Blockade.

In any attempt to convey an idea of the finance accounts of Buenos Ayres it should, in the first instance, be observed that, although those accounts are, *primá facie, national*, they exhibit in reality the receipts and expenditure of the government of the *province* of Buenos Ayres alone:—the other provinces, containing three-fourths of the population of the whole republic, contribute nothing towards the general expenses, though most of them manage to support their petty provincial administrations. Buenos Ayres alone found all the pecuniary means both for the war with Spain for the establishment of the independence of the republic, and, subsequently, for liberating the Banda Oriental from the domination of the Emperor of Brazil, which latter state, though gaining everything by the result, has never repaid her a single dollar. Chile owes her as much for the armies sent across the Andes, which freed that country also from the yoke of the King of Spain, and has been equally ungrateful.

It is only astonishing how this little State contrived, as she did, to raise the ways and means for these efforts, and that she did not altogether succumb to the difficulties and embarrassments they gave rise to:—that they have left her finances in a wretched state can hardly be wondered at. Nevertheless, if it had not been for the struggle with Brazil, which succeeded the establishment of her own independence of the mother-country, Buenos Ayres would long ago have been quit with all her creditors, presenting a very different appearance, quoad her finances, to the world.

When the struggle with Spain was over, and her military establishments reduced, the arrangement of her pecuniary affairs became one of the first objects of her provincial administration.

In 1821 commissioners were appointed to call in and liquidate all outstanding claims against the government, of whatever description, not excepting even those left unsettled by the authorities of the mother-country previous to the declaration of independence. The greater part of these debts were due for actual services, or for loans to the government in times of necessity; others were of a more doubtful character, and had been sold or made over to other parties by the original creditors, and into these classes they were separated by the legislature:—the one receiving obligations bearing an interest of six per cent; the other, receiving the same, bearing an interest of four per cent per annum; and these obligations were simultaneously provided for by the creation of public stocks, bearing quarterly interest:—the first instance of the establishment of anything like a public funded debt in any of the new states of South America. Commissioners were appointed to manage it, and to pay the dividends quarterly to the stock-holders; transfer-books were opened, and a sinking-fund was established for its gradual redemption. The first quarter's interest became due on the 1st of January, 1822, and, for the credit of Buenos Ayres, it should be stated that, notwithstanding the great subsequent increase of the debt, under the circumstances to which I shall presently refer, the quarterly dividends have, from that time to this, been as regularly paid as those at the Bank of England.

The amount of stock created up to the close of 1825 was—

	Dollars.
of 6 per cents.	5,360,000
" 4 " "	2,000,000

which was sufficient to provide for every outstanding claim against the government up to that period, whilst the charge for the annual interest was hardly felt in the general expenditure, which, after the reductions consequent upon a state of peace, the revenue was more than sufficient to meet,—as will be seen by the following returns of the yearly receipts and payments from 1822 to 1825, inclusive.

The receipts were—

	Dollars.
in 1822	2,519,094
" 1823	2,869,266
" 1824	2,648,845
" 1825	3,196,430 6½

The total of the four years was, Spanish dollars, 11,233,635, which, at the exchange of 45*d.* per dollar, was equal, in sterling money, to about £2,106,306, or, on an average, £526,576 per annum.

Three-fourths of this revenue was derived from the custom-house duties, the yearly account of which was, in the year—

	Dollars.
1822	1,987,199
1823	1,629,149
1824	2,032,945
1825	2,267,709
In the 4 years	7,917,002, or about £1,488,604.

The remainder was made up by duties on stamps, the contribucion directa, a sort of property-tax; the post-office revenue, the port-dues, rents of government buildings and lands, and other items of little consequence.

The account of the expenditure for the same period stood thus:—

Expenditure	1822 Dollars.	1823 Dollars.	1824 Dollars.	1825 Dollars.
On account of the Public Debt and Dividends	643,791 3	452,038 3¼	547,107	
Of the Home, or Government Department	446,140 2½	513,993 7¼	679,585 2½	
Of the Finance Department	264,187 2½	323,663 3½	290,696 4½	
Of the War Department	843,935 6	1,249,258 2½	1,111,976 3½	
Total	2,198,054 6	2,538,954 ½	2,629,365 2½	2,698,231 5½

Never had the financial concerns of the republic borne so creditable and promising an appearance. In this prosperity nothing was thought of but schemes for improvement of every kind; and projects were submitted to the government for a variety of public works, piers, docks, custom-houses, &c., some of which were of manifest utility.

It was under these circumstances, and with a view to carry into effect some of the projected improvements, that the government of Buenos Ayres determined to endeavour to raise a loan in England, which there was no difficulty in obtaining upon the terms they stipulated for, viz., seventy per cent. At that price parties in London contracted with them for a loan, nominally, of a million sterling, to be raised upon bonds bearing interest at six per cent per annum, payable half-yearly. A sinking-fund of £5000 per annum was to be applied to their redemption, and the contractors were further allowed to keep back the amount of the dividends for the first two years. This, with charges, &c., reduced the sum to be paid over to the government of Buenos Ayres to about £600,000. The first half-yearly dividend became due on the third or fourth quarter of 1824.

Whilst the government were deliberating, amongst the many projects before them, how to lay out this money to the best advantage, the quarrel broke out with the Emperor of Brazil for the possession of the Banda Oriental, which soon settled all difficulty on that point, and absorbed every dollar of the loan in preparations for the ruinous war which followed. From the commencement of that struggle not only were the expenses of the state enormously increased, but, when resources were most wanted, nearly the whole of its ordinary revenues (depending upon the duties on foreign trade) were suddenly cut off by the blockade of the river Plate instituted by the Brazilians, which lasted during the whole continuance of the war, viz., from December, 1825, to September, 1828,—nearly three years.

In their emergencies the government determined to avail themselves of the bank, an establishment which had been set up by the leading capitalists of Buenos Ayres in 1822, upon the grant of an exclusive privilege of issuing notes *in that province* for twenty years. It was entirely independent of the government, and was managed by directors annually chosen by the shareholders. To the mercantile body it was of great utility, and its notes, payable in specie on demand, in default of any national coinage, had become the ordinary currency of Buenos Ayres, and were as readily taken as gold or silver:—its capital was a million of dollars. But, as this could not be done compatibly with its independence and existing constitution, it was further, in an evil hour, resolved to alter entirely its original character.

Under pretence of extending the circulation of its notes throughout the republic, application was made to the General Congress[81] to sanction its conversion into a *national* bank, with a nominal capital of *ten millions* of dollars, towards which the government subscribed for shares to the amount of *three millions*, and very soon assumed the right to exact from it almost any accommodation they required. The consequences were soon apparent. The wants of the government increasing, the bank was obliged, in order to provide for them, to increase its issues, which, ere long, reached an amount obviously out of all proportion to its real capital[82]. The aid of the legislature was again called in:—the notes were declared a legal tender for their nominal value, and the bank was relieved by law from the obligation of paying them in specie on demand:—its credit fell to the lowest ebb, and its notes became proportionably depreciated.

