

INTERNATIONAL UNION OF AMERICAN REPUBLICS

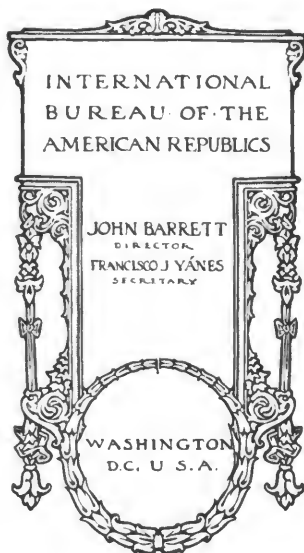
BULLETIN  
OF THE INTERNATIONAL UNION OF THE  
AMERICAN  
REPUBLICS

JUNE

1909



NO. 2 JACKSON PLACE, WASHINGTON, D. C., U. S. A.  
CABLE ADDRESS *for* BUREAU *and* BULLETIN, "IBAR," WASHINGTON



---

---

**SUBSCRIPTION RATES FOR THE BULLETIN**

English Section, \$2 per year in all countries of the International Union; in other countries, \$2.50 per year. Single number, 25 cents.

Spanish-Portuguese-French Section, \$2 per year in all countries of the International Union; in other countries, \$2.50 per year. Single number, 25 cents.

Double number (Bulletin in English, Spanish, Portuguese, and French), \$3 per year in all countries of the International Union; in other countries, \$4. Single number, 40 cents.

---

---

**GOVERNING BOARD OF THE  
INTERNATIONAL BUREAU OF  
AMERICAN REPUBLICS**

PHILANDER C. KNOX, Secretary of State of the United States  
Chairman ex officio.

AMBASSADORS EXTRAORDINARY AND PLENIPOTENTIARY.

Brazil ..... Mr. JOAQUIM NABUCO,  
Office of Embassy, 1738 K street, Washington, D. C.

Mexico ..... Señor DON FRANCISCO L. DE LA BARRA,  
Office of Embassy, 1415 I street, Washington, D. C.

ENVOYS EXTRAORDINARY AND MINISTERS PLENIPOTENTIARY.

Argentine Republic ... Señor DON EPIFANIO PORTELA,  
Office of Legation, 1800 Massachusetts avenue, Washington, D. C.

Bolivia ..... Señor DON IGNACIO CALDERÓN,  
Office of Legation, No. 2 Stone street, New York.

Chile ..... Señor DON ANÍBAL CRUZ,  
Office of Legation, 1529 New Hampshire avenue, Washington, D. C.

Colombia ..... Señor DON ENRIQUE CORTÉS,  
Absent.

Costa Rica ..... Señor DON JOAQUÍN BERNARDO CALVO,  
Office of Legation, 1329 Eighteenth street, Washington, D. C.

Cuba ..... Señor DON CARLOS GARCÍA VÉLEZ,  
Office of Legation, "The Wyoming," Washington, D. C.

Ecuador ..... Señor DON LUIS FELIPE CARBO,  
Summer address, Blue Ridge Summit, Pennsylvania.

Guatemala ..... Señor DR. LUIS TOLEDO HERRARTE,  
Office of Legation, "The Highlands," Washington, D. C.

Haiti ..... Mr. H. PAULÉUS SANNOX,  
Office of Legation, 1429 Rhode Island avenue, Washington, D. C.

Honduras ..... Señor DR. LUIS LAZO ARRIAGA,  
Office of Legation, The New Willard, Washington, D. C.

Nicaragua ..... Señor DR. RODOLFO ESPINOSA R.,  
Office of Legation, 2003 O street, Washington, D. C.

Panama ..... Señor DON C. C. AROSEMENA,  
Office of Legation, "The Highlands," Washington, D. C.

Peru ..... Señor DON FELIPE PARDO,  
Office of Legation, 1737 H street, Washington, D. C.

Salvador ..... Señor DON FEDERICO MEJÍA,  
Office of Legation, "The Portland," Washington, D. C.

Uruguay ..... Señor DR. LUIS MELIÁN LAFINUR,  
Absent.

Venezuela ..... Señor DON PEDRO EZEQUIEL ROJAS,  
Office of Legation, The New Willard, Washington, D. C.

CHARGÉS D'AFFAIRES AD INTERIM.

Colombia ..... Señor DON POMPOYO GUZMÁN,  
Office of Legation, 1728 N street, Washington, D. C.

Dominican Republic ... Señor DON ARTURO L. FIALLO,  
Office of Legation, "The Benedlek," Washington, D. C.

Uruguay ..... Señor DON ALBERTO NIN FRIAS,  
Office of Legation, 1110 Twenty-first street, Washington, D. C.

[Paraguay has at present no representative on the Governing Board.]



UNITED STATES  
REPRESENTATIVES IN THE  
LATIN AMERICAN REPUBLICS

AMBASSADORS EXTRAORDINARY AND PLENIPOTENTIARY.

Brazil.....IRVING B. DUDLEY, Rio de Janeiro.  
Mexico .....DAVID E. THOMPSON, Mexico.

ENVOYS EXTRAORDINARY AND MINISTERS PLENIPOTENTIARY.

Argentine Republic.....  
Bolivia.....JAMES F. STUTESMAN, La Paz.  
Chile .....THOMAS C. DAWSON, Santiago.  
Colombia .....ELLIOTT C. NORTHCOTE, Bogotá.  
Costa Rica.....WILLIAM L. MERRY, San José.  
Cuba .....EDWIN V. MORGAN, Havana.  
Ecuador.....WILLIAMS C. FOX, Quito.  
Guatemala .....WILLIAM HEIMKE, Guatemala City.  
Haiti .....HENRY W. FURNISS, Port au Prince.  
Honduras .....PHILIP M. BROWN, Tegucigalpa.  
Nicaragua.....HORACE G. KNOWLES, Managua.  
Panama.....HERBERT G. SQUIERS, Panama.  
Paraguay.....(See Uruguay.)  
Peru.....LESLIE COMBS, Lima.  
Salvador .....  
Uruguay .....EDWARD C. O'BRIEN, Montevideo.  
Venezuela.....WILLIAM W. RUSSELL, Caracas.

MINISTER RESIDENT AND CONSUL-GENERAL.

Dominican Republic.....FENTON R. MCCREERY, Santo Domingo.



# TABLE OF CONTENTS

	Page.	Page.
<b>Editorial section</b> .....	961	
Death of the President of Brazil—Latin Americans on International tribunals—Upbuilding the merchant marine of the United States—School lectures on Latin America—New steamships for South American travel—Preparations for the Fourth Pan-American Conference—United States tariff and trade with Latin America—Special Envoy from Nicaragua—Dinner given by the Brazilian Ambassador—A new winter excursion to South America—The International Club of San Antonio—Chilean Consul-General in New York—Increase of books on Latin America—The coming annual review—Progress in the movement for banks—Brazilian preferential rates for United States products—Bolivian trade in 1908—Discontinuance of the Chilean Nitrate Association—Colombia's emerald mines—Economic conditions in Costa Rica—Industrial development in Haiti—Agricultural development in Honduras—Mexican railways—The new United States Consul-General in Panama—Preliminary plans for a World's Fair at Panama—Steamship and railway enterprises in Peru—Advancing commerce in Salvador—Consular reports on Uruguay—Patriotic society in Venezuela—Sanitary Convention of the American Republics.		tary report made by the subcommittee of the First Central American Conference.
<b>Book notes</b> .....	974	
The Panama Canal and its makers—An expedition across Venezuela and Colombia—Mon-		tary report made by the subcommittee of the First Central American Conference.
		<b>MAGAZINE ARTICLES</b> ..... 976
		<b>An answer to Panama Canal critics—Pan-American matters discussed in the April "Independent"—Appreciation of two famous Spanish artists—A South American number of the Bulletin of the Philadelphia Geographical Society—In the Venezuelan wilderness—Latin American affairs treated in the American Journal of International Law—The new Brazil—Report of the Chief Engineer of the Isthmian Canal Commission—The Pan-American Scientific Congress of Chile—The Mexican peon—Harbor works at Salina Cruz—Spanish edition of the United States Pharmacopœia—Regional population groups of Atacama—The lock system of the Panama Canal—Iron deposits of Chile—Education in Honduras—Vanadium deposits of Peru—Cable routes between London and South America—Civil and mercantile societies of Venezuela.</b>
		<b>Latin American notes</b> ..... 984
		<b>The Month of June in Pan-American History</b> ..... 987
		<b>Maize or Indian corn the great native food supply of America.</b> 989
		<b>Municipal Organization in Latin American Capitals, Montevideo</b> 1003
		<b>New Steamer Service for South American Service</b> ..... 1015
		<b>Alejandro Alvarez and International Law</b> ..... 1019
		<b>Reception of New Minister from Venezuela in the United States</b> 1024

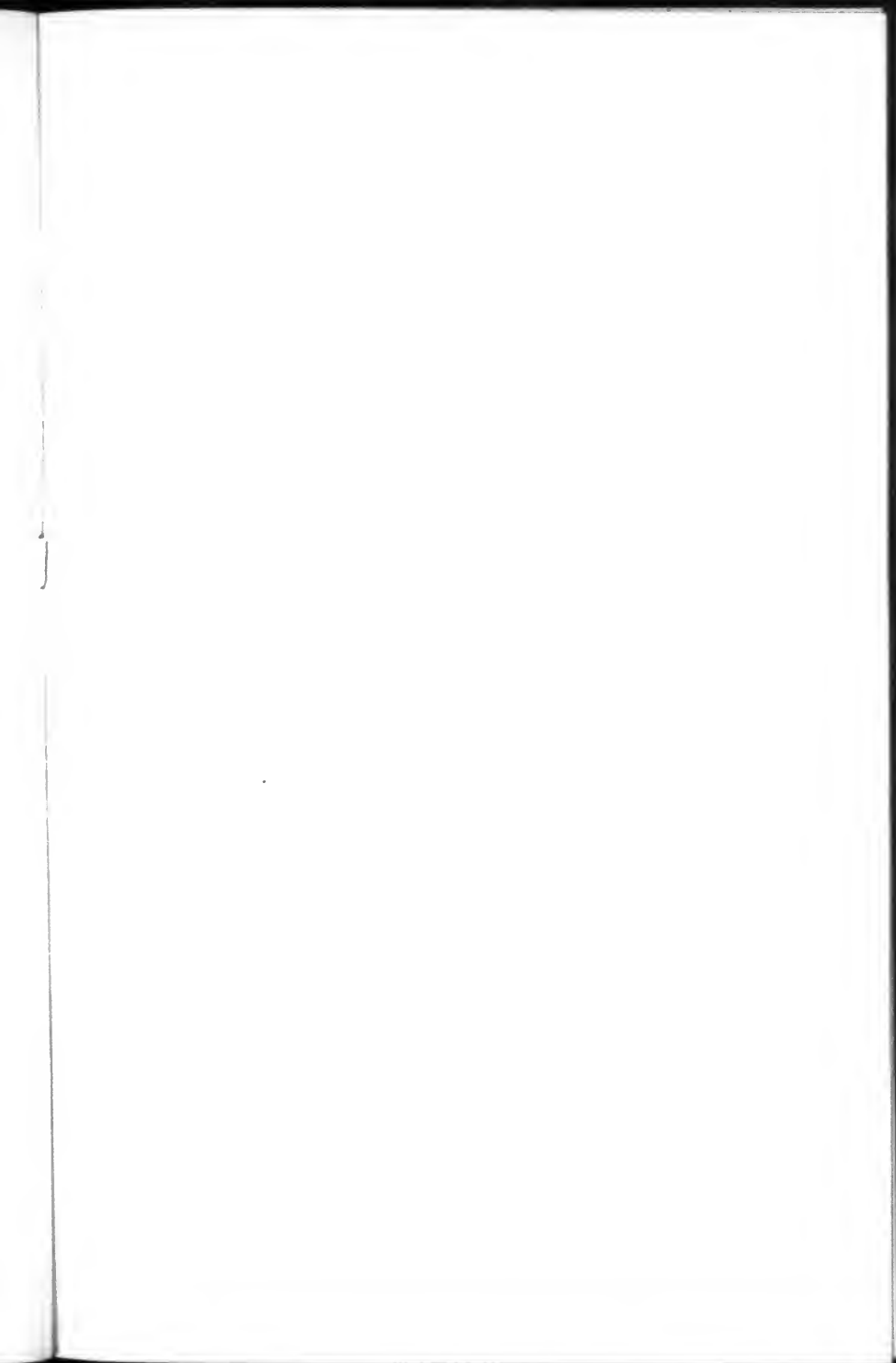
	Page.		Page.
<b>Reception of Special Envoy from Nicaragua to the United States</b> .....	1025	Valparaiso and Panama—Commercial Institute of Valparaiso—Abrogation of Valparaiso harbor contract—New industrial companies.	
<b>The Emerald Mines of Colombia.</b>	1027	COLOMBIA .....	1097
<b>Brazil the Host of Pan-America.</b>	1040	Financial administration—New navigation service on the Magdalena River—Revenues for second half of 1908—Municipal improvements at Bogota.	
<b>Whaling in Brazil</b> .....	1048	COSTA RICA .....	1100
<b>A Botanical Garden in Buenos Aires</b> .....	1055	Modification of customs tariff—Explosives for industrial purposes—Free importation of corn and beans.	
<b>Dry Farming in Brazil</b> .....	1064	CUBA .....	1102
<b>Indorsement of the Work of the Bureau</b> .....	1068	Message of the President—Communication facilities in the Republic—Proposed improvements at Havana—Foreign capital in the Republic.	
<b>Subject-Matter of Consular Reports</b> .....	1069	DOMINICAN REPUBLIC.....	1104
<b>Cacao Trade and Consumption</b> ..	1071	Report of the Secretary of Foreign Relations.	
<b>Trans-Isthmian Traffic in 1908.</b>	1074	ECUADOR.....	1105
<b>American Wheat Production in 1908</b> .....	1075	Schedule of telegraph charges—Railway from Huigra to Cuenca.	
<b>Shipping Facilities Between Europe and South America</b> .....	1077	GUATEMALA .....	1105
ARGENTINE REPUBLIC.....	1080	Ratification of conventions of the Third Pan-American Conference.	
Report on the boundary with Paraguay—Meat and cattle trade with Great Britain—Centennial celebration in 1910.		HAITI.....	1106
BOLIVIA.....	1084	Railway and industrial concessions.	
Foreign commerce in 1908—Foreign commerce, first half of 1908—The gold standard—Tin mining in the Republic—Automobile service in the Republic—Export duty on copper and bismuth—University and newspaper congresses—Status of taxes on coca.		HONDURAS .....	1108
BRAZIL.....	1088	Concession for railroad from Trujillo Bay to Jaticalpa—Cabinet and dye woods on government lands—Encouragement of agriculture—Public instruction—Modifications in the customs tariff—Water and electric light and power contract—Treaty of commerce and amity with Mexico.	
Operation of tariff concessions to United States products—Output of Para rubber in 1908—The dock system of Rio de Janeiro—Floating dock at Rio de Janeiro—New bankruptcy law—Status of the flour market—Results of perini fiber cultivation—Report of the Bank of Brazil for 1908—Participation in Health Congress—The manufacture of textiles—Exports of nuts—Lease of the Madeira-Mamoré Railway—Miscellaneous notes.		MEXICO .....	1112
CHILE .....	1095	Rates for coal transport—Discovery of high-grade oil—New railway prospectus—The Northwestern Railway Company of Mexico—Railway and steamship connections—Proposed	
Status of the nitrate industry—Fast steamship line between			

TABLE OF CONTENTS.

