GEOGRAPHICAL CONGRESS IN RIO JANEIRO.

we spent on the Putumayo and which seemed to us etc. an eternity; we suffered the same fatigues as our savage companions, not only in the management of our little and fragile canoe, but also in hunting, fishing and in the expeditions which we made a-foot, and it is our conviction that is was this circumstance that gained us the affection and the respect of the savages who recognize no other superiority than that of strength.

At last, after great fatigues, after crossing the Cordillera and going, either on foot or in the canoe, over the fourteen hundred miles of the Putumayo River, we arrived at the Amazon River. Our efforts had been crowned with complete success, having pursued the object that induced us to undertake this expedition, which was nothing less than to discover a river navigable for steamers which would form a communication between Colombia and the Amazon

Explorations of the same laborious character as that which I have just described we subsequently made during several years, with my brothers Henry and Nestor, on the rivers Caqueta, Napo, Ucayali, Yabari, Yurna, etc., and others, which are marked on the map which I hand you herewith.

My brother Henry died of malignant fever, while exploring the Yabari River, and the Peruvians erected him a sumptuous mausoleum in the cemetery of

Nestor, my younger brother, was lost while exploring the forests of Putumayo, where, as stated before, he was devoured be the savages. We could only recover his bones, which I was able to unite with the remains of my brother Henry, and carried them to Bogota, the Capital city of Colombia, where they now rest, deposited in the Cathedral.

May it be permited to me, Mr. President, to convert myself for a moment into a herald of historic justice, and, leaving aside the considerations of the ties of consanguinity, to consecrate here, before you, a remembrance of admiration to those two heroes of labor and of the civilization of the American Continent.

FROM THE MOUTH OF THE PUTUMAYO TO RIO JANEIRO.

The point where the Putumayo, or Iça, as the Brazilians call it, unites with the Amazon River, is called San Antonio, and is some 1,800 miles distant from the mouth of the latter at the Ocean.

We had now arrived at a place which might be called civilized, in comparison with the regions which we had just traversed; a small steamer arrives there monthly plying between Pará and Iquitos, and in which we took passage for the former city, where we arrived six months after our departure from Pasto,

We published a short account of our trip, which caused a great impression and was reproduced in of Brazil, we were the object of many manifestations on the first trip, in steamboat, on the Putumayo. of affection and esteem on the part of the author-

Such was our life during the two months that Julio Laroque, Manuel Antonio Pimenta Bueno, etc.

From Pará we went to Rio de Janeiro, touching on our way the cities of San Luis de Maranhao, Ceara, Rio Grande del Norte, Pernambuco and Bahia. The voice of the press had preceded us, giving information on our expedition, and in all these cities, as well as in Rio Janeiro, we were received and feasted with enthusiasm.

On the very day of our arrival at Rio de Janeiro we received a note from the Governor of the Palace, welcoming us in the name of the Emperor, Don Pedro II, and informing us that the Emperor would receive us the following day, which was a Gala Day of the Court, at four o'clock in the afternoon, in his Palace of San Cristobal.

We went there at the appointed hour. The burning sun, rain, hunger, and all the fatigue which we had suffered during six months while crossing the Continent, had converted my body into a skeleton and enveloped it in a species of parchment; for this reason it was that, when I presented myself in the Hall of Receptions, before the entrance of the Emperor, and in which were all the grandees of the Empire in their gala uniforms, I noticed that I was looked upon as an intruder; nobody knew who I was and I remained isolated from all. A few moments afterwards the Master of Ceremonies called my name and conducting me through the assemblage, which then saluted me with deference, he showed me into the working cabinet of the Emperor, by whom I was received not only with politeness, but also with affection.

Don Pedro II was of majestic and commanding stature, of frank and honest countenauce and blonde like a German. In his great blue eyes could be discerned the kindness and nobility of his soul; he was possessed of a highly cultivated intellect, and was a savant in the most perfect sense of the word. He spoke several languages correctly and we carried on our conversation in French; he had a passion for Geography and for the exploration of the immense territories of his empire. For an hour we discussed the map which I had formed of my expedition, and in which he showed great interest. He accompanied me to the Hall of Receptions, where he presented me and recommended me to all those who were present.