The government, however, had then no alternative but to go on with the system it had commenced:—the precious metals having wholly disappeared as a medium of circulation, it was in this depreciated currency that it found itself obliged to continue borrowing such sums as it required, until, as may easily be imagined, the nominal amount of the public debt became fearfully increased. Before the close of the war with Brazil, the value of the paper dollar of the bank had fallen from 45*d.* to below 12*d.* sterling; and at the end of 1828, besides 6,000,000 dollars which had been added to the amount of the funded debt, the deficit on the general account of receipts and expenditure was 13,412,075 dollars, the whole of which was due to the bank; and this was independently of the English loan.

Nevertheless, when peace was signed, upon terms highly honourable to the republic, the public confidence immediately rallied. The value of the current dollar rose at once to 24*d.*, and amidst the general rejoicings even the pecuniary prospects of the country put on a flattering appearance. Nor were the hopes entertained by the Buenos Ayreans of a speedy improvement in their finances without foundation. It was evident, as has been observed in the preceding chapter, that, although the foreign war had led to enormous expenses, the sudden suspension of the trade had locked up a large amount of foreign, as well as native, capital within the country, the investment of which, in a variety of ways, had greatly tended to increase its means of production, and consequently its national resources.

The mutiny of the army, however, under General Lavalle, and his barbarous murder of General Dorrego, the Governor, blasted all these flattering prospects, and involved the whole republic in confusion and ruin. The consequences of the civil warfare which followed to the finances of the country were deplorable, and infinitely worse than those occasioned by the war with Brazil. The currency suffered apparently beyond all hope of recovery, and the paper dollar, after great fluctuations, fell to about 7*d.*, at which rate it has, with little variation, been stationary for the last seven years.

In the five years from 1828 to 1832, inclusive, the receipts and expenses were as follow:—

	Dollars.
1 The expenditure of the Government, or Home Department, was	8,254,515
2 Of the Department of Foreign Affairs	778,935
3 Of the Finance Department and Public Debt	29,884,831
4 Of the War Department	31,947,435
Dollars, currency	70,865,716
The revenue in the same period only produced	40,889,263
Leaving a deficiency of to be provided for by loans and other extraordinary ways and means.	29,976,453

The *War Department*, it will be seen, absorbed more than three-fourths of the whole revenue:—nor was this

the final account of the extraordinary expenses which may be traced to the revolt of the troops above alluded to. Whilst they were cutting the throats of their countrymen in the interior, the Indians broke in upon the frontiers, left without defence, and made it necessary to organise a new army to put them down, which occasioned a great expenditure, though it was, perhaps, compensated for by the extension of the frontiers, and the new security it gave to the lands in the south of the province.

To provide for these expenses the Funded Debt was again very largely increased, and at the close of 1835 stood as follows:—

	4 per cents. Dollars.		6 per cents. Dollars.
Created before the war with Brazil	2,000,000		5,360,000
In September, 1827			6,000,000
" February, 1831			6,000,000
" March, 1834			3,000,000
" November, 1834			5,000,000
	2,000,000	and	25,360,000
Of which the Sinking Fund had redeemed up to that time	574,246	and	6,389,713
Leaving unredeemed at the close of 1835	1,425,754	and	18,970,286

Besides this there was a floating debt in treasury-bills and other outstanding claims of nearly 8,000,000 more to be provided for out of the ways and means for 1836, which, after every possible reduction of the establishments, were hardly equal to meet the ordinary expenditure. In the hope of being enabled to pay off this part of the debt, the Legislature authorised the Government, in the first instance, to offer for sale, at a fixed price, a portion of the lands in the south, acquired in the recent campaigns against the Indians:—but their expectations were not realised,—there were no bidders for the lands; and when the junta met the next year to receive the accounts for 1837, instead of any decrease in the floating debt, it had risen to above 9,000,000 of dollars. They then adopted the alternative of creating Public Funds, and passed a law for adding no less than 17,000,000 to the Public Debt. The funds in question were placed at the disposal of the government for sale, at a price not lower than sixty per cent, at which it was calculated that they would produce 10,200,000, and be, therefore, sufficient to cover the floating debt, and leave the ordinary revenue free to meet the ordinary expenditure of the states. To provide for the increased interest of the Public Debt, new stamp duties and a more strict enforcement of the direct taxation (Contribucion Directa) were enacted.

This was at the commencement of 1837, when, including this new creation of stock, the responsibilities of the government appeared to be as follow:—

First.—The Funded Debt.

	Dollars.		Dollars.
Created up to Nov., 1834	2,000,000	and	25,360,000
Created in 1837 to provide for the Floating Debt			17,000,000
Total created	2,000,000	and	42,360,000
Of which there were redeemed at the beginning of 1837	585,967	and	7,385,422
	1,414,033		34,974,578
The 4 per cents, reduced to the same denomination, equal to			942,688
Amount of Funded Debt unredeemed (6 per cents)			35,917,166

The annual charge for the interest and sinking fund of this part of the debt amounted to 3,055,199 current dollars.

Secondly.—The English loan for 1,000,000 sterling, the interest of which (at the rate of £60,000 per annum) has been unpaid since January, 1828.

And Thirdly,—The amount of the bank issues in circulation, understood to be about 20,000,000 of dollars currency, for the whole amount of which the government had declared itself responsible to the public as the easiest mode of settling its own account with that establishment upon the expiration of its charter in 1836.

On the other hand, the whole of the ordinary revenues were only estimated at 12,000,000 of currency, of which about a fourth part, as above stated, was required to be set apart in the first instance to meet the charges for the funded debt.

The remaining 9,000,000 was insufficient by half to meet the ordinary expenditure of the state, much less to enable the government to make any provision for a settlement with the English bondholders, or for the redemption of the currency.

This was the state of things at the commencement of 1837, as far as I can collect from the accounts which have been published; deplorable as it appeared, it perhaps would not have been altogether irremediable, had the peace of the country been preserved, and the war establishments been reduced.

The estimated revenue of 12,000,000 was based upon the average of the years immediately preceding, which had been far from favourable to the development of the resources of the republic. It was notorious that many branches of it were very loosely collected; the contribucion directa, or property-tax, especially, which produced little or nothing, instead of being made, as it ought to have been, one of the most important items in the revenue of the state. In this, as in other branches of it, there was no doubt that, with care and good management, the public income might have been greatly increased. Besides, there were still the greater part of the public lands undisposed of, which the legislature, in 1836, had given authority to the government to sell, for the purpose of liquidating the debt previously contracted; and with regard to the funded debt, the operation of the sinking fund with its accumulating interest was becoming so efficient that, notwithstanding its large amount, a very few years indeed would suffice to redeem the whole of it, if not further increased. In 1837 the sinking fund already amounted to more than a million of dollars, which, in twelve months, redeemed little short of two millions and a half of stock.

But, as I have before had occasion to observe, touching their social condition, so it is most especially with regard to their financial prospects, there can be no well-founded expectation of any improvement which is not based upon a continuation of the peace and quiet of the country. That, unfortunately, has been again interrupted in the past year, and the Republic has not only become involved in the war declared by Chile against Bolivia, but in a much more serious and disastrous dispute with the French, the calamitous consequences of which it is difficult to estimate.