VII

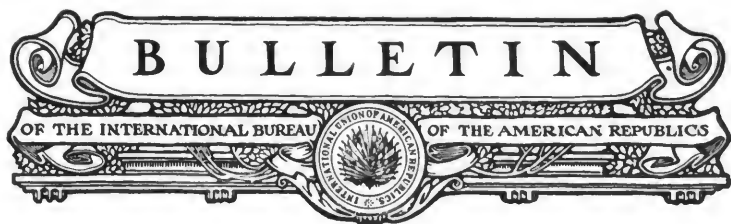
	Page.		Page.
new census—New steamship line between Progreso and New Orleans—Irrigation in the Chapala district.		of Peru and London—Primary instruction in national colleges.	
NICARAGUA.....	1115	SALVADOR.....	1121
Banana exploitation on the west coast—Improvement contract with the Cukra River Planting Company—New railway contract.		Foreign commerce in 1908—Financial condition in 1908—Duties on wines and canned goods.	
PANAMA.....	1117	UNITED STATES.....	1123
School physicians in Panama—Chinese business employees in Panama—Tax on petroleum lands and mines—Mining opportunities.		Foreign commerce, nine months of 1908-9.	
PARAGUAY.....	1119	URUGUAY.....	1123
New municipal law—Status of public and private instruction.		Economic conditions in 1908—Railways and shipping—Export items in 1908—Mining and minerals in the Republic—Characteristics of trade and industry.	
PERU.....	1120	VENEZUELA.....	1128
Dry dock at Callao—Internal revenue, 1908—Imports of wheat and rice, first half of 1908—Subsidy for steamship line—Bank		Commission of public hygiene—Importation of merchandise by parcels post—Establishment of factories for meat extracts—Population, January 1, 1909—Closing of Tucucas custom-house.	







GENERAL FERNANDO FIGUEROA,  
PRESIDENT OF SALVADOR.



---

VOL. XXVIII.

JUNE, 1909.

No. 6

---

**D**R. AFFONSO AUGUSTO MOREIRA PENNA, President of the United States of Brazil, died suddenly on June 14, 1909. It is with a deep feeling of grief that the International Bureau of the American Republics has learned of his demise. He was one of Latin America's greatest public men. Under his able administration the Brazilian Republic has prospered to a degree in keeping with the wealth of its material resources and with its moral and political dignity.

Doctor PENNA was elected to the Presidency in 1906, taking the oath of office on November 15 of that year, for the regular term of four years ending in 1910. Previous to Doctor PENNA'S entry into public life he had devoted himself to journalism with much success. During his subsequent career in the service of his country he held various important positions in the Government, and was finally elected to the Presidency of the Republic. Immediately upon receipt of the news conveying the sad intelligence of President PENNA'S death, the Director of the International Bureau, in behalf of this institution, cabled Baron DO RIO BRANCO, the Minister of Foreign Relations at Rio de Janeiro, an expression of heartfelt sympathy for the Brazilian Government and people in their great loss. A similar expression of condolence was sent to Mr. NABUCO, the Brazilian Ambassador, at his summer residence. As a tribute of respect to the late President and of the participation of the Bureau in the mourning of Brazil, the flag of the Bureau was displayed at half-mast until after the funeral.

---

LATIN AMERICANS ON INTERNATIONAL TRIBUNALS.

The high rank held by public men of Latin America in diplomacy and the position attained by the republics of the Western Hemisphere in world affairs have recently been emphasized in the appointment of two distinguished Latin Americans upon international tribunals of arbitration. The application of the principle of arbitration is one of the highest developments of civilization, and its accepted exponents are always chosen from among the foremost nations of the globe. The selection,

therefore, of a South American to serve on the arbitral tribunal instituted to adjudicate the old and much-discussed question between the Governments of the United States and Great Britain concerning the fisheries on the North Atlantic coast is an epoch-marking event. This honor, which is shared by all of Latin America, has been bestowed upon Dr. LUIS MARIA DRAGO, the renowned Argentine statesman and author of the doctrine which bears his name. The Drago Doctrine, although the subject of much critical discussion when first introduced at the Third Hague Conference, was ultimately received by the majority of the nations participating in the conference as a principle of international law. The other noteworthy instance of recent occurrence of the same character is the acceptance, on the part of the United States, of the services of Señor Don AUGUSTO B. LEGUIA, President of Peru, as arbiter in questions which may arise between the Governments of Panama and the United States subsequent to the treaty signed by the two nations. President LEGUIA'S name was suggested by Panama and the proposition was received with enthusiasm by the United States. Among South Americans previously serving on international tribunals may be mentioned the late Viscount D'ITAJUBA, who was a member of the court that met at Geneva to decide the "Alabama" question between the United States and Great Britain, and the late Viscount DE ARINOS, who presided over the international court that sat in Washington to decide concerning Franco-American claims arising out of the civil war in the United States and the Franco-German war.

---

#### THE CAMPAIGN FOR UPBUILDING THE MERCHANT MARINE.

The Merchant Marine League of the United States is planning a most elaborate campaign for the education of the people at large to an appreciation of the importance of building up American shipping. At a meeting of the executive committee of the league, held recently in Cleveland, Ohio, there was a large attendance and a general discussion, in which it was decided to carry forward the work of the organization on lines more expansive and broader than ever before attempted. This will include lectures before Chatauquas all over the United States, the publication of pamphlets and reports, and the distribution of a regular monthly publication wherever it will do the most good. The campaign will be waged with special strength in the districts of Congressmen who opposed the shipping bill as it was voted upon at the last session of Congress. The presidents of universities and colleges will also be asked to cooperate, so that the young men who are going out from their doors into public life may be interested in the subject. In the prospectus describing the monthly publication it is stated that:

It was the opinion that to accomplish the most good from these bulletins they should be mailed regularly to all Senators, Congressmen, and gentlemen prominent in public life in this country who it is expected might be interested in this





AFFONSO AUGUSTO MOREIRA PENNA,  
Late President of Brazil, who died June 14, 1909.



subject; to the editors of the leading daily and agricultural papers and magazines; prominent men in a number of the chief labor organizations of America; United States Consuls scattered all over the world; secretaries of the various national, State, and local business men's associations; presidents of the leading colleges and universities, and all the members of the league, or those who are in any way connected with its workings, in any part of America.

---

#### LECTURES ON LATIN AMERICA BEFORE SCHOOLS.

It is reported that the officials having in charge the courses of lectures which are delivered before the school children of New York City are planning next year to have a series delivered on Latin America. The Bureau has frequently urged that this step be taken, not only in New York but in other cities where lectures are part of the school work. There is no better way of awakening interest in a new field than getting the attention of the growing children. In their minds are planted ideas which grow with their advancing years, and if they are taught when very young to recognize the importance of Latin America, its vast area, its mighty resources, its splendid potentialities, and its direct relationship to the United States, they will grow up with a true appreciation, which otherwise would be lacking, of that part of the world. Already many of the teachers in New York City are giving their children special instruction on Latin America, as is shown by the requests that are received here for data bearing on Central and South America.

---

#### A NEW STEAMSHIP FOR SOUTH AMERICAN TRAVEL.

The Lamport & Holt Line is to be congratulated for placing upon the New York-Rio de Janeiro-Montevideo-Buenos Aires route the magnificent new steamer *Vasari*, which arrived in New York May 8 to make her maiden trip to South America. She is a ship of over 12,000 tons, with passenger accommodations that will satisfy the most exacting travelers. It is fortunate that this line is improving its service, because there is a decided increase in the number of travelers now who wish to visit South America. As soon as it becomes generally known that there are boats of this character, the number of people taking advantage of the opportunity to go comfortably to South America directly from New York will be notably augmented. On Tuesday, May 11, Messrs. Busk & Daniels, the agents of the Lamport & Holt Line, gave a beautiful luncheon on board the *Vasari*, which was attended by men prominent in business, shipping, and newspaper life of New York City, and by a few representative men from other places, like Washington. The Director was honored with an invitation, and had much pleasure in attending and making some remarks appreciative of the efforts of the Lamport & Holt Line to improve travel conditions between North and South America. In another part of the BULLETIN photographs of the *Vasari* and its interior are reproduced, together with a more detailed description of her appointments.

## PREPARATIONS FOR THE FOURTH PAN-AMERICAN CONFERENCE.

Preparation for the Fourth Pan-American Conference to be held at Buenos Aires next year will now go on more rapidly than ever before. The Argentine Government has just requested, through its Minister in Washington, that each member of the governing board communicate with his government and learn its attitude toward the questions which have been proposed for discussion at that conference. This situation was brought to the attention of the Governing Board at its last meeting on May 5, by the Argentine Minister, and it is hoped that reports may be received before the majority of the board leave for the summer, in order that the programme, at least in general terms, may be determined upon at an early date.

---

## THE TARIFF AND TRADE WITH LATIN AMERICA.

Attention has been frequently called to the growth of the commerce of the Argentine Republic and to the share which the different principal nations have in this trade. Those who are working for free hides have logically pointed out that the inclusion of such a provision in the tariff bill at present under discussion by the United States Government would add materially to the opportunities for the development of the export and import business of the United States with Argentina. In fact, the chief export of Argentina to the United States is hides, but the complaint is made in that country that it is purchasing far more from the United States than the United States is buying from it, but that if the duty on hides is removed there will be a great increase in the export trade of Argentina with the United States with a corresponding increase in the purchase of manufactured products of the United States. Last year Argentina bought products to the extent of \$93,000,000 from Great Britain, and sold to her \$78,000,000; from Germany \$38,000,000, and sold to her \$35,000,000; from the United States \$35,000,000, and sold to her only \$13,000,000.

---

## SPECIAL ENVOY FROM NICARAGUA.

On May 17, 1909, Dr. PEDRO GONZALEZ, credited as Special Envoy from the Government of Nicaragua to the United States, presented his credentials to President TAFT. Doctor GONZALEZ has held many high posts in the service of his country and is a jurist of renown, not only in Nicaragua, but throughout Central America, being a recognized authority on economic questions. The Pan-American Bureau offers its most cordial salutations to this distinguished representative of Nicaragua.



SEÑOR DON EMILIO C. JOUBERT.

Señor Joubert for the past four years has represented the Dominican Government as its Minister in the United States, serving ex officio as a member of the Governing Board of the Bureau of the American Republics. He recently returned to his own country, where he has been tendered the important cabinet position of Minister of Justice and Public Instruction.

## DINNER GIVEN BY THE BRAZILIAN AMBASSADOR.

The Brazilian Ambassador, Mr. JOAQUIM NABUCO, is to be congratulated for the success and brilliancy of the dinner which he gave at Rauscher's in Washington, D. C., Thursday, May 6, in honor of Dr. JOSÉ CARLOS RODRIGUES and the famous Gridiron Club, which is made up of the leading newspaper men in the capital of the United States. Nearly a hundred guests sat down at small round tables handsomely decorated. The general arrangement was that of a garden with a high hedge around the sides, and a large palm in the center. Able and interesting speeches were delivered by Ambassador NABUCO, Senator ELIHU ROOT, Mr. SCOTT BONE, Acting President of the Gridiron Club, and Doctor RODRIGUES. Selections from these are published elsewhere in the BULLETIN.

---

## A NEW WINTER EXCURSION TO SOUTH AMERICA.

The announcement of the Hamburg-American Line that it will send one of its large boats, the *Blucher*, to carry an excursion to South America, leaving New York in January and going as far south as the Straits of Magellan, is welcome news to the Bureau, which has constantly urged the steamship lines that have summer excursions to the Caribbean and to the Mediterranean to make the same experiment with reference to South America. Although it might seem at first more desirable for this trip to be made sometime between June and September, which are the winter months south of the equator, yet it is true that people in the United States are much more ready to go away on journeys of this kind in the winter than they are in the summer. The itinerary of the *Blucher* will include stops along the seacoast of South America from the mouth of the Amazon to Punta Arenas, with extra time at such places as Rio de Janeiro, Montevideo, and Buenos Aires. If this experiment is a success there is little question that the company will put other steamers on the same excursion route.

---

## THE INTERNATIONAL CLUB OF SAN ANTONIO.

The Director has recently received a very interesting communication from Mr. WINCHESTER KELSO, President of the International Club of San Antonio, Texas, the object of which is to improve the social and business relations between Mexico and the United States. It has a membership of over 500 and includes in its honorary list of names those of Gen. PORFIRIO DIAZ and ex-President THEODORE ROOSEVELT. The former presented the club with an oil portrait of himself, almost life size, and the Mexican Government has provided it with an exhibit of the mineral and vegetable products of that country, which is to be seen in the club rooms. If more organizations of this kind were started



SENHOR JOSÉ JOAQUIM GOMES DOS SANTOS,  
Consul-General of Brazil at New York.



SEÑOR DON RICARDO SANCHEZ CRUZ,  
Consul-General of Chile at New York.



in the States having close association with the different Latin-American Republics, another step forward would be taken toward greater Pan-American accord.

---

#### CHILEAN CONSUL-GENERAL IN NEW YORK.

RICARDO SANCHEZ CRUZ was born in Valparaiso, Chile, September 27, 1869. He received his education at the College of the French Fathers and the Seminario Conciliar de Valparaiso, where he obtained the prize "Optime Meruit," given to the student winning all of the first prizes in his course, taking his degree as doctor in laws and political sciences at the age of 19 years. He commenced his diplomatic career as Second Secretary of the Chilean Legation in Peru, serving in that capacity until 1902, when he was sent to Paris as secretary of the first class and treasurer, remaining there until 1904, when he was promoted to the post of secretary of the Chilean legations in Germany and Austria-Hungary. About the middle of the year 1905, due to the death of the Envoy Extraordinary and Minister Plenipotentiary of Chile in Berlin, he assumed the duties of Chargé de Affaires to the courts of Berlin and Vienna. During his eight months' service in this capacity he sent to his Government information of importance with reference to South American politics. Early in 1908 he was promoted to the post which he now holds of Consul-General of Chile in the United States.

---

#### INCREASE OF BOOKS ON LATIN AMERICA.

The increased demand on the International Bureau for recommendations covering the best current books on Latin America which can be read by those seeking information quickly and easily shows that more and more attention is being given by the public at large to that part of the world. Where one inquiry of this kind was received two years ago, at the inauguration of the new administration of the Bureau, a score now comes in. The number of libraries asking for a list of books on Latin America is gratifyingly large, and if the work goes on it ought not to be long before the people of the United States become far better informed in regard to the Latin American Republics than they now are. The number of books, moreover, which are being written or planned about Latin America is to be noted as showing a growth of interest. It is not infrequent for a scholar or traveler to communicate with the Bureau stating that he is preparing manuscript on some phase of Latin American history, geography, commerce, scientific progress, or governmental evolution. The Columbus Memorial Library, which the governing board of the International Bureau intends shall be thoroughly comprehensive on all Latin-American subjects, is receiving most of the books published on that part of the world, but it is not yet sufficiently well known so that all authors place copies in it, as they do in the Congressional Library.