I remained two months in Rio Janeiro, during which I received all kinds of polite manifestations from that society, whose hospitable character is proverbial. Permit me to mention the names of the gentlemen who took great pains in offering me their support in future explorations: Baron of Rio Branco, Chief of the Gabinet; Marquis San Vicente and Baron Cotejipe, Admiral Van den Colk, the Republican Quintino Bocayuba, actual president of the Senate, Baron of Rio Branco Jr., then editor of «La Tarde» and at present Minister of Brazil in Germany.

I comply whith a duty in mentioning here also the name of the illustrious explorer and botanist Raiall the daily papers of Brazil. It was the first time mundi, to whom I am indebted for words of encourthat a traveller had traversed the American Conti- agement for the continuance of my explorations; nent from the Pacific Coast of Colombia in order to and must also mention the name of Mr. Alfred Simpreach Pará. In this city, as hospitable as all those son, an English gentleman, who accompanied me

The Government of Brazil generously offered to ities and of persons of the select circles of society, supply us with ships and money to enable us to consuch as Messrs. Dr. F. A. Raiol, Manuel Pinheiro, tinue our explorations, which, however, I did not accept, as I neither had asked nor accepted them from my own country, all our explorations having been made with funds belonging to my brothers and to myself.

From Rio de Janeiro we returned to Para, where we bought the Steamer Tundama, named after our native province in Colombia and which we manned and provisioned for the purpose of making the voyage of the Putumayo to La Sofia.

FROM PARA TO LA SOFIA.

In our steamer we ascended the Amazon River without obstacle to San Antonio. There we entered upon the waters of the Puntumayo. We can say that it was one of the happiest days of our lives, when we saw, for the first time, the flag of Colombia float trom the stern of the vessel waving in the breeze. This vessel was to realize the conquest of civilization and progress for our country and to improve the horrible condition of thousands of savages who at the mere contact with civilized man felt as if stricken by the electric spark of that same civilization, as they had not only treated us hospitably but very

We spent two months navigating the 1200 miles of this River to Sofia and there we had to procure fuel for the steamer.

With the assistance of the Portuguese Captain, Francisco Antonio Bisao, we drew the geographical map of the Putumayo River, the only one of our explorations that has been published.

While passing through the territory of the savage tribes, which months before had seen us deprived of all resources and had assisted us to continue the expedition, we were then able to rewerd them generously, permitting them to admire the objects and curiosities of civilization until then unknown to them, of which objects we carried a supply in our steamer. To our friend Chua, the Chief of the powerful tribe of the Mirañas we made a present of arms, which, however, he never used against ourselves, of implements of agriculture, of seeds and of garments for his numerous wives. We finished our voyage at La Sofia, where the mighty current of the river prevents a further advance of steamers. From that port, a hundred miles distant, the immense Cordillera of the Andes rises majestically, appearing in the horizon like a gigantic wall of bronze, crowned with snow, above which, towards the South, in Ecuador, the volcanos of Pichincha, Cotopaxi, Chimborazo and others throw forth fire and smoke. Beyond those elevated summits lay our home, calling us back with all those impulses of affection which are irresistible to the soul. In order to arrive there after our repeated expeditions, we had again to traverse a-foot the dense woods and icy plains through which we had plowed our first route. Later, we united the Putumayo River with the City of Pasto by a bridleroad, over which is carried on to-day an important

What we said of the river Putumayo is also applicable to all the other rivers and forests explored by the brothers Reyes. The Indians are now partly civilized and their condition of life has improved, and with their asiistance an export commerce of

CLIMATE AND AGRICULTURAL PRODUCTS.

On the slopes of the Cordillera of the Andes, the temperature varies from zero to 20 degrees centigrade, according to the altitude. The climate is healthy and fit for the inhabitants of the temperate zone. The lands are extraordinarily fertile and produce, with facility and abundance, the following: wheat, barley, potatoes, corn and all the products of the cold climates. In the zone situated between 18 to 22 degrees centigrade, coffee of a superior quality is produced. There is an abundance of water-falls for the development of electric force. The extent of this zone which forms the limit of the basin of the Amazon, is several hundred thousand square miles. From the foot of the Cordillera of the Andes to the Ocean, the climate is hot, and miasmatic fevers prevail, as they do in all similar regions. The soil is extremely fertile and suitable for the cultivation of sugar-cane, cocoa, tobacco, cotton, etc., etc.