Pending the settlement of their alleged grievances, the French have instituted a strict blockade of Buenos Ayres, which falls heavily upon those neutral parties who have established an extensive commercial intercourse with the country.

FOOTNOTES:

[81] The Congress in question had been convoked principally for the purpose of drawing up a constitution for the republic, and was properly only a *constituent* one:—after a time, however, it proceeded to appoint a president, and to pass a variety of laws founded on the like scheme of *nationalising* the republic, which, though acquiesced in, *per force*, by the people of Buenos Ayres, were resisted *vi et armis* by most of the provinces at a distance, and led to much ill-will and disunion amongst them, at the moment when all their joint efforts were required against their common enemy. The president, Rivadavia, after a vain struggle to establish his authority, found himself forced to resign amidst a complication of difficulties.

[82] It never exceeded five millions of dollars, viz., one the amount of the capital of the Provincial Bank, incorporated with it; three subscribed by the Government; and about one more by individuals.

APPENDIX.

No. 1.

Declaration of Independence of the United Provinces of South America in 1816.

We, the Representatives of the United Provinces of South America, in General Congress assembled, invoking that Supreme Being who presides over the universe, in the name and by the authority of the people we represent, and protesting before Heaven and all nations and inhabitants of the earth, the justice of this our resolution, do hereby solemnly declare that it is the unanimous and undoubted determination of these provinces to break the bonds which have bound them to the kings of Spain, to recover the rights of which they have been deprived, and to take upon themselves the high character of a free nation independent of king Ferdinand VII. and his successors, and of Spain; with full and ample power in consequence *de facto* and *de jure* to establish for themselves such form of government as the pressure of existing circumstances may render imperative.

All and every one of them do publish and declare the same, and pledge themselves, through us, to carry into effect and to maintain this their fixed resolve with their lives, their fortunes, and their fame.

Wherefore be this duly published for the knowledge of all whom it may concern; and considering what may be due to other nations in this matter, a separate manifesto shall set forth in detail the grave and weighty reasons which have led to this our solemn declaration.

Given in the hall of our meetings, signed by our hands, sealed with the seal of the Congress, and countersigned by the secretaries thereof, in the city of San Miguel de Tucuman, the 9th day of July, 1816.

[Follow the Signatures.]

No. 2.

Estimated Population of the Provinces of the Rio de la Plata, 1836-7.

Province of	Buenos Ayres, from	180,000 to	200,000
	Santa Fé	15,000 to	20,000
	Entre Rios	30,000 to	30,000
	Corrientes	35,000 to	40,000
	Cordova	80,000 to	85,000
	Santiago	45,000 to	50,000
	Tucuman	40,000 to	45,000
	Salta	50,000 to	60,000
	Catamarca	30,000 to	35,000
	La Rioja	18,000 to	20,000
	San Luis	20,000 to	25,000
	Mendoza	35,000 to	40,000
	San Juan	22,000 to	25,000
		600,000 to	675,000

This is exclusive of independent Indians within the territory laid claim to by the Republic.

The population of the Banda Oriental is estimated to be from 100,000 to 120,000 souls, rapidly increasing.

That of Paraguay I should assume, from accounts in my possession, to be about 250,000, though I know it has been estimated at double that amount by persons who have been in the country.

No. 3.

Statistics of British Residents at Buenos Ayres, in 1831.

A.

Registered in the British consulate, from 1825 to 1831.

Merchants and traders and clerks	466
Shopkeepers	193
Physicians, surgeons, chemists, and apothecaries	27
Schoolmasters	9
Hotel and tavern keepers	13
Master Mechanics	93
Carpenters	362
Bricklayers	123
Labourers	667
Farming men	125
Tailors	66
Shoemakers	63
Painters	7
Sailors	329
Registered without denomination	107
Women	595
Children	827
	4,072

The individuals not registered were supposed to amount to at least a thousand more, exclusive of the sailors on board the British shipping trading with the port.

B.

Statistics of British Residents at Buenos Ayres.

Return of marriages, baptisms, and burials of the Protestant population in Buenos Ayres, from August 1825 to August 1831, showing the proportion of British subjects—and in 1836.

From August 1825 to August 1831, six years.

	British.	Other foreign Protestants.	Total.
Marriages	238	42	280
Baptisms	77	13	90
Burials	278	85	363

For 1836.

The Returns published of the foreign Protestant population in Buenos Ayres, give—

Total marriages in the year	19
Baptisms	63
Burials	55

The proportion of the British is not given, but may be estimated from that quoted in the first period.

No. 4.

Treaty between Great Britain and the United Provinces of Rio de la Plata.

Signed at Buenos Ayes, February 2, 1825.

Extensive commercial intercourse having been established for a series of years between the dominions of His Britannic Majesty, and the territories of the United Provinces of Rio de la Plata, it seems good for the security as well as encouragement of such commercial intercourse, and for the maintenance of good understanding between His said Britannic Majesty and the said United Provinces, that the relations now subsisting between them should be regularly acknowledged and confirmed by the signature of a treaty of amity, commerce, and navigation.

For this purpose they have named their respective plenipotentiaries, that is to say;—

His Majesty the King of the United Kingdom of Great Britain and Ireland, Woodbine Parish, Esquire, His said Majesty's Consul-General in the Province of Buenos Ayres and its Dependencies;—and the United Provinces of Rio de la Plata, Señor Don Manuel José Garcia, Minister Secretary for the Departments of Government, Finance, and Foreign Affairs, of the National Executive Power of the said Provinces;

Who, after having communicated to each other their respective Full Powers, found to be in due and proper form, have agreed upon and concluded the following Articles:—

Article I.

There shall be perpetual amity between the dominions and subjects of His Majesty the King of the United Kingdom of Great Britain and Ireland, and the United Provinces of Rio de la Plata, and their inhabitants.

Article II.

There shall be, between all the territories of His Britannic Majesty in Europe, and the territories of the United Provinces of Rio de la Plata, a reciprocal freedom of Commerce: the inhabitants of the two countries, respectively, shall have liberty freely and securely to come, with their ships and cargoes, to all such places, ports, and rivers, in the territories aforesaid, to which other foreigners are or may be permitted to come, to enter into the same, and to remain and reside in any part of the said territories respectively; also to hire and occupy houses and warehouses for the purposes of their commerce; and, generally, the merchants and traders of each nation, respectively, shall enjoy the most complete protection and security for their commerce; subject always to the laws and statutes of the two countries respectively.

Article III.

His Majesty the King of the United Kingdom of Great Britain and Ireland engages further, that in all his dominions situated out of Europe, the inhabitants of the United Provinces of Rio de la Plata shall have the like liberty of commerce and navigation stipulated for in the preceding article, to the full extent in which the same is permitted at present, or shall be permitted hereafter, to any other nation.

Article IV.