It is hoped that as the Library becomes better known it may contain every volume that has to deal in any shape or form with Latin America.

---

THE COMING ANNUAL REVIEW.

The July issue of the MONTHLY BULLETIN will contain the annual review of Latin American trade. This should prove of practical value to all persons who are interested in the progress of commercial conditions in the various American Republics. There was a great demand for the annual review of 1908, and it is intended to make that of 1909 even more comprehensive and specific. The greater part of the July issue will be occupied with this review to the exclusion of many special articles of interest, but its importance warrants that amount of space and attention being given to it.

---

PROGRESS IN THE MOVEMENT FOR BANKS.

Indications now point to real progress being made in the matter of the establishment of a large United States-Latin American banking institution, which will have headquarters in New York City and branches in the principal capitals and commercial centers of the American Republics. The movement may not be consummated this year, but conditions are developing which must lead surely to its ultimate success. The great financial houses of New York City are taking an interest never before manifested in the bond issues and in the great material undertakings of the Latin-American countries, and they are appreciating that one of the strongest influences for the development of trade would be a chain of banks in the places where the largest operations are conducted. The Director has been continually in conference with bankers considering the feasibility of the project, and it is hoped that actual results may presently be recorded.

---

BRAZILIAN PREFERENTIAL RATES TO UNITED STATES PRODUCTS.

The message of the President of Brazil, delivered in May, 1909, furnishes a valuable résumé of conditions in the Republic during the preceding year. The results during 1908 of the special preferential rates accorded by Brazil to certain specified imports from the United States form, according to Consul-General ANDERSON at Rio de Janeiro, the one encouraging feature of the year's commerce between the two countries. In spite of the fact that the total imports of Brazil for 1908 were about 12 per cent less than those of 1907, and in spite of the fact that the imports of Brazil from the United States show a loss of \$4,081,785, or about 16.5 per cent, as compared with 1907, the imports of goods subject to preferential treatment in 1908 amounted to \$2,387,593, as compared with

\$2,351,326 in the preceding year, thus showing an actual gain of \$36,267, or 1.5 per cent. This gain is made in face of the fact that the imports of similar goods from all countries showed a decrease of about 5 per cent in 1908. The past two years are the only successive years in which the preferential rates have been accorded throughout the entire twelve months.

---

#### BOLIVIAN TRADE IN 1908.

By the publication of monthly reports of Bolivian trade through the department of finance and industry of the Government as initiated in January, 1909, it is possible to procure current information as to the economic status of the Republic. It is shown that although the commercial movement of Bolivia was not so great during 1908 as in the preceding year, the entire trade declining by nearly \$1,500,000, yet the trade balance remained in favor of the Republic, exports for the year exceeding imports by over \$1,000,000. The total trade volume is valued at \$33,837,000. That the country, in spite of a lowering in the price of native commodities abroad with the consequent decline in export values was able to increase its purchasing power by over \$1,000,000 is abundant evidence of the economic development now in progress. President-elect VILLAZON, who will enter into the discharge of his duties in August as the successor of President MONTES, has a high conception of the character of his office, coupled with a firm conviction as to the ultimate greatness of his country.

---

#### DISCONTINUANCE OF THE CHILEAN NITRATE ASSOCIATION.

The company which has for many years controlled the output and export of Chilean nitrate decided to discontinue its operations from April 1, 1909. The year's production was slightly in excess of the 2,000,000 tons fixed as the exploitable quota, being 42,847,267 quintals of 101 pounds, while exports also exceeded the estimate, figuring for 2,250,000 tons. The Government has appointed a commission for the collection and distribution of information bearing upon this important branch of national life and will carry on an active propaganda in its behalf at home and abroad.

---

#### COLOMBIA'S EMERALD MINES.

The measures being taken by the Colombian Government for the adequate exploitation of one of its greatest sources of revenue in the leasing of the emerald mines of Muzo for a period of twenty years to an English syndicate demonstrate the application of business methods to governmental administration which is characteristic of the present régime.

Heretofore the short leases to which the mines were subjected hindered the installation of appropriate machinery and the thorough working of the deposits. When it is realized that Colombia is practically the only source of supply for these valuable gems and that the Colombian product ranks absolutely first in the emerald market the importance of the subject is evident.

---

#### ECONOMIC CONDITIONS IN COSTA RICA.

Through the courtesy of the Secretary of Foreign Relations of Costa Rica, the Bureau has received the last message addressed by the President of the Republic, Señor Don CLETO GONZALEZ VIQUEZ to the constitutional congress on May 1, 1909. Physical conditions are reported to have adversely affected the agricultural production of the country throughout the preceding year with a sympathetic decrease in commercial values. Total trade declined by about \$3,500,000, the loss in imports figuring for something over \$2,000,000 and exports showing a decrease of more than \$1,000,000. The United States takes first rank both as a market for Costa Rican products and as a supplier of merchandise.

---

#### INDUSTRIAL DEVELOPMENT IN HAITI.

The numerous governmental concessions granted in Haiti for the exploitation of railways and industries indicate the efforts being made to bring the Republic in line with American progress. Many of the concessions are held by United States companies, and much of the equipment and machinery has been furnished by American concerns.

---

#### AGRICULTURAL DEVELOPMENT IN HONDURAS.

The bureau of agriculture established by the Government of Honduras in 1908 gives a good report of its first year's operations in the recently issued statement of the secretary. While the actual culture work is not considerable, careful study has been made of the possibilities of the soil of the Republic and valuable suggestions are made as to the work of the future. The reservation to the Government of lands on which are grown cabinet and dye woods, other than as covered by previous concessions, will open up the commercial exploitation of certain regions hitherto unexplored and add greatly to the resources of the country.

---

#### MEXICAN RAILWAYS.

The immense impetus given to transit throughout the Republic of Mexico by the construction of the Tehuantepec line is being supplemented by the opening of additional rail connections. In many respects



HONORABLE ALBAN G. SNYDER,  
United States Consul-General at Panama.

the greatest event in the history of Mazatlan and the State of Sinaloa was the completion of the Southern Pacific Railway to that point on April 18, 1909. It was made the occasion of popular festivities in which government officials and citizens participated. The company incorporated as the Mexico Northwestern Railway Company is to acquire and exploit immense tracts of timber and agricultural land in addition to its railway enterprises, while the betterment of steamer connections with other lands has stimulated to a remarkable degree the shipment of what are practically new export products. The shipping of refrigerated meat to Great Britain has been successfully inaugurated, and it is intended to still further develop this branch of trade.

---

#### THE NEW UNITED STATES CONSUL-GENERAL IN PANAMA.

Mr. ALBAN GOSHORN SNYDER, who was appointed January 11, 1909, United States Consul-General to Panama, to succeed Mr. ARNOLD SHANKLIN, was born in Charleston, West Virginia, November 5, 1877. He received the degree of B. A. from Washington and Lee University in 1898 and studied law at the University of West Virginia in 1902. He was appointed American Vice-Consul at Porfirio Diaz, Mexico, in 1899; was Secretary of Legation and Chargé d'Affaires at Bogota, Colombia, from February 12, 1903, to December 6, 1905, and was appointed Consul-General at Buenos Aires, Argentine Republic, on June 22, 1906.

---

#### PRELIMINARY PLANS FOR A WORLD'S FAIR AT PANAMA.

Mr. ARNOLD SHANKLIN sends the information that much interest is being taken in the Republic of Panama in the proposed world's fair to be held at the city of Panama in 1915, concerning which he says:

The present active officers of the proposed fair are Mr. A. BIENKOWSKI, president, and Mr. E. C. MCFARLAND, secretary, who report that a number of prominent men have permitted their names to be used on the printed matter as honorary presidents and vice-presidents. Several meetings have been held, and one of the wealthy land-owners of the Republic has given a beautiful site of 300 acres in the Sabanas.

---

#### STEAMSHIP AND RAILWAY ENTERPRISES IN PERU.

The arrival and installation in the harbor of Callao of the dry dock constructed for Peru in Europe marks a feature in the development of Peruvian transit enterprises. This is supplemented by the granting of a subsidy for fast steamer service between that port and Panama, recently granted by the Peruvian Congress, and it is further reported that a contract has been entered into between the Government and a citizen of Berlin for the survey of an all-rail route from Paita to a point on the Marañon River. It is hoped to commence construction work some time in 1910.

## ADVANCING COMMERCE OF SALVADOR.

In the published returns of the trade of Salvador for 1908 it is gratifying to record that an increase in total valuations amounting to \$500,000 is noted, as compared with the preceding year, and that the balance in favor of the Republic is over \$1,000,000. With the improvement of communication facilities with the United States, it is anticipated that the proportion of commercial interchange between the two countries will be increased.

---

## CONSULAR REPORTS ON URUGUAY.

Among recent informatory data concerning the Republic of Uruguay, it is important to acknowledge the annual report furnished from Montevideo by United States Consul FREDERIC W. GODING, in which it is stated that the year 1908 was a memorable one for the Republic, every branch of commerce and industry showing unequaled prosperity. Other reports forwarded indicate the specific progress made in different branches of economic life, covering agricultural, pastoral, manufacturing, financial, and mining enterprises.

---

## PATRIOTIC SOCIETY IN VENEZUELA.

For the suitable celebration of the centenary of the independence of Venezuela, President GOMEZ has decreed that an advisory board composed of the prominent officials and citizens of the Republic shall be organized. This centennial celebration is to be held on July 5, 1911, and is supported by the representative elements of national life. In Caracas a central board was established in December, 1908, for the organization of a patriotic society which should have its ramifications in all sections of the country and whose efforts should be directed toward the upbuilding of a widespread feeling of unity and cooperation in connection with the centenary and all other developments of intellectual and moral worth.

---

## SANITARY CONVENTION OF THE AMERICAN REPUBLICS.

The call for the Fourth International Sanitary Convention of the American Republics has been issued by Surgeon-General WALTER WYMAN, Chairman of the International Sanitary Bureau. The convention which is to be held in San Jose, Costa Rica, from December 25, 1909, to January 2, 1910, meets in accordance with the resolution adopted by the Second International Sanitary Convention of the American Republics whereby biennial conventions were authorized. The programme provisionally establishing the topics to be discussed is extended in its range and comprehends all matters having bearing upon hygiene in the various republics interested.

## BOOK NOTES

It is very pleasant to read an appreciative study of any work, and still more gratifying when it comes from an outsider who approached the subject with an unbiased mind. It is therefore well worth while to take note in the BULLETIN of a recent book in the Columbus Memorial Library, "The Panama Canal and its Makers," by Vaughan Cornish. Boston, Little, Brown & Co., 1909. Doctor CORNISH is an Englishman and gives an English point of view of the canal and the work accomplished and yet to be accomplished there, and he brings a trained scientific judgment, a keen observation, and a comprehensive grasp of detail to bear upon his task. The book is thoroughly English, but for that reason is of added value, because it gives not only the information supplied by the Canal Commission in the United States and the opinions current here about this vast undertaking, but also the European idea of the canal as an influence upon international commerce, as well as the competitive factors by which this commerce will be modified.

There are 10 chapters dealing with the historical questions, the future of the canal, the present conditions on the Isthmus, the men at work, the health of the employees, the cost of the canal, and the problems of distances and comparative values to transportation routes to or from all continental ports of traffic. The description of the construction by which the high-level canal will be accomplished is the clearest that has been written, because, although taken, of course, from official statements, its language is concise and direct and quite free from technical verbiage which is so confusing to the uninitiated reader. Due credit is given to the scientific skill and thoroughness of the French engineers, and the sea-level plan is acknowledged to be so exceedingly difficult of execution that the present lock type of canal is finally approved. All praise is given to the sanitary results obtained on the Isthmus; in fact, Doctor CORNISH speaks of the healthy condition there as a triumph of science and despotic government combined, but he intensifies the statement by showing how this object lesson of hygiene and government has forever abolished the tradition that the tropics are death traps for the Anglo-Saxon.

In this regard the author has some very human criticisms on the appearance of the employees, who, he asserts, are the healthiest lot of white men he has ever seen in the tropics; the hand laborers are capable of doing more work than ever before in the same circumstances, owing to the nutritious diet provided for them, and the women and children appear to him to be really in better physical condition than would be deemed possible in India or other portions



of the East. The ladies, however, looked rather bored, probably because they have so little to do and because the Government does so much for them.

Americans or Frenchmen might resent his ascribing all the credit of the discovery of the cause of the malaria to the Britisher, Doctor Ross; no one would for an instant detract from his due merit, but as the malarial parasite is named after LAVARAN, whose studies were carried on independently and with great courage, pathologists like to have his name mentioned in any discussion of the disease.

As a contribution to the literature of the canal and a study of one of the great world problems, the effect of which is less understood in the United States than in Europe, this book of Doctor CORNISH is very valuable. It should be read and digested by those who wish to learn the true status on the Isthmus and the far-reaching consequences of this new international waterway.

---

Dr. HIRAM BINGHAM, lecturer on Latin-American history at Yale, has brought out through the Yale Publishing Association "The Journal of an Expedition Across Venezuela and Colombia, 1906-7." In it he describes his exploration of the route of BOLIVAR's march of 1819, and the battlefields of Boyaca and Carabobo. Doctor BINGHAM remarks in his preface that Spanish-American historians have considered this march of BOLIVAR's as wonderful as the more famous marches of HANNIBAL and NAPOLEON, but that it has been almost impossible to estimate the actual obstacles overcome, as the region is not easily visited and the published descriptions of it are meager. The author spent four months in going over the ground, a paper prepared by him covering some of the details of his trip being subsequently published in the MONTHLY BULLETIN of the Bureau.

---

The February, 1909, issue of the "*Revista de la Universidad*," of Tegucigalpa, Honduras, publishes an interesting report made to the Federal Government by the subcommittee of the First Central American Conference (*Comisión Auxiliar de la Primera Conferencia Centroamericana*), which met in Tegucigalpa on January 1, 1909, in conformity with the provisions of the Convention on Future Central American Conferences celebrated in Washington on December 20, 1907. The present monetary system of Honduras was established in 1879. The report gives in detail the history of the monetary system of the Republic before and after said date, and incidentally treats of the monetary systems of the other Central American countries. The custom-house system, and the system of weights and measures in use in Honduras, is also considered, and the recommendation is made that the decimal system be adopted in all of the Republics of Central America.