As may be seen from the map, there are on the rivers Ucayali, in Peru, and on the Negro, Orinoco, Meta and Vichada, in Venezuela and Colombia, immense plains covered with natural pastures, similar to those of the River Plate and on which millions of head of cattle may be raised.

MINERAL WEALTH.

On the map which I present, the region of the Cordillera of the Andes is indicated, which contains an abundance of mines of gold, silver, iron, copper, coal, mercury and every other kinds of minerals, and besides, the famous emerald mines of Muzo and Coscuez which are located in Colombia and are the only ones of any importance in the World. In Brazil, in the State of Minas Geraes, are located the famous diamond mines.

At the foot of the Cordilleras, and in the beds of the rivers which descend from them, there is to be found an abundance of alluvial and placer gold mines as rich as those of California. The Indians extract from them important quantities of gold.

SAVAGE INDIANS.

It is very difficult to calculate, even approximately, the number of savages, which inhabit this immense region. We believe that they amount to some hundreds of thousands, which may be easily attracted to civilization, because their character is generally kind and hospitable. They can assist greatly in the exploitation of the enterprises that may be established

THE GOLD MINES IN COLOMBIA.

Before the Conquest, the territory now forming the Republic of Colombia was acknowledged by the aborigenes as the richest in gold. When Columbus arrived at the Antilles, the natives informed him that the gold, which they possessed in large quantities, was obtained from the Indians who inhabited the coast of that territory.

The immense gold treasures found in Peru by the Pizarros and Almagro came mostly from the mines of Barbacoas on the Pacific coast, between Tumaco some tens millions of dollars is maintained in caucho, and Pasto, and from those of Novita, on the Choco, cocoa, medicinal plants, etc., and this trade fills with whose natives bought with gold the salt, which is its products the holds of hundreds of river steamers. not found in that region, but which was abundant in Peru. At present that commerce still exists on a large scale and many vessels are engaged in the trade.

The abundance of gold in Barbacoas was so great, that even the agricultural implements used by the Indians, such as axes, machetes, knives, etc., and household utensils, as plates, cups, etc., were made of gold, as proved by those found in Indian graveyards, because it is known that the habit was to bury the dead together with such articles of gold as they

possessed during their lifetime. The Quimbaya Indians, who in habited the heights ed with excellent results. of the Andes, between Bogota and Popayan, possessed gold in such large quantities that there was found a few years ago in the tomb of one of their chiefs, a treasure of various objects, weighing many pounds, and which was presented to the Queen of Spain by Colombia. These can be seen in Madrid. In the Indian cemeteries there are frequently found treasures amounting in value to several thousands of dollars, being the jewels with which they used to

The El Dorado tradition in search of which Hernan Perez de Quezada, brother of Gonzalo de Jiménez de Quezada, the Conqueror of the country which to-day is called Colombia, made his famous expedition from Bogota to Pasto, on the Eastern slopes of the Andes, traversing more than two hundred leagues (600 hundred miles) over the rough mountains, has its origin in the tradition that at the approach of the Conquerors, the Indians hid an immense treasure which, up to the present time, has not been found.

During the Colonial epoch, the Spaniards worked the Mines of Antioquia, of Choco Alto, of Quibdo, of Novita, and the famous mine «El Medio,» those of Timbiqui, of Barbacoas and of the interior of Cauca, employing in them the Indians and the negroes which they brought from Africa, and with such great success, that they made themselves millionaires. In some cities, like that of Popayan, the capital of the Department of Cauca, in which they erected palaces for their private residences, there were very rich people, like a certain Valencia, the founder of the house of the Counts of Casa-Valencia, who established a Mint with his private means, which he presented to the Government, and who constructed an aqueduct for the city.

It is stated in the Archives of the Indies, and in all official documents that the graater quantity of gold which Spain derived during all the colonial period, was produced in the Kingdom of New Granada, the Colombia to-day.