No higher or other duties shall be imposed on the importation into the territories of His Britannic Majesty, of any articles of the growth, produce, or manufacture of the United Provinces of Rio de la Plata, and no higher or other duties shall be imposed on the importation into the said United Provinces, of any articles of the growth, produce, or manufacture of His Britannic Majesty's dominions, than are or shall be payable on the like articles, being the growth, produce, or manufacture of any other foreign country; nor shall any other or higher duties or charges be imposed, in the territories or dominions of either of the contracting parties, on the exportation of any articles to the territories or dominions of the other, than such as are or may be payable on the exportation of the like articles to any other foreign country: nor shall any prohibition be imposed upon the exportation or importation of any articles the growth, produce, or manufacture of His Britannic Majesty's dominions, or of the said United Provinces, which shall not equally extend to all other nations.

Article V.

No higher or other duties or charges on account of tonnage, light, or harbour dues, pilotage, salvage in case of damage or shipwreck, or any other local charges, shall be imposed, in any of the ports of the said United Provinces, on British vessels of the burthen of above one hundred and twenty tons, than those payable, in the same ports, by vessels of the said United Provinces of the same burthen; nor in the ports of any of His Britannic Majesty's territories, on the vessels of the United Provinces of above one hundred and twenty tons, than shall be payable, in the same ports, on British vessels of the same burthen.

Article VI.

The same duties shall be paid on the importation into the said United Provinces of any article the growth, produce, or manufacture of His Britannic Majesty's dominions, whether such importation shall be in vessels of the said United Provinces, or in British vessels; and the same duties shall be paid on the importation into the dominions of His Britannic Majesty of any article the growth, produce, or manufacture of the said United Provinces, whether such importation shall be in British vessels, or in vessels of the said United Provinces;—The same duties shall be paid, and the same drawbacks and bounties allowed, on the exportation of any articles of the growth, produce, or manufacture of His Britannic Majesty's dominions to the said United Provinces, whether such exportation shall be in vessels of the said United Provinces, or in British vessels; and the same duties shall be paid, and the same bounties and drawbacks allowed, on the exportation of any articles the growth, produce, or manufacture of the said United Provinces to His Britannic Majesty's dominions, whether such exportation shall be in British vessels, or in vessels of the said United Provinces.

Article VII.

In order to avoid any misunderstanding with respect to the regulations which may respectively constitute a British vessel, or a vessel of the said United Provinces, it is hereby agreed, that all vessels built in the dominions of His Britannic Majesty, and owned, navigated, and registered according to the laws of Great Britain, shall be considered as British vessels; and that all vessels built in the territories of the said United Provinces, properly registered, and owned by the citizens thereof, or any of them, and whereof the master and three-fourths of the mariners, at least, are citizens of the said United Provinces, shall be considered as vessels of the said United Provinces.

Article VIII.

All merchants, commanders of ships, and others, the subjects of His Britannic Majesty, shall have the same liberty, in all the territories of the said United Provinces, as the natives thereof, to manage their own affairs themselves, or to commit them to the management of whomsoever they please, as broker, factor, agent, or interpreter; nor shall they be obliged to employ any other persons for those purposes, nor to pay them any salary or remuneration, unless they shall choose to employ them; and absolute freedom shall be allowed, in all cases, to the buyer and seller to bargain and fix the price of any goods, wares, or merchandise imported into, or exported from, the said United Provinces, as they shall see good.

Article IX.

In whatever relates to the lading and unlading of ships, the safety of merchandise, goods, and effects, the disposal of property of every sort and denomination, by sale, donation or exchange, or in any other manner whatsoever, as also the administration of justice, the subjects and citizens of the two contracting parties shall enjoy, in their respective dominions, the same privileges, liberties, and rights, as the most favoured nation, and shall not be charged, in any of these respects, with any higher duties or imposts than those which are paid, or may be paid, by the native subjects or citizens of the power in whose dominions they may be resident. They shall be exempted from all compulsory military service whatsoever, whether by sea or land, and from all forced loans, or military exactions or requisitions; neither shall they be compelled to pay any ordinary taxes, under any pretext whatsoever, greater than those that are paid by native subjects or citizens.

Article X.

It shall be free for each of the two contracting parties to appoint consuls for the protection of trade, to reside in the dominions and territories of the other party; but before any consul shall act as such, he shall, in the usual form, be approved and admitted by the government to which he is sent, and either of the contracting parties may except from the residence of consuls such particular places as either of them may judge fit to be so excepted.

Article XI.

For the better security of commerce between the subjects of His Britannic Majesty, and the inhabitants of the United Provinces of Rio de La Plata, it is agreed, that if at any time any interruption of friendly commercial intercourse, or any rupture should unfortunately take place between the two contracting parties, the subjects or citizens of either of the two contracting parties residing in the dominions of the other, shall have the privilege of remaining and continuing their trade therein, without any manner of interruption, so long as they behave peaceably, and commit no offence against the laws; and their effects and property, whether entrusted to individuals or to the state, shall not be liable to seizure or sequestration, or to any other demands than those which may be made upon the like effects or property, belonging to the native inhabitants of the state in which such subjects or citizens may reside.

Article XII.

The subjects of His Britannic Majesty residing in the United Provinces of Rio de la Plata, shall not be disturbed, persecuted, or annoyed on account of their religion, but they shall have perfect liberty of conscience therein, and to celebrate divine service either within their own private houses, or in their own particular churches or chapels, which they shall be at liberty to build and maintain in convenient places, approved of by the government of the said United Provinces:—Liberty shall also be granted to bury the subjects of His Britannic Majesty who may die in the territories of the said United Provinces, in their own burial places, which, in the same manner, they may freely establish and maintain. In the like manner, the citizens of the said United Provinces shall enjoy, within all the dominions of His Britannic Majesty, a perfect and unrestrained liberty of conscience, and of exercising their religion publicly or privately, within their own dwelling-houses, or in the chapels and places of worship appointed for that purpose, agreeably to the system of toleration established in the dominions of his said Majesty.

Article XIII.

It shall be free for the subjects of His Britannic Majesty, residing in the United Provinces of Rio de la Plata, to dispose of their property, of every description, by will or testament, as they may judge fit; and, in the event of any British subject dying without such will or testament in the territories of the said United Provinces, the British consul-general, or, in his absence, his representative, shall have the right to nominate curators to take charge of the property of the deceased, for the benefit of his lawful heirs and creditors, without interference, giving convenient notice thereof to the authorities of the country; and reciprocally.

Article XIV.

His Britannic Majesty being extremely desirous of totally abolishing the slave trade, the United Provinces of Rio de la Plata engage to co-operate with His Britannic Majesty for the completion of so beneficent a work, and to prohibit all persons inhabiting within the said United Provinces, or subject to their jurisdiction, in the most effectual manner, and by the most solemn laws, from taking any share in such trade.

Article XV.

The present treaty shall be ratified, and the ratifications shall be exchanged in London within four months, or sooner if possible.

In witness whereof the respective plenipotentiaries have signed the same, and have affixed their seals thereunto.

Done at Buenos Ayres, the second day of February, in the year of our Lord one thousand eight hundred and twenty-five.

(Signed) Woodbine Parish.
Manuel José Garcia.