## WHAT IS IN THE MAGAZINES

"An answer to the Panama Canal critics," by WILLIAM HOWARD TAFT, prepared prior to his inauguration as President of the United States and published in "McClure's Magazine" for May, would seem to furnish the last word on this much discussed subject. A personal examination of the work under way; the illuminative explanations, furnished by expert engineers on the spot; the demonstrated progress toward completion, and the unassailable character of the man making the report, should render further controversy as to the merits of the lock or sea-level type superfluous. Opening with the statement that "the Panama Canal continues to furnish copy for the newspapers and the magazines of the country," President TAFT adds:

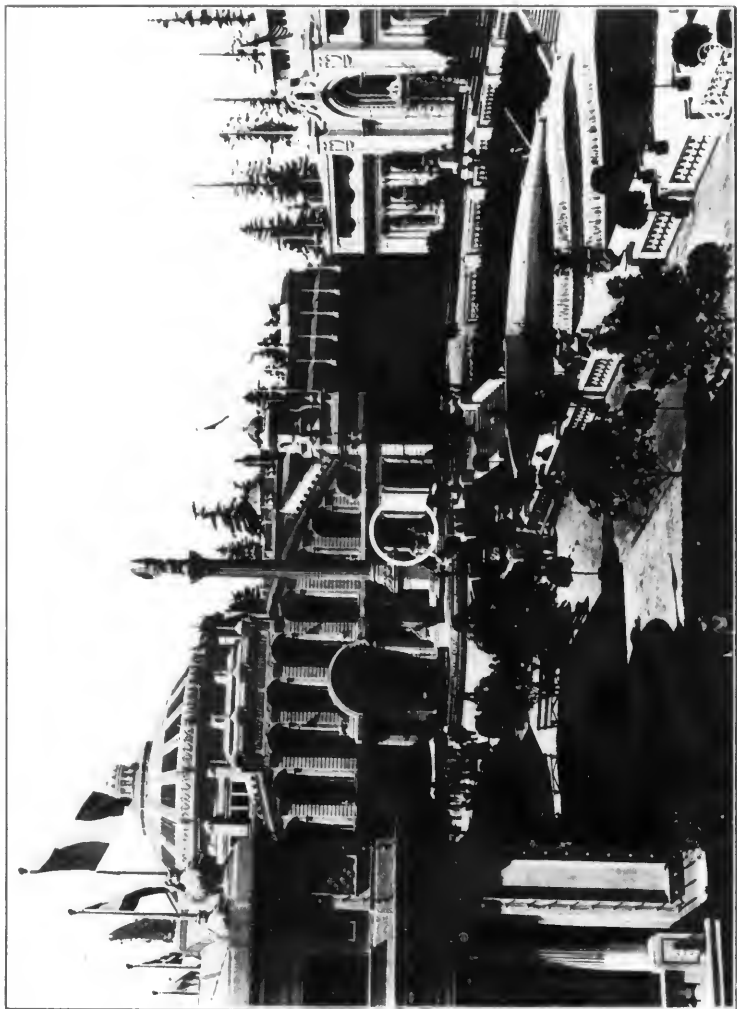
It is being constructed by the United States for the benefit of world commerce, and every citizen of the United States, and indeed every citizen of the world, properly feels himself authorized to criticize the work as it is being done and to express his opinion as to the type of canal that is selected.

Having thus granted to everyone absolute freedom of opinion, the writer proceeds to review the various steps by which the decision as to a lock system was reached, concluding with gentle irony:

For these reasons the administration is proceeding to construct the canal on the type authorized and directed by Congress, and the criticisms of gentlemen who predicate all their arguments on theory and not upon practical tests, who institute comparisons between the present type of canal and the sea-level type of 300 to 600 feet in width that never has been or will be on sea or land, can not disturb the even tenor of those charged with the responsibility of constructing the canal, and will only continue to afford to persons who do not understand the situation and are not familiar with the history of the canal and of the various plans proposed for the canal an unfounded sensation of regret and alarm that the Government is pursuing a foolish and senseless course. Meantime the canal will be built and completed on or before the 1st of January, 1915, and those who are now its severest critics will be glad to have their authorship of recent articles forgotten.

---

The April numbers of "The Independent" contain the usual generous allotment of space devoted to a consideration of Pan-American affairs. Of notable importance is the fourth paper in the series furnished by the Director of the International Bureau of the American Republics. This deals with the Northern Republics of South America—Ecuador, Colombia, and Venezuela—and is a forcible exposition of the opportunities offered in these countries for the man of



BUILDING OF THE UNITED STATES GOVERNMENT AT THE ALASKA-YUKON-PACIFIC EXPOSITION AT SEATTLE, WASHINGTON.  
The square within the circle indicates the entrance to the exhibit of the International Bureau of the American Republics



PARTIAL VIEW OF THE EXHIBIT OF THE INTERNATIONAL BUREAU OF THE AMERICAN REPUBLICS AT THE ALASKA-YUKON-PACIFIC EXPOSITION AT SEATTLE, WASHINGTON.

enterprise backed with adequate capital, opportunities which will be immensely enhanced by the opening of the Panama Canal. In the "Panama Canal number," for April 22, and the succeeding issues, publication is made of the results of the investigations made by the personal representatives of the magazine in the Canal Zone and the adjacent territory. Contrasts between conditions in 1909 and in 1906 are strikingly drawn, it being stated that "the advance made in three years is astounding." The following pen picture of the canal in operation is effectively drawn:

It is not difficult for a person with an active imagination to picture a huge ship in future years approaching the low-lying Atlantic coast of Panama, which gradually resolves itself into a beach of coral and hills of palm trees beyond. The ship enters a protected bay and at the head proceeds into a narrow canal, the trees so close on either hand that the ship seems to be in the heart of a tropical forest. After continuing for a few miles the boat reaches a gigantic staircase of three locks which lift it 85 feet upward out of the forest, until the Atlantic Ocean is seen far below. The locks are opened and the ship enters a large lake dotted with islands. After crossing the lake the ship passes through the narrow cañon at Culebra, the sides rising several hundred feet above the deck on either side, then out again into a smaller lake, down two sets of locks and into a 4-mile sea-level canal. The locks and lakes, so apparently simple, seem to the passenger to have been the subject of much unnecessary discussion and controversy, as the ship drops the thin black coast line below the horizon and sails out upon the broad Pacific.

---

The widespread interest and æsthetic delight taken by the American public in the pictures of the two famous Spanish artists, JOAQUÍN SOROLLA Y BASTIDA and IGNACIO ZULOAGA, as exhibited in New York and elsewhere under the auspices of the Hispanic Society of America, is evidenced by the extended *critiques* given them in many of the monthly magazines of standard character. The works of these painters are well known and appreciated throughout South America, and reproductions of their most famous canvases are frequent in the pictorial sheets of many of the countries. Their fame is, however, but now finding its proper place in the knowledge and appreciation of the general public of North America, and a tremendous impulse to this is given through the acclaims of the press. The "Century" for May prints a number of full-page illustrations of the distinctive paintings of the two artists, accompanied by comment by CHRISTIAN BRINTON, the same writer also contributing a paper to "The Craftsman" for the same month, entitled "Zuloaga and the National Note in Spanish Art." In defining the characteristic art of the two painters, BRINTON says:

Broadly speaking, it is to nature and natural phenomena, in all their instantaneous charm of force, color, and movement, which SOROLLA has dedicated his incomparably prompt observation and fluent technique. On the other hand,

it is upon humanity alone which the younger artist (ZULOAGA, the bullfighter who became a painter) concentrates his not less remarkable powers of effective composition and deliberate characterization.

In "The Story of Señor Sorolla" the American success of a great Spanish painter is effectively narrated by THOMAS R. YBARRA for "The World's Work."

---

The April number of the "Bulletin of the Geographical Society of Philadelphia" is accorded the subtitle of "A South American Number," the bulk of its subject-matter being devoted to papers on the subject. Hon. JOHN BARRETT, Director of the International Bureau of the American Republics, contributes the initial article on "South America: Its general geographical features and opportunities," in which the following summing up is made of the salient points discussed:

Twenty republics, varying in size from the area of Brazil, which is larger than that of the United States proper, to Salvador, the smallest, which would take in Rhode Island six times over, having a combined population of over 70,000,000 and a foreign commerce valued at more than \$2,000,000,000 per annum, are going ahead so rapidly that no man can safely prophesy the limit of what they will accomplish during the next ten years. Gifted with a variety of climate and resources; blessed with a marvelous intermingling of cool plateaus and tropical lowlands; provided with vast navigable river systems and a long extent of accessible coast line; supplying numerous important products which the rest of the world must purchase; and possessing a people of deep sympathies and high intellectuality based on an old and worthy civilization—they all challenge our best study and keenest appreciation.

A paper of more than ordinary interest is contributed by Prof. R. DE C. WARD, of Harvard University, being "An Outline of the Economic Climatology of Brazil," in which the wide range of products susceptible of profitable culture in the Republic is demonstrated. Dr. ALBERT HALE considers the general features of "The River Plate Region and its Possibilities," and Prof. ISAIAH BOWMAN, of Yale University, shows the "Distribution of Population in Bolivia," as influenced and determined by regional peculiarities.

---

In "Harper's Magazine" for May, C. WILLIAM and MARY BLAIR BEEBE continue their account of experiences in tropical lands. As indicated by the title of the article in reference, "In the Venezuelan Wilderness," the wonderful animal and plant life of the region is the main object of investigation, but the aspect of the great asphalt deposit is graphically described in the following terms:

Our trips to the pitch lake on the early-morning engine will never be forgotten. A warning toot from the diminutive whistle hurries us through our breakfast, and we hasten to the track and see our cameras and guns loaded on

one of the little square wooden "empties." We mount the wood-filled tender of the engine, and with many complaining creaks and jolts get underway, backing slowly around the curve which hides the last sign of civilization and buries us in the jungle.

For nearly twenty years these little toy engines have hustled and elbowed their way over the snaky rails, until the jungle and its people have come to look upon this narrow winding steel path as part of the general order of things. The underbrush creeps close, and only the constant whipping of the engines and cars beats down the growth between the rails.

We reach the lake long before the dew is dried and before the freshness of the dawn is dissipated. It is surrounded by dense forests, the front ranks of which are made up of the marvelously tall and graceful moriche palms. There is one oasis in this pitchy expanse—Parrot Island it may be called. To this shelter, guarded on all sides by soft, quaking pitch, parrots come at dusk by hundreds, roosting there until the next morning.

Near the northern edge is the "mother of the lake," just above the deep-hidden source of supply, where the pitch is always soft and where no vegetation grows. It is a veritable pool of death, and nothing can enter it and live. The lizards and heavy-bodied insects which scamper over the rim are often clogged and drawn down to death. A jaguar, leaping after a jacana, slipped in shortly before we came and made a terrible fight for life. Half blinded, its struggles carried it only farther outward, and the end came mercifully soon.

All the rest of the lake is a varied expanse of black pitch bubbles, short grass, clumps of fern and sedge, with occasional isolated palms. Flowers of many kinds and colors spring from the heart of the raw pitch itself. Jacanas rise before us with loud cries and flashing wings of gold. One may walk over the lake at will, morning and evening, but in the heat of midday in many places one's shoes sluk quickly unless one keeps constantly on the move.

---

"The American Journal of International Law," for April, 1909, issued by the American Society of International Law, in addition to the scholarly paper on Latin America and international law by the eminent Chilean, Señor Don ALEJANDRO ALVAREZ, of which note is made elsewhere in this issue of the BULLETIN, devotes much attention to a consideration of topics of interest to Pan-America. The results of a thorough study of the questions involved in the neutralization of the Panama Canal by Gen. PETER C. HAINS are given extended space, while in the editorial comment notes on allied topics cover the services of Hon. ELIHU ROOT to the cause of Pan-Americanism; international law at the First Pan-American Scientific Congress; the restoration of Cuban self-government; the first decision of the Central American court of justice; and the Venezuelan situation. In the book reviews note is made of the pamphlet by Dr. FERNANDO SANCHEZ DE FUENTES concerning the Second International Peace Conference, to which the writer was delegate from Cuba. In the supplement of the "Journal," devoted to the publication of official documents, treaties between Brazil and Colombia and between Chile and the Argentine Republic are reproduced; also documents in reference to the construction and neutralization of the Panama Canal.

The first paper in the "New South America" series, published by the "World To-day," appears in the May issue of the magazine under the title "The New Brazil," written by Prof. PAUL REINSCH. It is the personal record of observations in this the "most important tropical country in the world." It is, however, in the very exuberance of the tropical vegetation that characterizes the soil that the writer sees the reason for the present one-sidedness of the country's development. Where agricultural growths are almost spontaneously of commercial value, where the checking rather than the stimulating of production is a necessity for best results, it is natural that industries requiring mechanical skill and implements should be partly overlooked. This condition is, however, passing, and not only will the new Brazil be the center of production for natural products found nowhere else in similar abundance, but it will also take its place among the manufacturing nations. Indications of this new order of things are already evidenced in the establishment of manufacturing plants, the development of railroad communications, and improvements along lines which call for vast sums of money, freely supplied by the central and state governments.

---

The canal literature of the day is enriched by the report prepared by Lieut. Col. GEORGE W. GOETHALS, U. S. Army, chairman and chief engineer of the Isthmian Canal Commission. This report was submitted to President TAFT in March, 1909, and is available for the public through the "National Geographic Magazine" for April, 1909. After a preliminary sketch of the history of the enterprise, Colonel GOETHALS covers in detail the present working plan and its results, leading to the emphatically expressed opinion that—

every criticism against the stability of our locks and dams can be attributed either to an argument in favor of one's own plans or to absolute ignorance of the exhaustive data concerning their safety now in existence. The several other plans of lock-type canal have nothing in their favor that the plan now adopted does not possess to a greater degree.

January 1, 1915, is the date assigned for the practical exhibition of the effectiveness of the accepted system, the demonstration to consist of the passage of ships through the completed canal.

---

Dr. L. S. ROWE, the chairman of the United States delegation to the Pan-American Scientific Congress, held in Chile in December, 1908, regards that gathering as one of the most remarkable of modern times. In his paper on the subject, published in the "Review of Reviews" for May, he characterizes the congress as a great "experi-



ence meeting," at whose sessions the keynote was the emphasis laid on distinctively American problems. The spirit of international cooperation was particularly marked in the discussion of sanitary, social, and legal problems, and probably the most vivid impression carried away by the delegates from the United States was the fact that in every Latin-American country there is a group of serious students willing and even anxious to be fellow-workers with their colleagues of the United States in the investigation of problems affecting mutual welfare.

---

DILLON WALLACE continues in the "Outing Magazine" for May his narration of experiences beyond the Mexican Sierras, the peon and the land being considered in a friendly and appreciative aspect. The soil of the country is rich and arable, much of it being on the line of the extension of the Southern Pacific Railroad recently completed to Mazatlan. Numerous streams provide water sufficient for agricultural purposes, and the natives are reported as willing to assist in all well-directed efforts to improve their state. Descriptions of typical scenes and habitations, while indicating the picturesqueness of their surroundings, also demonstrate that much remains to be done for the uplift of the inhabitants of a beautiful region.

---

Among other items of interest covered in "Mexico To-day" for April, 1909, is a notable account of the great harbor of Salina Cruz, the Pacific terminus of the Tehuantepec Railway. This harbor, equipped with breakwaters inclosing an area of 130 acres, of which 96 acres have a depth of 33 feet, with a dry dock capable of accommodating the largest ship afloat on the Pacific Ocean, with quays, electric derricks, and every facility for handling the enormously increased traffic of the Tehuantepec line, represents the expenditure of many millions of dollars, and it is estimated that \$6,000,000 more will be required to complete the work in prospect.

---

A noteworthy feature of the April meeting of the New York branch of the American Pharmaceutical Association was the presentation of the first copy of the United States Pharmacopœia printed in Spanish. In commenting on the incident, the "American Druggist and Pharmaceutical Record" states that the preparation of the work was undoubtedly influenced by the steady growth in importance in the commercial relations between the pharmacists of Spanish America and the manufacturers of the United States.