When Baron Von Humboldt visited that country, at the beginning of the past century, he visited the auriferous lands of Choco, Antioquia and Cauca, and it was his opinion, as may be seen in his work, that these districts are the richest in gold in the World.

After this country achived its independence from Spain, the liberty of the slaves was decreed by the Government, and the gold mines were thenceforth not worked with regularity, and by the lack of means of communication, modern machinery could not be introduced, by the use of which, even relatively poor mines, like those of the Transvaal, may give immense results. The day on which the gold mines

that neither the Klondike nor the Transvaal are richer in gold than Colombia. Not many years ago, from the mine of Cargazon, in Barbacoas, a mass of pure gold was extracted weighing five hundred kilos, which did not require even washing. In the streets of that city, in the yards of the houses and on all sides gold is found in abundance.

At the present time the mines of Cana in Panama; of Zancudo in Antioquia; the famous one of Echendia and that of Timbiqui, in Cauca, are work-

The Inter-Continental Railway, which will traverse the whole auriferous region of Colombia, will open this wealth, now abandoned and almost unknown, to commerce and industry.

In Chocó, in Nóvita and Quibdó, platinum, which is almost as highly valued as gold, is found in abun-

THE EMERALD MINE OF MUZO AND COSCUEZ.

I have stated that this is the only mine of its class in the world, because, although it is a fact that emeralds are found in the Balkans, in Russia, and in India, these are pale and almost without value in the market; the esmeralds of Muzo, in Colombia, are the only really fine and valuable ones.

This mine is located fifty miles from Bogotá and very near to the route of the Inter-Continental railway.

It was first worked by the Indians, and the Conquerors took a great quantity of emeralds out of it. It belongs at present to the Government of Colombia, which farms it out, and the parties working it have become millionaires. Owing to the lack of means of communication, it has not been possible to introduce proper machinery, and it is worked in a primitive way. According to news lately received it has been leased to a Colombian Company at the rate of something over \$430,000 American gold per year.

It is easy to appreciate that this mine represents an inmense wealth, and as soon as it may be worked by modern methods and machinery it will give immense results.

What I have said of the gold mines of Colombia, may be applied equally, on a corresponding scale, to Venezuela, Ecuador, Peru, Bolivia, Brazil, etc., that is to say, to all of South America. In the chart accompanying this report, the mineral districts are in-

THE CORDILLERA OF THE ANDES.

The gigantic Cordillera of the Andes starts from Patagonia and traverses Chili where it reaches the altitude of the highest peaks of the Himalayas. It divides that country from the Argentine, extends through Brazil, Peru and Ecuador, and, at Pasto, in Colombia, it divides itself into three branches which cross that country and Venezuela; the western branch extends through the Isthmus of Panama and Central America and, on reaching Mexico, it takes the name of the Sierra Madre, and that of the Rocky Mountains in North America.

If this Cordillera has been a great obstacle for railway development, its bowels contain, in exchange, all the minerals that man employs in industry and of Colombia may be worked by means of modern commerce; it offers healthy and varied climates machinery, which will be as soon as the projected for the inhabitants of the temperate zone; there Railway is built, to carry it, it will be seen that the are localities like Bogota, Quito, and some other opinion of Von Baron Humboldt was correct, and places in Peru, which, owing to their situation near and to the rarity of the air, have the property of radically curing tuberculosis, that terrible scourge of the temperate zone. We believe that this fact ought to be universally known.

Between the ranges of the Andes there are extensive and fertile valleys, some of which are elevated and cold like that of Mexico, and as large as the latter; these are the savannas of Bogotá and Túquerres, in Colombia, and those of Otavalo and Quito, in Ecuador, in which, in addition to the fertility of the soil, there is found throughout the year a healthy and agreeable climate of from 12 to 15 degrees Centigrade, being, in fact, like a perpetual Spring, or else valleys where the temperature ranges from 20 to 26 degrees Centigrade, like that of the Cauca, in Colombia, on the Pacific slope, which is 120 miles long by 30 miles wide, and is watered by the river of the same name, which traverses it from North to South and is navigable for steamers. Humboldt called this valley the Paradise of America, and it is truly a paradise not only on account of the fertility of the soil and the mildness of its climate, but because of the beauty of nature and of the hospitality of its inhabitants. There is to be found in this valley all the wealth of the mineral and natural products in greater abundance than in any other part of South America. The two chains of mountains which form its Eastern and Western limit enable their inhabitants to select within their own farms, the climate which they may wish to have, from 26? down to 5? Centigrade on the high mountains. Another of the great advantages possessed by the Andes mountains is the abundance of water-falls, genuine cataracts, such as the famous Tequendama, in Colombia, which can develop motive power for electricity.