Note.—This was the first treaty entered into by any European power with the new Republics of America;—whilst it provided a necessary safeguard to British subjects resorting to that part of the world, it was of great importance to the Buenos Ayreans, not only in a political but in a moral sense, struggling as they were, in the infancy of their institutions, under the difficult task which they had undertaken of attempting to constitute a Government diametrically opposed in form and principles to the whole system of legislation whereby the country had been ruled for three centuries, and which, notwithstanding all their declarations of independence, still hung like a drag-chain about their necks:—under such circumstances every true patriot and advocate for civilization hailed it as the best possible guarantee of sound and liberal principles, whilst, on the other hand, the supporters of the old Spanish laws were proportionately discouraged, as they saw in it the death-blow to the old colonial policy of the mother-country.

No. 5.

Copy, in the Guarani Language, of the Memorial addressed by the people of the mission of San Luis, praying that the Jesuits might be allowed To remain with them. Dated 28th February, 1768.

I. H. S.

Señor Governador,

Tupa tanderaârô anga oroè ndebe ore Cabildo Caziq^{s} reta, Aba, haè Cuña, haè mitâ rehebe San Lui ỹ gua orerubeteramo ndereco ramo Corregidor Santiago Pindo, haè Don Pantaleon Cayuari Oiquatia orebe oreraỹhupareteramo ndereco aipo bae rehe ore yerobia hape oroiquatia àngà ndebe hupigua ete rupi, co ñande Rey poroquaita Guĭra tetirô oromondo haguâ Nande Rey upeguâra, oromboacĭ mirî eỹ ngatu ndoroguerecoi ramo oromondo haguâ rehe oico ñote Tupa omoña hague rupi Caàguĭ rupi, haè oñeguâ hè orehegui haè ramo iyabai ete oromboaye haguâ; aiporamo yepe oroico Tupa haè ñande Rey boyaramo hecobia tetirô oreyoquai reco rupi, Colonia mbohapĭ yebĭ ipĭeĭ bo, haè ombae àpo hece tributo hepĭbeêmo, haè angà catu oroñemboe Tupa upene acoi Guĭra catupĭrĭbe Tupa Espiritu S$^{to.}$ omeê haguâ ndebe, haè ñande Rey upe heçape bo, haè Angel Marangatu penaâromo rano. Aiporire nderehe yerobiahape; Ah Sñor. Gov$^{dor.}$ ore rubeteramo ndereco ramo ñemomirîngatu hape oroyerure àngà orereçaỹ pĭpe San Ignacio ray reta Pay abere dela Compã. de Jesus ipĭcopĭ haguâ ma rehe ore paûme yepi, cobaè rehe catu eyerure àngà ñande Rey Marângatu upe Tupa rerapĭpe, haè hayhupape; Cobaè rehe oyerure gueçaĭ pĭpe opĭa guibe taba guetebo, Aba, haè Cuña, Cunumi, Cuñataĭ reta rano; bĭte tenàngà y poriahu baè meme. Pay Frayle, coterâ Pay Clerigo ndoroipotai. Apostle S$^{to.}$ Thome Tupa boya martu niâ omombeù corupi ore ramoî upe, haè cobaè Pay Frayle, haè Clerigo nomaey orerehe, San Ignacio ray reta catu ou y pĭramo i àngata oreramoĭ reta re cabo rehe, haè omboè oreramoî ymongaraibo. Tupa upe, haè Rey España ùpe, ymoñemeêbo, Pay Frayle cotéra Clerigo, ndoroipotai ete; Pay dela Comp^{a} de Jesus. Orereco poriahu oguero hôsâ quaabaè, haè orobĭà porâ hece, Tupa upe, ñande Rey upe guara, haè oremeêne Tributo Guaçube Caà mirî ereipotaramo, Eney àngàque Sñor. Govern$^{r.}$ marângatu terehendu àngà oreñeê poriahu imbo àyeucabo àngà? Aiporire orereco ndoicoi Esclavo rehegua, oreremimoâruâ catu, noromoârúay Caray reco ñabo ñabô oyeupe año iñangatabae o amo reta rehe maê ymo y pĭtĭ bo ey mo, y mongaru ey mo rano; cohupigua ete oromombeu àngà ndebe, nde ereipota reco rupi ore y mombeù haguâma? Ani ramo cotaba; haè taba tetirô rũĭ ocañĭmba ne coĭte ñndebe nande Rey upe haè Tupa upe Aña retâme oroyeoita coĭtene haè acoi ramo oremano ramo mabaè àngà pĭhĭ pàngà y arecone! a ni etei oreray reta nia obĭa yoya Caàguĭpe. Tabape rapicha, haè ndo hechairamo Pay San Ignacio ray reta, acoi ramo oaĭrĭne ñu rupi coterâ Caàguĭpe teco marâ à pobo, San Joachin retâ, San Stanislao retâ, San Fernando reta Timbo pegua ocañĭmba yma rapicha, oroiquaa porâ reco rupi, oremombeù àngà ndebe, haè rire ore Cabildo Tupa upe, haè ñande Rey upe ndoromboyebĭ beichene Taba reco Señor Governador Marângatu. Eney Fiyaye àngà oreyerurehague ndebe, haè Tupa nde pĭtĭbone, haè tanderaârô yebĭ yebĭ àngà aipohaè ñote àngà.

San Luis hegui, à 28 de Febr^{o}. 1768, rehegua nderayre ta poriahu Taba guetebo. Cabildo.

No. 6.
Meteorological Observations in Buenos Ayres during 1822 and 1823 (from the Registro Estadistico).

	1822.	Thermometer.			Barometer.			Hygrometer.		Winds.			
		Max.	Mean.	Min.	Max.	Mean.	Min.	Days Humid.	Days Dry.	North to East.	North to West.	South to East.	South to West.
Summer	January	91	71·82	60	No observations.					12	3	9	6
	February	89	73·00	58	30·04	29·58	29·21	19	9	12	8	3	5
Autumn	March	82	70·83	53	29·88	29·61	29·33	20	10	12	6	6	7
	April	78	62·04	43	29·82	29·73	29·46	22	8	7	8	4	11
	May	68	58·31	44	30·18	29·76	29·21	30	1	13	7	2	9
Winter	June	66	54·32	40	30·05	29·77	29·23	30	0	14	5	2	9
	July	68	52·55	38	30·17	29·65	29·21	31	0	13	4	7	7
	August	66	51·83	36	30·21	29·84	29·51	31	0	18	3	6	4
Spring	September	72	54·64	42	30·41	29·74	29·32	30	0	13	3	11	3
	October	81	58·91	46	30·13	29·67	29·24	30	1	17	5	5	4
	November	88	68·43	56	29·91	29·61	29·17	28	2	23	1	5	2
Summer	December	86	70·91	62	30·00	29·45	29·15	23	8	16	3	6	6
								294	39	170	56	66	73
	1823.												
	January	94	75·31	60	29·92	29·54	29·25	5	26	17	4	5	5
	February	93	78·42	66	29·95	29·60	29·21	3	25	14	3	5	6
Autumn	March	93	75·79	52	30·02	29·88	29·18	19	12	10	6	9	6
	April	72	67·50	57	30·08	29·30	29·27	29	1	14	9	5	2
	May	63	52·50	41	30·14	29·79	29·53	31	..	11	12	6	2
Winter	June	65	52·50	40	30·15	29·68	29·15	30	..	16	5	9	..