The conclusion of Prof. ISALAH BOWMAN's paper on "Regional Population Groups of Atacama," is published in the April number of the "Bulletin of the American Geographical Society," the same issue printing interesting comment concerning the coffee situation in Brazil. Other subjects relating to Latin America given consideration embrace the frontier between Bolivia and Brazil; exports of Ecuador; Brazilian live stock; mineral wealth of Colombia; the River Parana, and whaling in the South Atlantic.

---

As a member of the Isthmian Canal Commission of 1904, Mr. C. E. GRUNSKY, whose views on the type of the Panama Canal are set forth in the "Popular Science Monthly" for May, is an authority of recognized importance. The writer does not confine himself, however, to an exposition of his own views solely, but quotes those of other experts, giving also the bases on which they rest their arguments in support of the lock system for the Isthmian waterway.

---

In the March number of the "*Boletín de la Sociedad de Fomento Fabril*," the Chilean organ of manufacturing industries in the Republic, extended treatment is given of the iron deposits of the country by CH. VATTIER. An outline is also published of the present connections over the Pan-American Railroad, the importance of which route can not, in the writer's opinion, be overestimated.

---

The University of Tegucigalpa, which since September, 1847, has been the official institute of Honduras, has furnished the files of the Columbus Memorial Library with the first number of its "*Revista de la Universidad*," published in accordance with the program adopted in April, 1908. Opening with a sketch of the university and its aims, valuable information is given as to the progress of education in the country and the measures taken to forward so important a branch of development.

---

"The Mining and Scientific Press," of San Francisco, for May, 1909, publishes a valuable paper by D. FOSTER HEWETT on vanadium deposits of Peru, the discovery of which was announced in 1904. From June, 1906, to January, 1909, there were produced and shipped to the United States 1,800 tons of oxidized ores, containing 20 per cent vanadic oxide, and the product from roasting 400 tons of the sulphide ore known as "patronite."

The "South American Journal" for April 10, 1909, reproduces important information from the "Times" of London, giving the cable routes to South America. It is shown that there are three good cable routes between London and Rio de Janeiro—the first via eastern Madeira, the second via Brest-Dakar-Pernambuco-Western, and the third via Galveston-Montevideo-Western.

---

The Columbus Memorial Library has received the "*Anales de la Universidad Central de Venezuela*" for the half-year ending with December, 1908. In its political science section is published an exhaustive account of the organization and operation of civil and mercantile societies, supplemented by a description of the many Venezuelan companies that may be classified under these heads.



## LATIN-AMERICAN NOTES

Chile produced 52,800,000 gallons of wine in 1908.

The sugar crop of the Pernambuco district of Brazil is estimated at 396,000,000 pounds.

The French cable service with Venezuela was reopened on May 13, 1909, the rate being \$1 per word.

The Chilean Government will shortly place contracts for 3,000 tons of steel rails for use on the Arica to La Paz Railway.

A wireless telegraph station to cost \$7,000 is to be erected at Porto Bello, Panama, for use in connection with the station at Colon.

At a meeting of the nitrate producers held at Iquique, Chile, 41 votes were recorded in favor of the quota prescribed by the trust and 46 against it.

The Dominican Republic plans a permanent exposition at Santo Domingo City for the exploitation of its agricultural, mineral, and manufactured products.

The Dominican Government is obtaining through its consuls in the principal European cities reports on the tobacco trade with a view to securing a better market for this article.

A report from Panama states that the Department of Public Works has undertaken the establishment of a brewery in Panama City. The erection of the plant has already been commenced.

The Minister of Public Works and the Minister of Finance of Brazil have approved a plan for an exhibition of French products in the Commercial Museum of Rio de Janeiro to be held in the near future.

President TART has ordered that the Pacific terminal of the Panama Canal hitherto known as La Boca shall be called Balboa, after the discoverer of the Pacific, the first white man who ever crossed the Isthmus.

The Brazilian Dredging Company, incorporated under the laws of the State of New York, with a capital stock of \$100,000, has been authorized by the Brazilian Government to engage in mining operations in the Republic.

The Mexican Light and Power Company plans to increase the capacity of its Necaxa plant from 50,000 to 124,000 horsepower. The company is now operating with 79,073 horsepower and expects soon to have 90,000 available.

The Chamber of Commerce at Port au Prince offers to place at the disposal of chambers of commerce, producers, and manufacturers of the United States and its colonies a space in its rooms for the exhibition of their products.

The national railway lines of Mexico offer a special excursion rate of \$130 to the Alaska-Yukon-Pacific Exposition, at Seattle. The itinerary includes stops at San Francisco and other coastal points and allows ten days at Seattle.

It is reported that Panama is to have an international exposition in 1915. Although the project is still in private hands, it has the support of the Government, with the prospect of substantial encouragement at the proper time.

A representative of Cook's Touring Agency, of London, is now in South America engaged in a study of transportation facilities, points of interest, and hotel accommodations, with a view to organizing tours through the Latin-American Republics.

A general reduction in telegraph rates in the Dominican Republic is announced by the French Cable and Telegraph Company. The old rate of 20 cents per word from Puerto Plata to the capital has been reduced to 5 cents and between other points in proportion.

It is reported that the Minister of the Treasury of Paraguay is negotiating with bankers in Buenos Aires and Paris for a loan of £2,000,000 to be used in retiring the paper money in circulation, increasing the capital stock of the Banco Agricola and the construction of important public works.

The Fourth Latin-American Medical Congress will take place from August 1 to September 30, 1909, at Rio de Janeiro, in connection with which there will be an exposition of hygiene. The United States delegate has been appointed, in the person of Dr. W. J. S. Stewart, of the Public Health and Marine-Hospital Service.

The Executive Committee of the International Exhibition of Railways and Land Transportation of Buenos Aires has informed the Bureau that in order to facilitate the entry of foreigners desiring to participate in the exposition, the date until which applications should be sent has been extended from June 30, 1909, to September 10.

During 1907 one local and ten European fire insurance companies insured property in Guayaquil, Ecuador, amounting to \$3,279,750, receiving in premiums \$181,360. One American life insurance company in the same year collected in premiums \$12,991, while another paid death claims and dividends on paid-up policies amounting to \$201,100.

When the Fourth Pan-American Conference meets in Buenos Aires, the International American Congress of Medicine and Hygiene will also be held, in commemoration of the first centenary of Argentine's revolution for independence, in May, 1810. In connection with the Exposition a "General Exhibition of Hygiene," universal in character, is projected.

The total importation of mahogany into the United States within the past two years reached nearly 42,000,000 board feet, of which Europe furnished 18 per cent, the principal countries of America showing the following proportions: Mexico, 46.2 per cent; Nicaragua, 19.2 per cent; British Honduras, 15.5 per cent; Cuba, 8 per cent; and Honduras 4.7 per cent.

The International Congress of Americanistas will hold its XVII meeting—for 1910—in the city of Buenos Aires. This gives its members opportunity to visit Latin-America, and it also provides for taking part in the centenary of the Argentine Republic during the celebration on the International Exhibition of Railway and Land Transport to be held in Buenos Aires in 1910.

Mr. W. S. Barclay, whose remarkable article on the Falls of Iguazu and the basin of the Upper Paraná River was reproduced in the Bulletin for February, 1909, is planning an expedition of investigation and practical study from the water parting between the Alto Paraná and the Paraguay rivers toward Cuyabá, in Brazil, thence northwestward to the falls of the Madeira River, not far from the Brazil-Bolivian frontier, and finally cross country to Iquitos, on the Peruvian Amazon. Mr. Barclay's experience throughout South America is very extensive, and he is a firm believer in the probabilities of colonizing this middle region of the continent. He asserts that it is easy of access, commercially, along the great waterways, and that the cattle areas of the interior of South America are much larger than people realize. The execution of his project will be of decided value to all those who have a sincere interest in Latin-America.

The Hamburg-American Line has just announced its first grand cruise to South America. It has arranged to send the S. S. *Bluecher*, a modern twin-screw steamer of 12,500 tons, especially constructed for voyages in the tropics, down the east coast of South America as far as Punta Arenas, in the Straits of Magellan. The start will be made from New York on January 22, 1910, and the itinerary is arranged to include the island of St. Thomas; Pará, Bahia, Santos, in Brazil, southbound; Montevideo, in Uruguay; and Punta Arenas, in Chile. Northbound the cities of Buenos Aires, in Argentina; Montevideo again; Rio de Janeiro and Pernambuco, in Brazil; the islands of Trinidad and Jamaica, in the West Indies, are visited, and the trip ends at New York on April 13, 1910. Opportunity will be given the passengers, during the stay in Buenos Aires, to cross the Andes to Chile; in Punta Arenas to visit the beautiful fjords of the western coast; in Santos to ascend to the plateau to the city of São Paulo and the famous coffee district, and in the other ports to enjoy the attractions which are offered the traveler. Full particulars may be obtained by writing to the main office, Hamburg-American Building, 45 Broadway, New York.

# THIS MONTH IN PAN-AMERICAN HISTORY ∴ ∴

---

---

## JUNE.

- June 1, 1660.—The silver mines at La Paz, Bolivia, are discovered by the Spaniards.
- 2, 1841.—ELIAS HOWE, of Cambridge, Massachusetts, United States of America, invents the first practical sewing machine.
- 3, 1898.—Lieutenant HOBSON sinks the *Merrimac* in Santiago Harbor, thus blockading the Spanish fleet (Spanish-American war).
- 3, 1770.—The Argentine patriot, DON MANUEL BELGRANO, born at Buenos Aires.
- 4, 1846.—JAMES SMITHSON founds the Smithsonian Institution at Washington, D. C., United States of America.
- 5, 1474.—BARTHOLOMEW DE LAS CASAS, the noted historian and defender of the Indians, born at Seville, Spain.
- 6, 1763.—The island of Cuba is evacuated by the British troops, who had previously captured Havana, and restored to the Spanish authorities.
- 7, 1863.—The French troops enter the City of Mexico (war of Mexico with France).
- 8, 1752.—BENJAMIN FRANKLIN demonstrates the identity of the electric spark and lightning, drawing electricity from a cloud by means of a kite.
- 9, 1614.—ADRIAN BLOCK, a Dutch navigator and explorer, discovers Long Island Sound, United States of America.
- 11, 1580.—The city of Buenos Aires, Argentine Republic, is founded by JUAN DE GARAY, the Spanish governor of the Plata Provinces.
- 12, 1864.—MAXIMILIAN, Archduke of Austria, arrives in Mexico City, where he is subsequently crowned as Emperor.
- 13, 1645.—PETER STUYVESANT, having been appointed governor of the Dutch possessions in America, arrives at New Amsterdam (now the city of New York).
- 15, 1813.—Gen. SIMON BOLIVAR issues his famous declaration at Trujillo, proclaiming war against Spain.
- 16, 1793.—The Chilean statesman and patriot, DON DIEGO JOSÉ VICTOR PORTALES, born at Santiago de Chile.
- 17, 1775.—Battle of Bunker Hill, one of the decisive engagements between the United States and British troops is fought.
- 18, 1613.—The University of Cordoba, Argentine Republic, is founded by Bishop FERNANDO TREJO DE SANABRIA.
- 19, 1867.—MAXIMILIAN I, Emperor of Mexico, is executed at Queretaro, Mexico.
- 20, 1896.—The Dominican Republic promulgates its constitution.
- 20, 1898.—The United States of America take possession of the Ladrões, or Marianne Islands (Spanish-American war).

- 22, 1826.—A Pan-American Congress, called by SIMON BOLIVAR, meets at Panama City.
- 23, 1814.—The city of Montevideo, the last stronghold of the Spanish forces, is taken by the Argentine General, ALVEAR.
- 24, 1497.—JOHN CABOT discovers the North American continent, landing on the coast of Labrador.
- 24, 1821.—The royalist forces are defeated at the battle of Carabobo by the patriots under Generals BOLIVAR and PAEZ.
- 25, 1898.—Opening of the Guayaquil-Quito Railway, Ecuador.
- 26, 1541.—FRANCISCO PIZARRO, the conqueror of Peru, is assassinated at Lima.
- 26, 1821.—The Argentine soldier, statesman, poet, and journalist, BARTOLOMÉ MITRE, born at Buenos Aires, Argentine Republic.
- 27, 1860.—Arrival of the *Great Eastern*, one of the largest vessels ever constructed, at New York, United States of America.
- 28, 1815.—Commodore DECATUR obtains an indemnity from the Dey of Algiers for the capture of American ships, and the release of the American prisoners (war of the United States of America with Tripoli).
- 29, 1610.—Lord DELAWARE arrives in Virginia, bringing relief to the colonists and refounding the colony which they had abandoned.
- 30, 1520.—MONTEZUMA II, Emperor of the Aztecs, of Mexico, dies in captivity having been wounded by his own people, whom he tried to persuade to surrender to the Spaniards.





# MAIZE OR INDIAN CORN THE GREAT NATIVE FOOD SUPPLY OF AMERICA

**W**ITHOUT Indian corn the native peoples of America probably could not have developed beyond the stage of savagery, and without Indian corn the explorers from Europe would certainly have been unable, in the conditions under which they were forced to land upon the western shores, to effect a permanent settlement on the American Continent.



Rows of Indian corn—maize—as they may be seen stretching over the American continents from the State of Maine or the shores of the Great Lakes to the southern farm and forest lands of Chile. The aborigines understood its cultivation, and scientific agriculture has effected but slight changes in the first principles beyond increasing the yield and the size of the stalk by proper seed selection.

Maize was the only health-sustaining food which the Indians could supply to those who attempted to make a home in New England; it sustained the adventurers who traversed the valleys of the James, of

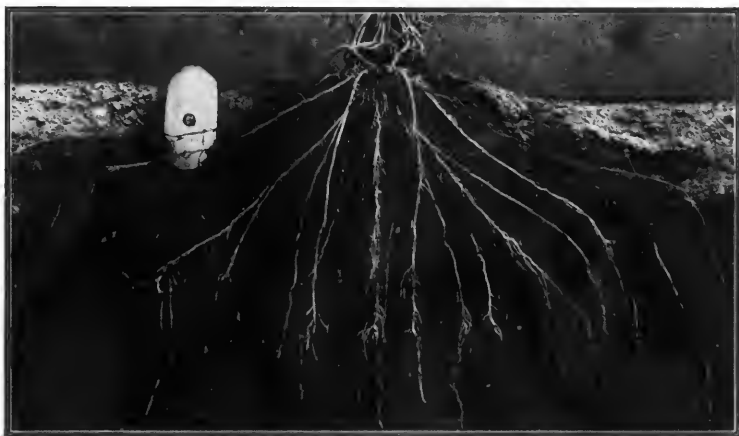


A GIANT CORNSTALK STANDING 15 FEET ABOVE THE GROUND.

A field of similar stalks is almost a forest. The tassel at the summit contains the male flowers, the female flowers being located below, at the side. An ordinary plant has from 12 to 15 leaves.

the St. Johns, and of the Mississippi; it provided the Spaniards in Mexico with nourishment during the reckless march from Vera Cruz to the plateau of Mexico, and this same maize was found by PIZARRO's small army of conquerors when they subjugated the innumerable hosts of the Incas of Peru.