Those born upon those mountains are abundantly justified in our love for them, as therein are our

COMMUNICATION BETWEEN THE INTER-CONTINEN-TAL RAILROAD AND WATER-WAYS.

I must call the attention of the Conference to the very important fact that the Inter-Continental Railway line, which will cross South-America, could easily, by means of some branches, be connected with the immense system of river communications formed by the Amazon and its tributaries, on which trans-Atlantic steam ships can navigate for three thousand miles, and river boats, like those of the Mississippi for thirteen thousand miles, which makes a river navigation of sixteen thousand miles, through a territory of virgin soil and in which all kinds of mineral and agricultural resources are abundant. These rivers run through the territory of all the South-American countries, with the exception of Chili, in such a manner that they are, or can be, communicated with each other by means of river na-

During several years I explored in company with may brothers Enrique and Nestor, the Amazon river and the greater part of its affluents; we discovered some unknown rivers, we established steam navigation in others, we communicated by means of overland routes the river navigation with the towns on the pool to Iquitos), and for river steamers for 400 of the rivers which at that time were unknown, today there are hundreds of steamers which carry in-

the equinoxial line, to their altitude above sea level, dustries and civilization to the virgin forests where the savage cannibal wandered formerly. The exportation which is to-day made by those rivers, only of rubber, (caucho) which grows wild in the forests, is worth more than twenty million dollars in gold. In those forests there grows in abundance the wild cocoa, which is now exported in considerable quantity, and all clases of fine woods and medicinal plants are also abundant. Game of all kinds is found; in its waters Professor Agassiz classified more than five hundred species of fish, which form a very impor-

> The extension of the territory that these rivers irrigate, is more than 4.000,000 square miles which are still to-day virgin soil and which are offered to commerce and to human industry.

> The names and navigable extension of the principal of these rivers are as follows:

1,000

1,300

500

200

The Guianas.—The River Trombetas is naigable by steamers.

Venezuela.—The River Negro is navigable from the City of Manaos, the population of which is 50,000 inhabitants, to a point from which communication can be obtained, by the River Caciquiare, with the Orinoco, which flows into the sea opposite the island of La Trinidad. The combined navigation of the River Negro and of the Orinoco and its affluents, the Meta, the Arauca and the Vichada, which belong to Colombia, is more than.....

Colombia.—The River Putumayo, discovered and explored by us, which has its course in the neighborhood of the City of Pasto, through which the Inter-Continental railroad would pass, has a course from its source until it plows into the Amazon, of fourteen hundred miles, of which 200 run down the slope of the Andes, through fertile and healthy lands that are rich in all class of minerals and through woods in which abounds rubber, wild cocoa, etc., etc., from La Sofía as far as San Antonio, on the Amazon, affording free navigation for steamers during the whole year.....

The River Caquetá or Yapura has its source in the Lake of El Buey, where the River Magdalena has also its own, this latter flows towards the West and empties itself into the Atlantic, at Sabanilla, and the Caquetá flows towards the East and has a course of 1,600 miles, of which those navigable for steamers are.....

Ecuador.—The River Napo, has its source to the East of the City of Quito: around it all classes of minerals are found in abundance; it has a course of 1,000 miles of wich those navigable for steamers are......

The Pastaza has a course of 300 miles of which those navigable for steamers are.....

The Tigre has a course of 600 miles of which those navigable for steamers are...... Peru. - The Morona, navigable for river

The Amazon or Marañon, which flows from Lake Lauricocha, has a course of more than 4,100 miles, until it empties itself into the Ocean; of these, 3,000 are navigable for trans-Atlantic steamers, from Pará to the town of Iquitos, which has 30,000 inhabitants (there are two direct lines of steamers running from Liver-

A la vuelta..... 8,900