In the eighteen months the highest of the thermometer was 94, in the month of January; the lowest 36, in August. It sometimes rises to 96, as in January, 1824, when it was at that point some days. On the other hand, it has been known to fall as low at 28 and 29; but these extremes are very rare.

No. 7.—Some Fixed Points in the Provinces of the Rio de la Plata.

Province of Buenos Ayres.

Place.	S. Latitude. °	´	"	Longitude. °	´	"	Where from.	Observations.
Centre of the City of Buenos Ayres	34	36	29	58	23	34	Greenwich	
Anchorage of H. M. S Nereus in the Outer Roads in 1813	34	34	30	58	2	0	"	Variation 12½° E.—1813
Luxan	34	38	36	1	1	10	W. of Buenos Ayres	
Guardia del Salto	34	18	57	2	14	49	"	Variation 14° 39´ E.—1796
Fort Roxas	34	11	48	2	41	39	"	
Fort Mercedes	33	55	18	3	4	14	"	
Fort Melinqué	33	42	24	3	30	38	"	
Corzo, near the Lake (source of the Salado) }	34	4	55	3	36	32	"	
Lake Roxas	34	19	7	3	2	56	"	
Lake Carpincho	34	35	31	2	52	44	"	
Lake Toro-Moro	34	49	1	2	38	30	"	
Lake Palentalen	35	10	15	2	6	34	"	
Lake de los Huesos	35	14	30	1	34	44	"	
Lake del Trigo	35	14	3	1	14	54	"	
Cisne	35	46	0	0	20	5	E. of ditto	
Manantiales de Porongos	35	54	50	0	1	55	"	
Lake Camerones Grandes	36	0	59	0	9	19	"	
Altos de Troncoso	36	5	30	0	10	55	"	
Fort Chascomus	35	33	5	0	22	20	"	
Fort Ranchos	35	30	46	0	3	20	"	
Lake Ceajo	35	29	49	0	16	40	W. of ditto	
Guardia del Monte	35	26	7	0	31	10	"	
Guardia de Lobos	35	16	7	0	52	10	"	
Fort Navarro	35	0	13	1	3	25	"	
N.B. The above positions from Luxan to Navarro were determined in the course of a survey of the frontiers, made in 1796 by Don Felix Azara, aided by Cerviño and Inciarte, all officers attached to the Commission for laying down the boundaries under the treaty, between Spain and Portugal, of 1777. The Statistical Register of Buenos Ayres, for 1822, has added to them the following:—								
San Pedro	33	40	51	1	32	0	"	
Barradero	33	43	50	1	25	4	"	
Conchas	34	25	15	0	10	31	"	
Pergamino	33	53	16	2	24	25	"	
Areco	34	11	57	1	26	47	"	
Arecife (Fort)	34	3	8	2	6	13	"	
Pilar	34	26	4	0	52	54	"	
Cañada de Moron	34	40	45	0	23	49	"	
Magdalena	35	5	29	0	44	0	E. of ditto	

No. 7—*continued*.

Observations taken on the Journey of Don Pedro Garcia, in 1810, to the Salinas.

Place.	S. Latitude. °	´	"	Longitude. °	´	"	Where from.	Observations.

Pass of the Salado	35	2	0	1	56	0	Buenos Ayres	
Palantalen	35	12	0	2	7	0	"	
Lakes Tres Hermanas	35	23	0	2	16	0	"	
Cruz de Guerra	35	41	0	2	24	0	"	
Cabeza del Buey	36	10	0	2	52	0	"	
First Lake of the Cañada Larga	36	38	0	3	24	0	"	
Lake del Monte	36	53	0	3	57	0	"	
Lake da los Paraguayos	36	58	0	4	12	0	"	
Lake of the Salinas (centre)	37	13	0	4	51	0	"	
Positions fixed on the Expedition in 1823, to extend the Frontiers.								
Fort on the Tandil	37	21	43	0	39	4	"	Variation 14° 59′ E.—1823.
Lake beyond the Tinta hills	37	40	3	1	27	0	"	
Another further on	37	44	7	2	0	7	"	Var. 15° 18′ E.
Ruins of the Jesuit Mission	37	59	48		"			
By the Officers of His Majesty's Ship Beagle, in 1832.								
Cape Corrientes	38	5	30	57	29	15	Greenwich	
Sierra Ventana, highest summit	38	11	45	61	56	18	"	
Fort Argentine, near Bahia Blanca	38	43	50	62	14	41	"	
On the River Negro.								
Pilot's house at the entrance of the River Negro	41	0	42	62	46	15	"	Var. 17° 42′ E. 1832.
Town of Carmen on ditto	40	48	18	62	58	0	"	
East end of the Islands of Choleechel	39	0	0				"	by Villariño, in 1782.
Junction of the River Neuquen	38	44	0	"				
Junction of the River Encarnacion }	40	6	0	"				
Villariños, furthest up the Catapuliché	39	33	0	"				

No. 7—*continued.*

Positions on the road from Buenos Ayres to Chile, fixed in 1794 by Bauza and Espinosa, Officers attached to Malaspina's Surveying Expedition.

Place.	S. Latitude. °	′	"	Longitude. °	′	"	Where from.	Observations.
Post of Portezuelas	33	53	0				Greenwich	
Do. of Desmochados	33	10	0				"	
Do. of Sanjon, on the River Tercero	32	40	0	61	45	0	"	
Pass on the Tercero	32	23	30				"	
San Luis de la Punta	33	18	0	65	47	0	"	
Pass of the Desaguadero	33	26	0				"	
Mendoza	32	52	0	69	6	0	"	
Uspallata	32	33	20				"	
St. Jago de Chile	33	26	0	70	46	0	"	
Provincial Towns.								
Cordova	31	26	14	314	36	45	Ferro	M. de Souillae, 1784.
Santiago del Estero	27	47	0				"	Azara.
Tucuman							"	
Salta							"	
Corrientes	27	27	0	319	55	0	"	ditto.
Assumption	25	16	40	320	12	0	"	ditto.
Affluents of the River Paraguay.								
Mouth of the Vermejo	26	54	0					
Do. of the Tebicuari	26	35	0					by Azara, in 1785.
Fort Angostura	25	32	0					
Mouth of the Pilcomayo	25	21	9					
Mouth of the Piray	25	2	0					Quiroga, in 1750
Do. of the Salado	25	1	0					
Do. Peribibuy	24	58	0					
Do. Mboicay	24	56	0					
Do. Ibobi	24	29	0					
Do. Quarepoti	24	23	0					
Do. Xexui	24	7	0					
Do. Ipané-mini	24	2	0					
Do. Fogones	23	51	0					
Do. Ipané-guazu	23	28	0					
Do. Guarambaré	23	8	0					
Do. Corrientes	22	2	0					
Do. Tepeti	21	45	0					
Do. Inboteti	19	20	0					
Do. Tacuari	19	0	0					
Do. Porrudos	17	52	0					
Do. Jaurú	16	25	0	320	10	0	Ferro	

No. 7—*continued.*

Towns in Paraguay.