Yet up to the time of the landing of COLUMBUS in America maize was absolutely unknown to the inhabitants of the old world. The few kernels of the new food brought to QUEEN ISABELLA by COLUMBUS were classed generally as grains or cereals. The Norsemen, who landed near Cape Cod in 1002 A. D., found a grain previously unknown to them, and this they called "corn," attempting to identify it with wheat and other grains to which they were already accus-



Careful attention must be given in the selection of soil for corn cultivation that the roots have room to penetrate deeply into the ground. Shallow soil means a barren and feeble stalk, with little strength to withstand the wind. The firm support given by the main roots is increased by the aerial roots above the ground.

tomed. The English Puritans also were astonished on landing to find a new corn; but as they had at home grouped all grains under that name they therefore applied to it the same term, definitely distinguishing it from the others by the specific phrase of Indian corn.

Indian corn is really maize; in English-speaking countries outside of the United States it is called maize, and in all Spanish countries *maïs* is the word employed; in Portuguese *milho*, and in French again *maïs* indicate its origin. Maize is altogether an American word, coming directly from the primitive Arawak, the most widely disseminated Indian stock in South America. It originated in the south with the Gnanas, on the headwaters of the river Paraguay, and embraced tribes on the highlands of Bolivia, extending finally to the Goajiros Peninsula, the most northern land of the continent.

They were the first, therefore, to welcome COLUMB'S to the Bahamas, Cuba, and Haiti. Though the Arawaks were practically in a state of savagery, they cultivated maize. The Arawak word for maize is *marisi*, and this they had handed over to the Caribs who inhabited many of the West Indian Islands. It was one of the first words COLUMBUS heard, and through him it became general in Europe. In Guiana and further south on the Atlantic coast of South America *manioc* took the place of maize as food.

North American Indians had other expressions for their grain. The grain itself had come to them partly through the Caribs, but



Twin ears of corn are unusual, but the phenomenon occasionally appears. When they are found in this mutation they are apt to show a wide range of variability in manner of growth, and may then afford an exceptional opportunity for the production of new types.

chiefly through the tribes of northern Mexico, which shows that there were two channels of communication, even in pre-Columbian times, to the land on the north Atlantic. These North American Indians seem not to have used the word maize; it had been lost in crossing the Gulf of Mexico, and whatever term was employed by them is now only a philologic curiosity. Neither does the ancient word of the Aztecs, of the Mayas, the Chibchas, or the Incas correspond to maize, so that it seems certain that maize was confined to that extensive race inhabiting regions far to the east and south of the original home of Indian corn.

The spot from which this purely American grain spread, even before its discovery by Europeans, to the extreme confines of the Western Hemisphere, has been accurately located. History, philology, ethnology as well as tradition have all been factors in this result. Indefinite claims have been advanced by Asia that maize was indigenous in the Far East, and the vague term Turkish corn—used in Germany and elsewhere—has been alleged as proof, but these claims have no substantial warrant. General scientific agreement, therefore, places the first home of Indian corn in the southern section of central Mexico. Here lived the Mayas, the foremost agriculturists of America, who long preceded the Peruvians in this art and whose material



Ten ears of white corn from the same field, showing great variability of type. When seed selection is made according to the best rules of agricultural science, it is possible to produce ears of remarkable uniformity throughout the same field.

impression on their country is ineradicable. All the plants closely related to maize are Mexican, and the discovery of a very primitive form of the plant in this part of Mexico aids in reaching this conclusion. Somewhat north of the Isthmus of Tehuantepec, therefore, the wild maize grew, from which section it was carried by Indians to be the principal food of all America.

The Mayas did not emerge from savagery until after the beginning of the Christian era, so the cultivation and use of Indian corn can not antedate two thousand years. From the Mayas the grain was spread over all America—north to the Nahuas and Aztecs, then to the Pueblo Indians on the Rio Grande, and from them eastward to

the Mississippi. Carried northward by the Iroquois and Algonquins, it was stopped only by climatic severity at the latitude of the Great Lakes and the lower area of the State of Maine. Its culture extended south through Guatemala and other portions of Central America and even across the Isthmus of Panama; thence it was carried into the Andean regions and extended finally as far south in Chile as the climate permitted or as the Indian population desired. East of the Andes the spread of maize by nature was restricted by the dense forests of the Amazon slope and by the lower altitude of that great drainage basin, because Indian corn requires for its growth definite climatic conditions which this portion of South America does not offer. There is no exact evidence that the region of the River



When the corn crop is grown for the grain, the mature ears are harvested after the plant is dried. This is sometimes best accomplished by driving a wagon through the fields to collect only the ears, the stalks being left on the ground until they can be utilized for other purposes. To-day great ingenuity is shown in saving what remains after the ears are gathered, even paper being made from this hitherto neglected waste.

Plate, now so wonderfully productive of maize, was utilized by the native Indian tribes resident there prior to the coming of the Spaniards.

From America maize was first introduced into Spain. Thence it spread throughout Europe and into Asia and Africa. In eastern Europe it unfortunately received the name of Turkish wheat because of the erroneous notion prevailing that the (present) West Indies being India everything introduced from there must necessarily come through Turkey. Other confusing names imply some indefinite origin of this kind, but the geographic prefix refers simply to the commercial, not to the agricultural source of the grain. The Portu-

guese carried maize into Africa in the sixteenth century, and by them it gradually spread over much of the continent. In this connection it is interesting to note that the staple foods of the wild inhabitants of the Dark Continent—maize, manioc or cassava, and pineapple—have all been introduced through some such routes of trade and commerce.

Maize early reached India and Burmah. It grows there now everywhere among the hills, and is the favorite crop of the people. In the valleys rice takes its place, but even then there is usually a little plot of maize about the native's home. The Portuguese reached Java in 1496 and China in 1516, bringing maize with them, and as no



When the stalks of Indian corn are cut in the field, they are then gathered into large bundles at regular intervals and stacked in the open before being carried to the barns. These bundles are called "shocks," and they present one of the prettiest sights of harvest time.

trustworthy evidence has ever been brought forward to the effect that this grain was known in the Far East prior to these dates, it is safe to say that its march from America along this path is well established.

Its geographical distribution therefore is to-day world-wide. In America, Europe, Africa, Asia, and Australasia, maize is a common and highly prized crop. A hardy plant, easily cultivated and rich in nutritious elements, it can never be displaced as one of the leading food products for mankind.

Maize will not grow in all climates, however. It requires long summers with plenty of sunlight, hot days and nights, with sufficient

but not too much rain. The range best suited for the crop is from 45° F. to 65° F., of mean annual temperature, but it will produce most abundantly with a maximum temperature of about 80° F. and a rainfall of from 30 to 50 inches. Frost kills the plant in all its stages, and it can not flourish where the nights are cold, no matter how favorable the other conditions. In the United States an elevation of over 2,000 feet seems too high for the commercial growth of Indian corn, but of course the farther south it is traced the higher is the elevation noted at which luxuriant crops are the rule. In Mexico vast maize fields are found at a height of over 8,500 feet, and in Peru it grows at an altitude of 12,000 feet.



On a modern farm great benefits result from providing a suitable storage place for the ears of corn. They must be well protected from bad weather, while they have the freest ventilation to prevent the injurious effects of moisture. The picture illustrates a practical shed devised for this particular purpose. The wagon, as it comes from the field by the upper road, can be unloaded into the bin by gravity, and when it is to be loaded for transport to market the same force loads the wagon ready in the lower road.

Indian corn was found over most of the United States east of the Mississippi by the earliest explorers and settlers. It was the crop to which the Indians gave most attention, and the great staple that turned them from the nomadic life of the chase into the home-building people such as agriculturists must be. The primitive method of preparing the ground was by tilling with hoes made of clam shells, but the English taught more improved methods, although the latter learned the advantage of fertilizing with herrings, which the Indians applied abundantly to the surrounding soil. Their hills were 5 feet apart—a practical distance that can be decreased only when the soil is rich and the climate very favorable. As the explorers traveled southward, they found different varieties and different



methods of preparing it for food. It was made into meal; it was boiled or parched or roasted. Often it was prepared into a flour and served as provision for a journey. The many forms into which maize is eaten to-day in America are all inherited directly from the aboriginal planters and housewives from Cape Cod to Chile.

The corn of the present commercial market, however, is a more highly developed grain than that which the Europeans found when they first landed. Science has improved the species in this as in other products of the fields. The appropriate conditions of soil and climate have been studied, with resulting increased knowledge on the subject. Corn demands rich land. Clay must be avoided; swampy,



Scientific agriculture has given much attention to the care of corn even after the seasons of planting, cultivation, and harvest have been successfully passed. The storage in suitable bins, such as are shown in the illustration, so that each ear may ripen and dry under the most favorable circumstances, increases noticeably the net value of the crop.

undrained areas are unsuitable, while too much shade, as is often caused by close proximity to timber, is sure to be harmful. Land can be drained, however, timber can be cut, or the shady places can be utilized for other purposes. Soil can be improved by fertilizers, or in many cases fertilization may be accomplished, while at the same time secondary crops may be raised by wide planting of corn and interplanting between the rows. Thus cotton can be grown along with corn when the climate is favorable, and good results are often attained by growing peanuts as an associated crop. All government agricultural departments and experiment stations are con-

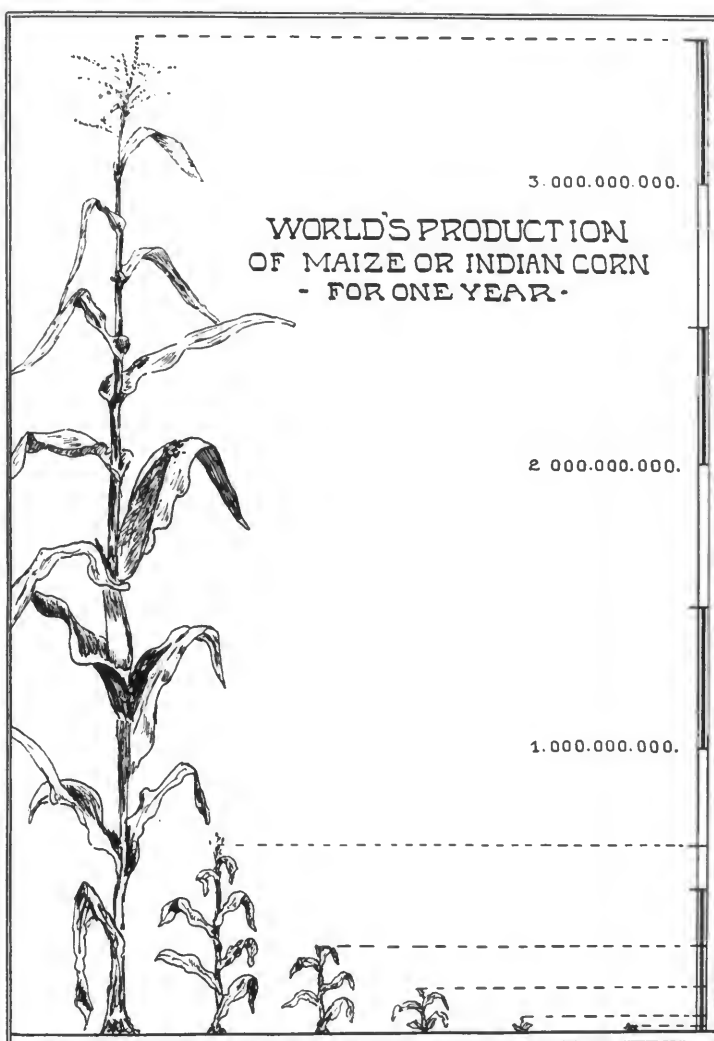
stantly at work studying the problems of improvement by methods of cultivation, and by seed selection. Few grains are susceptible of greater modification than maize, and the cultivation of a higher type generally adds to the commercial and food value of the crop, giving also a larger yield to the acre.

To the eye a field of Indian corn is a very beautiful sight. Its clean-limbed individual stalks have something martial about them, and the American, when he sees them in continuous array from the Great Lakes, across the Rio Grande, through Mexico, on the plateaus of the Andes, and covering hundreds of square miles of the valleys of Chile and Argentina, has the feeling that there is preserved for him some trace of home, wherever he may be on either continent. The ears of corn also are beautiful, and the tassels have been the theme of poetry in all languages. The stalk grows to a height of 2 to 15 feet, depending upon the variety of the grain planted and the nourishment it receives. Corn is an annual, reaching its full maturity within a single season, sometimes within sixty days of planting, and must, therefore, be sown from the seed for each recurring crop year. As a botanical species it does not of itself travel far, and is propagated rather feebly by natural means. Consequently the widespread knowledge of corn shows to what extent it must have been cherished by the Indians and how it must have been handed on from one tribe and country to another.

There are six well-known kinds of Indian corn, with innumerable varieties, including pop corn, flint corn, dent corn, soft or Cuzco corn (the name indicating some traditional origin from Peru), and the delicious sweet corn. The pop corn is supposed to be the direct descendant of the primitive Mexican ancestor.

As a food product maize has few equals among the cereals. The Indians thrived on it, and so long as they continue its use they show much of their pristine sturdiness, but when by climatic or other reasons it is denied them they suffer in physique and morale. In Asia and Africa maize is likewise a food for man, but in north Europe it has not attained the popularity it merits, although its nutritive value far surpasses, at the same cost, many of the food products the peasant consumes. Strong effort has been made by the United States Government to introduce corn into Europe in all its different culinary forms, but the conservatism of the Old World is not easily overcome in favor of food products from the new.

In Europe, Indian corn is used chiefly for animal food or in the industries. In 1891, however, the United States Department of Agriculture sent a special commissioner to Europe for the purpose of giving practical demonstrations of the various ways in which maize could be used, as substantial, nourishing, and pleasant food for all classes of human beings. This propaganda had two objects—a philanthropic one, by which the cost of living might be reduced if the



WORLD'S PRODUCTION  
OF MAIZE OR INDIAN CORN  
- FOR ONE YEAR -

3 000.000.000.

2 000.000.000.

1 000.000.000.

3.500.000.000.	650.000.000.	300.000.000.	150.000.000.	40.000.000.	10.000.000.
*NORTH AMERICA	EUROPE	SOUTH AMERICA	ASIA	AFRICA	OCEANIA

NOTES:-

\* NORTH AMERICA INCLUDES :- MEXICO, CENTRAL AMERICA, THE WEST INDIES AND CANADA.

QUANTITIES ARE GIVEN IN BUSHELS

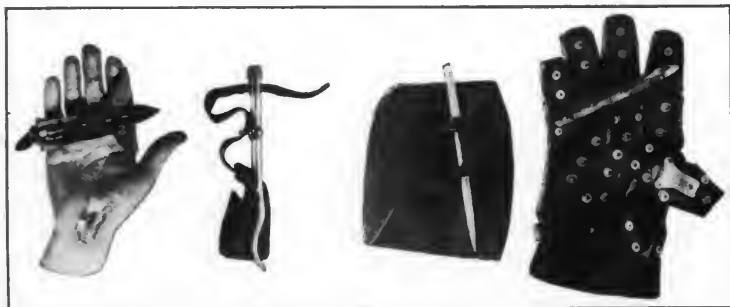
189

189

The annual yield of Indian corn may be taken to have reached the above amount since the days of Columbus. This is given somewhat higher than the customary crop reports, because it takes into consideration the harvests of parts of Mexico, Central America, large areas of South America, and of India, where maize is grown to-day, but consumed by the native inhabitants in domestic use, so that it does not enter into commercial calculations. Decided variations, however, occur from year to year.

consumption of Indian corn could be popularized, and a commercial one, by which a great agricultural product of America would receive a permanent stimulus. The result is encouraging, and the food value of maize is becoming better recognized.

The part played by maize, or Indian corn, in the social life of America is a very interesting phase of history. As far back as the aborigines can be traced, it seems to have been venerated by them as a most important element in their general nature worship. When the corn in the ear was green the Indians of North America practiced certain rites with dancing and conviviality, and the time of harvest was also a season of festival and rejoicing, during which they ate and drank the various productions of their native kitchens. The Aztecs consecrated a goddess to maize, and the Mayas, the Peruvians, together with other nations of these highly developed races, observed the period of the ripening of corn with both solemnity and gladness.



Great ingenuity has been displayed ever since corn became an important article of commerce in the production of implements with which to expedite corn "husking." In America, where it is so general a food, the ears are removed from the cob by various devices, such as are illustrated here. They save laceration of the hands and enable the operator to accomplish his task in shorter time. Many races are run and prizes given in a neighborly "husking bee."

Even in burial rites corn was not omitted. In many instances it was interred with the body to serve as food on the journey into the unknown world, and the tombs of all countries, from Ohio, in North America, to Peru, in South America, contain evidences of the custom of putting maize in the burial places with the body.

In the United States the celebrations held upon the ripening of Indian corn have been more in the nature of congratulation on material success in harvesting the crop than the expression of superstition, yet since the first Thanksgiving Day of the Puritans devout thanks have mingled with the social joys of the people at harvest time. Harvesting has been as much studied scientifically as planting; technical machines have been devised for every step of the process, but along with this work has always gone a wholesome element of play, sometimes taking the form of competitive contests in shocking and husking, at others giving opportunity for the lighter



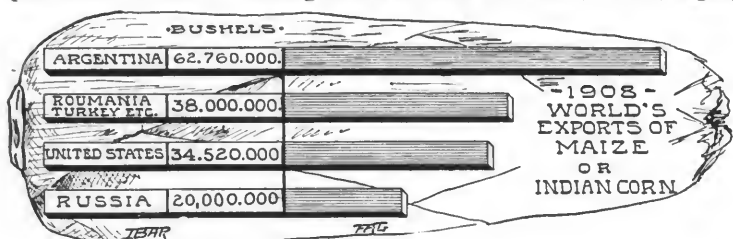
(Copyright by Underwood & Underwood.)

CORN PALACE, MITCHELL, SOUTH DAKOTA.

In the autumn of 1908 a Corn Palace was built in Mitchell, South Dakota, to celebrate the splendid crop in that neighborhood. All the decorations were made from some part of the corn plant, and for refreshments corn was served in all conceivable varieties and dishes. Other cities in the United States have held similar festivals within the last few years. Thus emphasis is given to the popular American expression that "Corn is King."

amusements, as dancing and general social entertainment. In many so-called corn States a general holiday has been declared at the end of the harvest. Special trains have been arranged for, in which lectures were given by experts from agricultural schools to all those directly interested in planting and harvesting corn. Thereafter picnics would be held, in which corn was preeminently glorified among the products of the farm. In one State an exposition devoted to illustrating the multiform uses of corn is held, and in other exhibitions of a general character the importance of corn to America is given prominence.

This is only just to the one truly American grain. It has become, to the American people, the gauge of prosperity. Corn represents in the United States a crop whose value is far in excess of \$1,000,000,000, fully twice as large as any other crop. It is valuable also not only on this account, but because of its very general usefulness. More than 150 products come from its stalk, pod, and ear. No part of it is wasted. Among them are flour and meal, starch, sugar,



This estimate of the world's export of corn for 1908 is from British sources and differs slightly from other reports. It illustrates the enormous consuming power of the people of the United States and the unequal proportion of production in various countries. While the United States, with 80,000,000 population, exports only a fraction above 10 per cent of its corn crop, Argentina, having only 6,500,000 population, can export over 50 per cent of the crop grown there.

alcohol, whisky, and oil, rubber substitutes, hominy, cellulose, beer, pipes, and paper. How closely it is a part of American life may be judged from the fact, applicable at least to the United States, that of the nearly 3,000,000,000 bushels produced in the last recorded year, 75 per cent had been consumed on the farm, 15 per cent had been used for manufacturing, and less than 10 per cent had been exported.

A similar rule concerning consumption and export can be applied to other maize-producing countries. For example, India, which yields millions of bushels a year, consumes it all at home and makes slight showing therefore among the producing nations of the world. Colombia, Venezuela, Ecuador, Peru, and Chile raise fine crops of corn, but they scarcely appear in the lists of producers, although the last two are beginning to export. America, nevertheless, produces three-fourths of the world's supply, and Latin America furnishes almost one-half of the world's export.

# MUNICIPAL ORGANIZATION OF THE CAPITALS OF LATIN AMERICA

## MONTEVIDEO.

**T**HE Spanish Marshal BRUNO MAURICEO DE ZABALA in 1724 began the construction of Fort San José at the site of what is now the city of Montevideo, and this date may be considered as the year of the founding of the city, although January 20, 1726, when the plan of the city was marked out by Captain CARDOSO is the date usually celebrated. The fort was built by 1,000 Tupis Indians collected and brought for this purpose from



MONTEVIDEO. LIBERTY SQUARE IN 1909.

the Spanish missions. The purpose of ZABALA was, from the first, the founding of a Spanish city to the east of the Uruguay River; and in pursuance of his recommendations the Spanish court gave orders that families of settlers from the Canaries and from Galicia

should be sent as colonists to the new settlement. Similar orders were given by the royal authorities in Chile, in Tucuman, and in Paraguay. None of these orders, however, at once produced results in colonists, and so Marshal ZABALA sent JOSÉ GOMEZ DE MELO to Buenos Aires. MELO had better luck and was able to bring back with him on his return in 1726 seven families who formed the nucleus of the city's future population. Meanwhile ZABALA, by virtue of a royal decree, offered to every colonist the title of *hidatgo*, in addition to an allotment of lands, cattle, and sheep. Soon after the return of MELO and the laying out of the city by CARDOSO came other families from Santa Fe, Chile, Paraguay, and Buenos Aires, and in 1728 FRANCISCO ALZAIAR brought twenty families from the Canary Islands.

The occasion of the feverish haste displayed by the Spanish Government in creating the settlement at Montevideo was to forestall a Portuguese occupation of the *Banda Oriental*, the country to the east of the Uruguay River.

In 1730, four years after the arrival of the first civilians under MELO from Buenos Aires, civil government was first established through the installation of the first *Cabildo* or town corporation, with Don JOSÉ DE VERA Y PEÑONIA as the first *alcalde* or mayor. At the same time was begun the first church, to the building of which each colonist contributed 10 *pesos*, but this not being sufficient for the purpose, the Marshal met the deficit.

Montevideo was declared a military stronghold in 1751 and a military governor with civil powers was appointed. This first governor was Colonel JOAQUIM DE VIANA. In 1778 the city had 4,000 inhabitants, and in this year was founded the Charity Hospital. In 1800 the population was over 15,000 and the port commerce for the year was 626,000 *pesos* imports and 1,300,000 *pesos* exports. In 1835 the population was 23,000; in 1843, 31,189; in 1852, 33,994; in 1860, 57,913; in 1864, 164,028; and in 1889, 215,061. The National Bureau of Statistics in 1894 estimated the city's population at 255,225, and in June, 1904, at 276,034. In 1907 it is given at 308,057, and on June 30, 1908, at 312,946. According to the census of 1889 the native born numbered 114,322 and the foreign born 100,739. The population was entirely white with the exception of 2,620 negroes, mulattoes, and half-breed Indians. 33,886 were engaged in work on their own account, and 61,408 were wage-earners.

According to a Jesuit missionary, who visited Montevideo in 1727, there were 42 dwelling houses in the young town; 40 of these were skin huts and 2 of more substantial material. In 1757 the skin huts had disappeared and there were 170 buildings. In 1800 there were 300 roofed buildings, of which 60 were more than one story, and in 1842 there were 771.





THE MONTEVIDEO ALMHOUSE, A MODERN INSTITUTION FOR THE CARE OF THE CITY'S POOR.

During the years 1867 and 1868 alone over 1,000 buildings were erected, and from 1872 to 1889 there was an increase in the material city of over 250 per cent of structures. In 1901 the city contained 17,106 buildings, of which 83 per cent had more than one story.

A recent modification in the form of municipal administration has been made in the creation of the office of Intendente as chief executive of Montevideo. Señor Daniel Muñoz, a distinguished Uruguayan diplomat, having been chosen for the position, was, on April 1, 1909, duly installed as the first Intendente of the city.

Montevideo was built upon a tongue of land putting out between the ocean on the one side and the Plate River—here over 60 miles wide—on the other. The peninsula, in outline somewhat like Man-



THE CATHEDRAL, MONTEVIDEO, URUGUAY.

An imposing structure, with towers rising 133 feet above level of pavement and overlooking the beautiful and historic square "Plaza de la Constitución." It was dedicated in 1806.

hattan Island, upon which New York is built, is formed like a whale's back, rising in the center about 40 feet above sea level. The Cerro, formerly called Mount St. Philip, gave the name to the city.

The whole peninsular is a solid bank of gneiss overlaid with a thin soil. It is in consequence of this that the city has the best natural drainage of any city in the world.

The streets running north and south along the axis of the whale-back are elevated slightly, one above the other, so that to one coming in from the sea the whole city is in view, and appears even larger than it is.

The harbor is magnificent, but near the city shallow so that all landing heretofore has been by lighters and small boats. When the



**ZABALA SQUARE, MONTEVIDEO, URUGUAY.**

The metropolis of the Republic of Uruguay contains six public squares, which are in reality well kept and artistically laid-out gardens, adorned with beautiful trees, shrubs, and flowers. Zabala Square is one of the most notable in the city.

*pampero* blew—a strong wind from off shore—the water was driven back and out to sea and the shallows for some distance became dry land. It was then that vessels were unloaded first with the lighters, and from these the goods were brought ashore in specially constructed carts, with wheels ten feet in diameter, and drawn by mules, driven into the water until only their heads appeared. The passengers were often brought ashore on men's backs.

Montevideo, lying in the Temperate Zone, has a notably fine climate. The mean temperature is, winter 52° F., spring 64° F., summer 71° F., and autumn 61° F. The maximum temperature in mid-summer, January, will be from 97° to 99°, and the minimum in

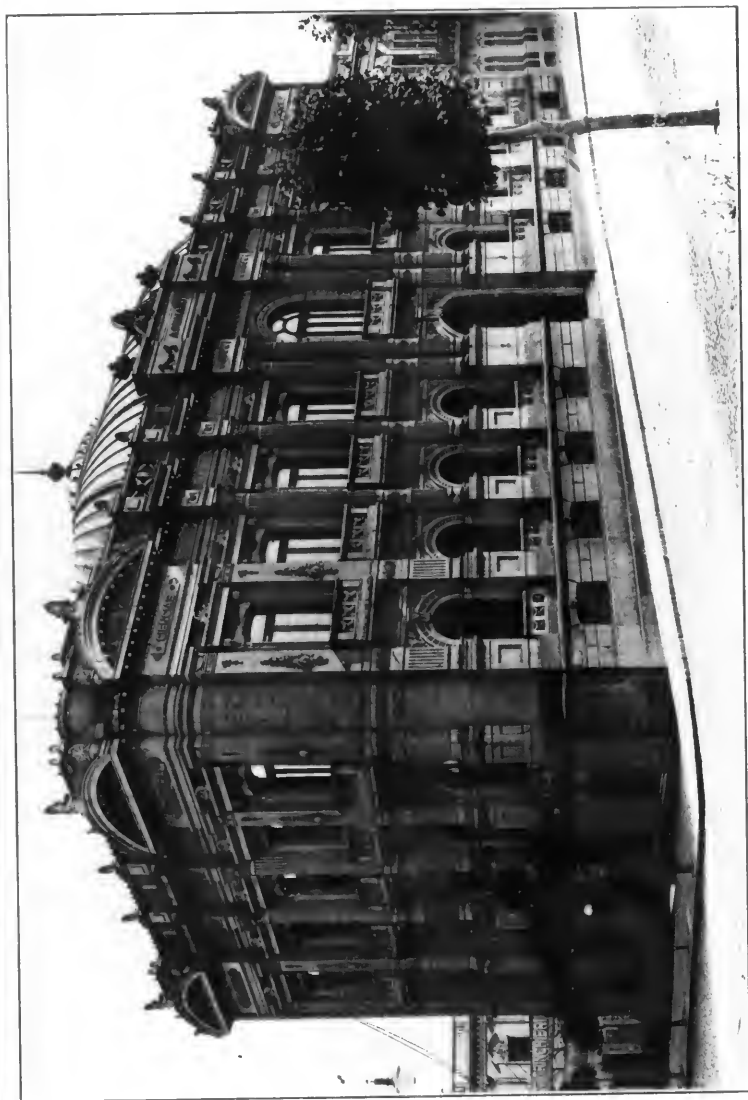


CENTRAL RAILWAY STATION, MONTEVIDEO, URUGUAY.

The railway systems of Uruguay have a length of about 1,500 miles and represent, including the lines under construction, a capital of \$98,000,000. Of this sum \$28,000,000 carries a Government guarantee of 3½ per cent interest. Uruguayan railroads are exempt from trade and land taxes, as well as from import duties on construction material.

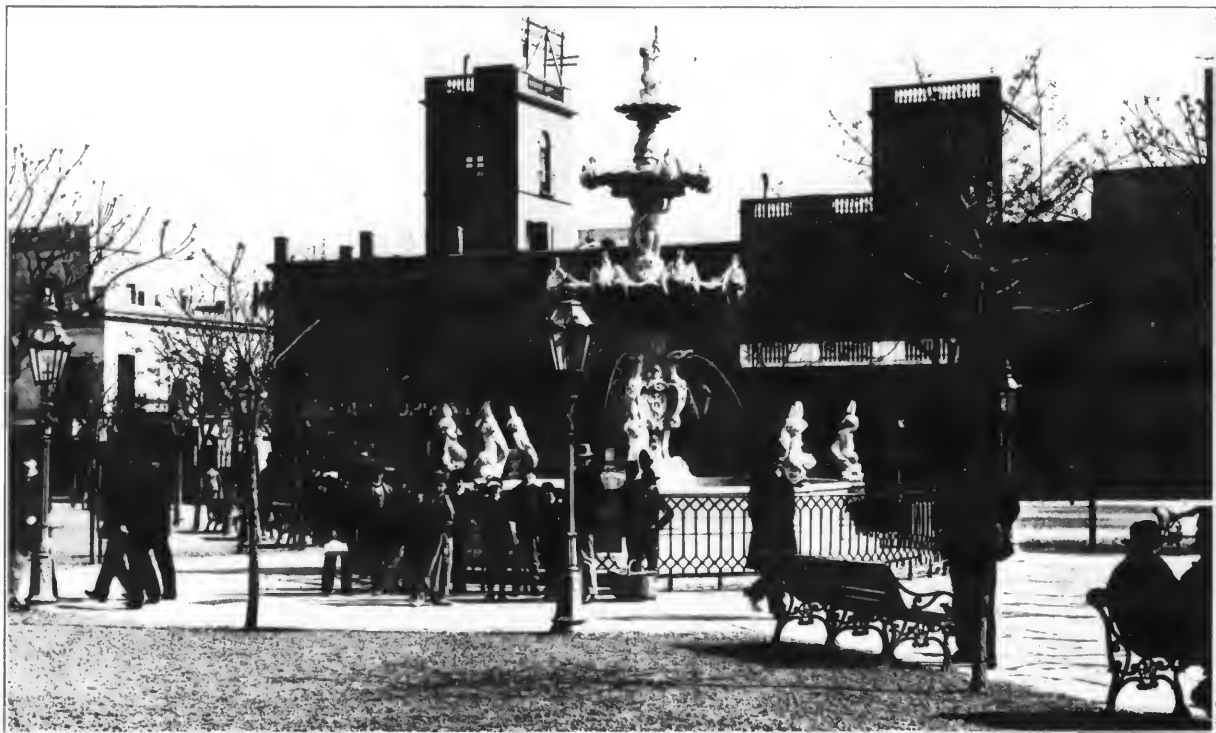
mid-winter, July, will fall to within 4° or 5° of freezing. The longest days of the year are in December—from the 19th to 25th of that month the days are fifteen hours long from sunrise to sunset. In June come the short days, when in the last half of the month a minimum of nine hours forty minutes is reached. Meteorological observations show an average of 224 days fair, 85 cloudy, and 36 with rain to the year.