Place.	S. Latitude. °	′	"	Longitude. °	′	"	Where from.	Observations.
Yaguaron	25	41	15					
Itapé	25	51	14					
Cazapa	26	9	53					Azara, in 1785.
Yuti	26	36	4					
Point of embarkation on the Tebicuari	26	35	21					
The Jesuit Missions of the Uruguay and Paranã, as fixed by the Boundary Commissioners, under the Treaty of 1777.								
San Ignacio-guazu	26	55	12	321	5	9	Ferro	
Santa Maria de Fé	26	48	10	321	11	9	"	
Santa Rosa	26	53	12	321	14	28	"	
Santiago	27	8	40	321	20	14	"	
San Cosmo	27	18	55	321	47	53	"	

Itapua	27	20	16	322	14	2	"	
Candelaria	27	27	14	322	19	30	"	
Santa Ana	27	23	40	322	31	23	"	
Loreto	27	19	44	322	35	19	"	
San Ignacio-mini	27	14	55	322	43	11	"	
Corpus	27	7	36	322	36	27	"	
Trinidad	27	7	35	322	19	20	"	N.B. The difference adopted between the meridian of Ferro and Paris by the Commissioners, was 20° 30´.
Jesus	27	2	36	322	17	2	"	
San José	27	45	47	322	19	30	"	
San Carlos	27	44	36	322	11	1	"	
Apostoles	27	54	27	322	19	45	"	
Conception	27	58	51	322	33	22	"	
Santa Maria Mayor	27	53	34	322	38	59	"	
San Xavier	27	51	8	322	49	26	"	
Martires	27	50	24	322	36	49	"	
San Nicolas	28	11	23	322	44	21	"	
San Luis	28	25	41	323	1	23	"	
San Lorenzo	28	27	51	323	14	29	"	
San Miguel	28	33	13	323	22	24	"	
San Juan	28	27	51	323	37	22	"	
San Angel	28	18	13	323	47	15	"	
San Tomas	28	32	49	322	1	39	"	
San Borja	28	39	51	322	4	49	"	
La Cruz	29	11	0	321	30	0	"	
Yapeyú	29	28	0	321	17	2	"	
The Gran Salto, or Great Fall on the Paranã	24	4	58				"	by the Boundary Commissioners, 1788.

N.B. Malaspina's Observations on the Shores of the River Plate, alluded to at page 97, are not inserted, owing to some apparent inaccuracies in the Copy received, which cannot be corrected without further reference to Buenos Ayres.

No. 8.—Return of Foreign Shipping arrived at Buenos Ayres, from 1821 to 1837, inclusive.

	1821.	1822.	1823.	1824.	1825.	1829.	1830.	1831.	1832.	1833.	1834.	1835.	1836.	1837.
British	128	133	113	110	99	78	73	44	48	74	61	54	49	61
N. American	42	75	80	143	102	97	83	77	55	91	67	51	37	40
Brazilian						15	38	42	44	47	43	42	39	42
Sardinian	3	7	6	6	5	15	23	20	26	30	43	23	21	20
French	19	21	24	21	29	28	16	10	22	17	10	14	19	24
Hamburgh					5	3	3	2	4	9	14	8	5	7
Dutch	2	4	6	8	6	5	8	2	2	2	2	3	2	1
Bremen					1		2	5	4	5	5	7	4	4
Danish	1	1	5	10	14	3	6	3	1	5	5	6	9	9
Swedish	7	11	6	14	11	3	1			1		3	6	4
Tuscan							1	1	2	2			1	1
Roman							1		1	2	1			
Russian					1	1		1		1	1			1
Neapolitan								1		3	2			
Austrian										2				
Hanoverian					1				1	1				
Portuguese							1			1	4	1		2
Chilian						1	1			1	1			
Prussian					1							1		
Belgian								2			2		2	
Haytian						1								
Spanish													6	12
Totals	202	252	240	312	275	250	257	210	210	294	261	213	200	228

N.B. The years 1825, 26, and 27 are omitted; Buenos Ayres having been under blockade the greater part of that period. The vessels under the flag of Monte Video are omitted also, being chiefly the carriers of a transit-trade.

No. 9
A Statement of the Quantities and Declared Value of British and Irish Produce and Manufactures Exported from the United Kingdom to the States of the Rio de la Plata,
In each year from 1830 to 1837.— (From Returns laid before Parliament.)

Articles.		1830. Quantities.	1830. Value.	1831. Quantities.	1831. Value.	1832. Quantities.	1832. Value.	1833. Quantities.	1833. Value.	1834. Quantities.	1834. Value.	1835. Quantities.	1835. Value.	1836. Quantities.	1836. Value.	1837. Quantities.	1837. Value.
			£		£		£		£		£		£		£		£
Apparel, Slops, and Haberdashery,	value		6,305		4,341		5,067		3,082		2,096		3,986		5,028		2,111
Arms and Ammunition	"		158		443		345		419		3,035		6,388		867		1,391
Bacon and Hams	cwts.	146	338			60	157	155	490	104	225	59	115	28	70	105	220
Beer and Ale	tuns	112	2,097	54	1,003	78	1,465	108	1,712	74	1,083	87	1,394	107	2,065	68	1,149

Books Printed	cwts.	12	319	6	128	2	51	1	10	5	126	7	166	12	275	9	180
Brass and Copper Manu-factures	"	265	1,219	50	279	105	485	96	555	139	807	37	265	1	5	72	675
Butter and Cheese	"	98	308	215	728	547	2,160	829	3,169	86	277	2	5			35	49
Coals, Culm, and Cinders	tons	941	585	109	94	707	430	868	438	966	508	1,544	751	975	514	713	400
Cordage	cwts.	80	200			55	53	144	234	100	150	430	646	30	100	153	288
Cotton Manu-fac-tures, entered by the yard	yards	10,805,990	324,305	6,242,134	176,874	17,256,838	391,591	12,731,734	280,292	20,942,118	449,831	12,853,287	312,400	18,628,197	435,932	20,183,454	445,291
" "	Hosiery, Lace and Small Wares	value		20,005		9,943		33,344		23,311		33,313		26,488		20,588		18,818
" Twist and Yarn	lbs.	5,831	587	800	30			300	26	9,258	446	34,560	2,824	4,600	350	5,734	364
Earth-enware of all sorts	pieces	671,945	9,617	292,529	4,274	354,684	5,309	770,172	9,377	523,161	5,762	598,001	6,212	966,687	9,748	1,093,905	7,724
Fish, Her-rings	barrels	60	72			35	29							2	2	2	2
Glass, entered by weight	cwts.	2,265	3,330	1,669	2,969	2,579	6,620	3,198	9,737	2,156	4,929	3,029	9,844	2,596	2,654	1,314	3,856
" " at value	value		254		58				100		60		196				
Hard-wares and Cutlery	cwts.	5,793	24,356	4,237	20,000	5,397	22,718	5,571	20,281	10,454	33,040	8,347	30,117	7,211	27,629	6,929	20,531
Hats, Beaver and Felt	dozens	3,165	10,262	1,314	4,340	1,711	4,039	1,173	3,085	2,900	4,891	2,924	5,780	1,099	1,925	2,146	3,239
Iron and Steel, wrought and un-wrought	tons	545	7,836	391	5,058	792	6,128	734	11,023	1,143	12,433	1,033	9,414	963	13,614	994	12,859
Lead and Shot	"	40	662	20	351	14	219	38	555	15	283	13	295	24	775	34	703
Leather, wrought and un-wrought	lbs.	34,500	9,791	19,752	5,253	23,473	6,809	33,792	9,219	38,457	8,341	30,669	7,151	16,708	3,760	23,987	5,763
Saddler-y and Harness	value		1,254		279		309		1,330		943		1,284		888		341
Linen Manu-fac-tures, entered by the yard	yards	973,640	31,893	406,583	16,663	344,013	30,680	509,528	21,690	1,487,576	43,919	948,026	34,789	794,772	27,844	1,477,392	42,591
" "	Thread, Tapes, and Small Wares	value		1,078		1,514		1,619		327		1,073		842		460		656
Machin-ery and Mill Work	"		38		222				18		72		4,022		40		390
Print-ers' Colours	"		758		293		690		1,973		2,907		2,634		2,066		1,769
Plate, Plated Ware, Jewel-lery and Watches	"		941		1,041		445		1,081		1,232		1,095		420		1,192
Salt	bushels	15,610	412	5,770	86	163	8	2,000	34	1,144	32	2,200	50	1,121	32	3,480	60
Silk Manu-factures	value		10,365		13,319		24,786		11,735		19,274		18,307		9,514		13,098
Soap and Candles	lbs.	51,730	1,147	2,710	35	125,520	2,661	277,102	5,416	13,100	290	18,369	380			224	12
Station-ery of all sorts	value		1,325		1,089		1,912		1,441		2,064		3,202		1,708		1,545
Sugar, Refined	cwts.	149	409	84	186			131	287	504	1,368	32	91				
Tin, un-wrought	"			37	125	35	117	8	30	78	185					15	61
Tin and Pewter Wares and Tin Plates	value		780		701		2,754		1,060		2,006		2,286		3,390		4,052
Woollen and Worsted Yarn	lbs.					1,672	80			6	1		816		90	672	130
Woollen Manu-fac-tures, entered by the piece	pieces	30,328	141,700	14,901	58,137	28,392	39,445	23,387	79,231	36,673	172,393	35,970	140,915	26,514	105,223	22,555	93,355
" " " yard	yards	84,830	8,184	49,119	5,077	39,219	9,099	65,269	5,640	112,124	10,781	113,750	9,251	114,023	10,121	60,857	5,578
" "	Hosiery and Small Wares	value		4,574		1,705		4,462		3,052		4,801		3,593		4,607		2,301
All other Articles	"		4,663		3,382		4,066		3,902		6,587		11,347		5,030		3,365
	Total	For 1830 £632,172		1831 £339,870		1832 £660,152		1833 £515,362		1834 £831,564		1835 £658,525		1836 £697,334		1837 £696,104	

No. 10.
TRADE OF MONTE VIDEO.

I.—Return of Foreign Shipping entered and sailed from the Port of Monte Video in 1836, with the *Estimated Value* of their Cargoes.

Countries.	Entered. Ships.	Entered. Value of Cargoes. Spanish Dollars.	Sailed. Ships.	Sailed. Value of Cargoes. Spanish Dollars.
British	58	1,172,658	57	951,423
Brazilian	62	713,793	62	825,440
American	50	217,402	48	295,829
French	40	578,178	40	464,430
Spanish	15	311,285	15	236,672
Sardinian	57	102,039	41	30,252
Portuguese	13	15,200	13	62,700
Other Countries.	..	502,082	..	639,909
		3,597,437		3,443,957

II.—Return, showing the *quantities* of each Article Exported, and the Foreign Countries for which they were shipped from Monte Video in the year 1836.

		England.	France.	U. States.	Spain.	Sardinia.	Antwerp.	Brazil.	Havanna.	Total Quantities.
Hides, dry	No.	61,718	108,428	38,848	67,026	4,668	87,942	3,270	119	372,019
Do. salt	"	124,666	13,288	297	230		2,901			141,382
Horns	"	329,836	32,110	142,766	20,328	27,291	20,242	12,552	850	593,625
Jerked Beef	cwts.							218,318	88,036	306,354
Horsehair	arrobes of 25 lbs.	9,578	4,622	3,984		436	72			18,692
Cuttings of Hides	4,468	764	1,584		960				7,776	
Horse Hides	No.	15,820	46	20,144	1,121		170			37,401
Grease	arrobes.	14,857		2,710			192	1,419	4,390	23,568
Wool	"	14,930	2,300	14,140	30	2,500				33,900
Sheep Skins	doz.	1,937	2,636	4,070	353	837		22		9,855
Tallow	arrobes.	6,158	4,112	452	3,787	2,123	450	2,425	1,847	43,182
Nutria Skins	doz.	3,990	320	1,640		220	400			6,570
Mares' Grease	arrobes.	2,944		59						3,003
Seal Skins	No.	3,831		16,000		53			161	20,045
Tongues	doz.							440		440
Mules										410
Horses								164		164
Bones	tons.	259	53	10			3	1		326

No. 11.—Comparative Value (declared) of British and Irish Produce and Manufactures Exported from Great Britain to the River Plate, Mexico, Columbia, Chile, and Peru, from 1829 to 1837, and to Spain in the same years.

Year.	River Plate. £	Mexico. £	Colombia. £	Chile. £	Peru. £	Total to New States. £	To Spain. £
1829	758,540	303,562	232,703	818,950	300,171	2,413,926	861,675
1830	632,172	978,441	216,751	540,626	368,469	2,736,459	607,068
1831	339,870	728,858	248,250	651,617	409,003	2,377,598	597,848
1832	660,152	199,821	283,568	708,193	275,610	2,127,344	442,926
1833	515,362	421,487	121,826	816,817	287,524	2,163,016	442,837
1834	831,564	459,610	199,996	896,221	299,235	2,686,626	325,907
1835	658,525	402,820	132,242	606,176	441,324	2,241,087	405,065
1836	697,334	254,822	185,172	861,903	606,332	2,605,563	437,076
1837	696,104	520,200	170,451	625,545	476,374	2,488,674	286,636
Totals	5,789,623	4,269,621	1,790,959	6,526,048	3,464,042	21,840,293	4,407,038
Yearly Averages	643,291	474,402	198,995 [83]	725,116	384,893	2,426,697	489,670

FOOTNOTES:

[83] A considerable portion of the articles sent to Chile are intended for the supply of the West Coast of Mexico.

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Transcriber's Notes:

Simple spelling, grammar, and typographical errors were corrected.

Punctuation normalized.

Anachronistic and non-standard spellings retained as printed.

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