Montevideo is one of the most charming American cities, but like Buenos Aires it is a new city. The visitor who finds so much in Mexico or Lima of interest in the contrast between the old and curi-



**THE ATHENEUM, MONTEVIDEO, URUGUAY.**

This institution represents a distinct element in the social life of Latin America, being devoted to literary and scientific research and the fostering among its members. This handsome and commodious building, the home of the society in Uruguay's capital city, is a substantial indication of the place which this movement occupies in the social life of the Republic.



FOUNTAIN, FLAZA DE LA CONSTITUCIÓN, MONTEVIDEO.  
This plaza is one of the many which beautify the capital of the Republic.

ous and the new and cosmopolitan will miss half his interest in Montevideo. Here there is very little old or curious, all is modern, but modern of the best type. The buildings are fine, often magnificent. One wonders where all the money comes to build such, until he remembers that Uruguay is a rich country, not only in natural resources but in accumulated capital. It is claimed that the per capita wealth of Uruguay is greater than that of any other country in the world.

Lined with trees the streets and avenues are broad and straight. Most of the trees are of a variety of the plane and in summer give to the whole city a parklike appearance. All the streets are well paved. Of public breathing spaces there are besides the splendid Paseo del Prado, six public plazas, a number of little parks called gardens, and the newly constructed city park, *Parque Urbano*, on the Ramirez beach. The city park is laid out on quite a magnificent plan, with grottoes, artificial lakes, flower plats, tree groups, and broad avenues. It is something more than an ordinary park in that it is also a bathing resort frequented not only by the Montevideans but also by people from the interior of the Republic and from Buenos Aires.

There are a number of bathing resorts in the vicinity of Montevideo. Among the most fashionable are the beaches at Pocitos, Capurro, and the magnificent Hotel Balneario, a large and modern building of iron and glass. Smaller but yet very showy hotels are at other points. At these and on the surrounding terraces in the afternoons and evenings there is dancing and musical programmes rendered by orchestras and bands and here congregate the wealth and fashion of Montevideo.

Fronting the bay the shore front is most attractive. Montevideo has outgrown its original site on the peninsula and has extended itself to the west and around the bay. The curving line is built up with the suburban residences of the well to do, constructed in the old Italian style with much modern elegance and even extravagance. The architecture is picturesque, but what appeals even more to the visitor, particularly if he be from a less-favored climate, than the buildings, ornate and showing as they do a lavish expenditure of money in construction, are the unrivaled gardens surrounding these suburban residences. Flowers everywhere bloom in perpetual spring; not with the garish display of tropic plants, for Uruguay is in the Temperate Zone, and these are the flowers of Europe and of the United States; but they bloom perpetually the year around, for, as said by an American traveler, "when it is not June in Uruguay it is October." Rose gardens, the like of which one must go to southern France to see, and then only for a few weeks, one finds in Montevideo in absolute perfection of flower from January to December.

But Montevideo is not all a playground; the dominant note is money making. Uruguay, the smallest of South American countries, is for its area the richest of all. It is said there is not a foot of un-tillable soil in the whole Republic, which, although small as com-



THE CITY HALL, MONTEVIDEO, URUGUAY.

This building is of particular interest, considered in connection with the new municipal law of Montevideo. The first Intendente under this law, Mr. Daniel Muñoz, was formerly Minister of Uruguay to England.

pared with its neighbors, Argentina and Brazil, is after all 72,172 square miles in extent. This is larger than England, or Scotland and Ireland together, and larger than the combined areas of New York, Connecticut, Massachusetts, Rhode Island, and New Jersey.



The industries of the country are agricultural, wheat, cattle, and sheep. It is said that it costs less than \$10 to raise and place on board a European cattle steamer a 4-year-old steer, and that sheep can be raised at a less cost in Uruguay than chickens in Iowa. The per capita wealth of the country is about \$1,500.

Among the principal buildings of the city are the Government Palace, the Department of Fomento, the Municipality, the Post-office, the School of Arts, the University, the Charity and the Military Hospitals, the Orphan Asylums, and the Penitentiary.

There are a number of fine parks and public squares.

The most interesting public work in Montevideo and the one destined on completion to place it in the front rank of world cities is



PICTURESQUE BRIDGE IN THE PASEO DEL PRADO, MONTEVIDEO, URUGUAY.

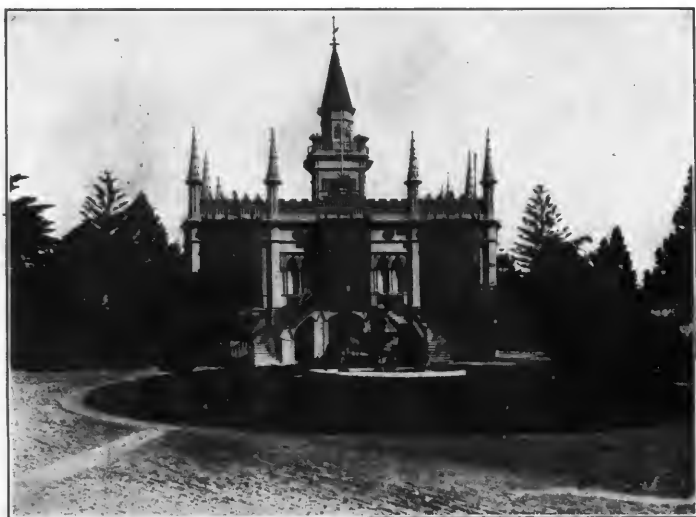
The Paseo del Prado is the largest and most beautiful of the six principal public parks of the capital of Uruguay. Its drives, lakes, grottoes, wide avenues, and luxuriant trees make it a favorite resort of the inhabitants of the metropolis. The city of Montevideo stands upon a granite bed 33 feet above sea level, facing a magnificent bay, and in a topographical position that lends itself to the natural development of one of the finest systems of parking in the Western Hemisphere.

the port works—the building of a great modern port. This has been more or less the dream of Uruguayans for over half a century, but it is only within the last dozen years that the project has taken on definite shape and is now nearing completion.

Looking at the map, it can be seen at a glance how admirably Montevideo is situated from a commercial standpoint. It is at the mouth of the great La Plata, second of American rivers, with an annual discharge two and a half times greater than the Mississippi and draining a rich territory half the size of Europe. Then, again, there is the Uruguay, itself a great river, and an immense back-lying country to the east of the Uruguay interlaced by a perfect network of navigable streams, so that in Uruguay almost every plantation has

water carriage to Montevideo, the metropolis. The conformation of the city and of the adjacent waters is almost ideal. The broad bay, 2 miles across, partly inclosed between the older city and the "Mount," is a perfect harbor were it not that both the bay and the approaches thereto are shallow.

The enormous amount of silt brought down by the Plata has made the river shallow and broad, with a great bank extending far out into the ocean. The problem at both Montevideo and at Buenos Aires is a double one, first to excavate the harbor and approaches and afterwards to keep the silt from filling in the excavations made. At Montevideo the first is the more difficult problem, in that much of the



ARGENTINE LEGATION, MONTEVIDEO, URUGUAY.

This structure is commodious and artistic, and the grounds well kept and attractive. During the flowering season the large bed in the foreground displays in varied colored flowers the name of the legation.

work is in hard ground, making the excavation much more costly than at Buenos Aires; at the same time the maintenance of the work, once completed, will be much less difficult at Montevideo.

A number of plans for the port work were entered in competition. From these the commission having the matter in charge selected those drawn by Messrs. GUERAND and RÜMMER, the one a French and the other a German engineer. On November 7, 1899, President CUESTAS approved an act of the Senate and Chamber of Deputies authorizing the execution of the work as planned by these engineers and providing a fund for the payment of costs of the work. It must be remembered that this great harbor improvement is being constructed

are advantage to permit the use of the harbor by the largest vessels, an advantage which is bringing a constantly increasing commerce to Montevideo.



**THE CUSTOM-HOUSE, MONTEVIDEO, URUGUAY.**

The foreign commerce of the Republic in 1907 exceeded \$9,000,000, the larger portion of which passed through this custom-house. The semicircular bay of Montevideo is 6 miles in circumference and large enough to accommodate a great number of ocean steamers at one time. Since 1901 it has been dredged, breakwaters have been built, quays constructed, and other vast port improvements have been made. The work is still incomplete, but is so far advanced as to permit the use of the harbor by the largest vessels, an advantage which is bringing a constantly increasing tonnage to Montevideo.

without the aid of foreign capital and with money derived from current resources. The act of 1899 provides for additional export and import duties, the proceeds of which are to be devoted to the work. These duties are known as "extra duties" for the construction of the port of Montevideo. From the date of the passage of this act to November, 1902, these duties had produced \$2,795,942, which amount has been turned over to the commission intrusted with the work. In the first five years the amount expended had increased to over \$4,000,000 and about the same rate has been since maintained.

The work was inaugurated July 18, 1901. The main features are two long breakwaters protecting the port west and south, a channel of approach dredged to a depth of  $24\frac{1}{2}$  feet for a distance of about 2 miles, and a great basin and docks in front of the city. The work is being done by contract, although the machinery is the property of the Government.

The work is now nearing completion. When it is finished Montevideo will be a great port and may confidently expect a million population within a comparatively few years.



From "Spanish-American Republics"

Copyright, 1891, by Harper & Brothers.

# NEW STEAMER FOR SOUTH AMERICAN SERVICE ∴ ∴

---

**T**HE steamer *Vasari*, of the Lamport & Holt Line, specially designed for mail and passenger service between New York and the ports of Brazil, Uruguay, and the Argentine Republic, is scheduled to make her first regular trip on May 20, 1909.

The vessel has been built to the highest class of the British corporation in the yard of Sir RAYLTON DIXON & Co. (Limited), the famous firm of Liverpool shipbuilders. The *Vasari* accommodations exceed those of the *Verdi*—placed on the line in 1908—by nearly 50 per cent. The vessel is 502 feet in length by 59 feet 4 inches in breadth, with a displacement of 13,870 tons. Cabin accommodations cover 170 for the first class, 60 for the second, and 200 for the third. Finishings and furnishings are of the most exquisite and complete nature, and in every particular it is purposed to meet the requirements of the increasing tide of traffic and travel setting toward South America.

For the suitable inauguration of the enlarged service, the agents of the Lamport & Holt Line in New York were hosts for a large and representative gathering of shipping, business, and newspaper men on May 11, when an elaborate luncheon was served and felicitous speeches exchanged, indicating not only the necessity for increased service between North and South America, but also the effective measures being taken to meet conditions.

Mr. JOHN BARRETT, Director of the Bureau of the American Republics, made a congratulatory address. He said in view of the new steamers that the Lamport & Holt Line had placed in the American service there was no longer any basis for the claim that passengers were compelled to first go to Europe to get adequate accommodation for South America. As Mr. BARRETT had in the past been associated very closely with the claim that such a condition did exist, his disavowal of further contention on the question occasioned much applause. His only regret, he said, was that the steamer did not carry the Stars and Stripes. Mr. BARRETT predicted spectacular development in South America, declaring the position there the same as existed in the United States seventy years ago.

In outlining the purposes of the shipping world to meet all demands made upon it, Mr. DANIELS, of the Lamport & Holt Line,



CAPTAIN, OFFICERS, AND GUESTS ON BOARD S. S. "VASARI," OF THE LAMPORIT & HOLT LINE, AT A LUNCHEON GIVEN IN NEW YORK, MAY 11, 1909.

1. Mr. Richardson; 2. Mr. Kellogg; 3. Mr. Wildeman; 4. Mr. Cooke; 5. Mr. Cook; 6. Mr. Gein; 7. Mr. Randolph; 8. Mr. Sousa; 9. Mr. Rennie (Purser);  
10. Mr. Geddes; 11. Mr. Rohl; 12. Mr. Williams (First Officer); 13. Captain Ferguson (S. S. *Thespis*); 14. Mr. Bullen (Second Officer); 15. Mr. Stirl;  
16. Mr. Grahame; 17. Mr. Smith; 18. Mr. Jennings; 21. Mr. Green; 22. Mr. Barrett; 23. Captain Cadogan (S. S. *Vasari*); 24. Mr. Dunleis.

touched upon the claim that travel to the Southland could only be made via Europe. He said:

In some parts of our large country, outside of New York, of course, I have heard echoes that there was no way of getting to South America from the United States except via Europe or the old-fashioned method of swimming; both of these ways may be popular, but not so popular as a trip with us. The Lamport & Holt Line dispatches two passenger steamers a month to South America at fortnightly intervals. The voyage to Rio de Janeiro occupies about sixteen days, including a stop at Bahia; from Rio de Janeiro to Buenos Aires seven days more, or twenty-three days from New York to Buenos Aires, stopping en route, after leaving Rio de Janeiro, at Santos and Montevideo. This time is exactly the same as that occupied by the passenger and mail steamers from the principal ports of Europe to the same ports in South America. The steamers themselves are capable of faster time, but the propelling power is coal, and we coal for the round voyage, as coal is the one thing at present not found native in Brazil or the Argentine Republic.



DINING SALOON, SS. "VASARI."

About a year ago many of you remember the coming out of the *Verdi*, the first of the new large passenger steamers placed in the South American service by the Lamport & Holt Line. To-day, about a year later, the *Vasari* follows the *Verdi*, with nearly 50 per cent increased accommodations.

The particular voyage of the *Vasari* is to our sister Republics of South America, Brazil, Uruguay, and the Argentine Republic, all countries closely associated with our own and with which our Government, through its Pan-American Congresses and the International Bureau of the American Republics—so ably directed by our good friend Mr. BARRETT, who is with us to-day—seeks to cultivate in trade and friendly intercourse.

The development of South America is progressing rapidly; the possibilities are still almost unlimited. I am pleased to say that within the last year American companies and American capital have materially increased their interests in South America; some looking to participate in the profits of this big field of new enterprise, and some looking to the future, when our own country will

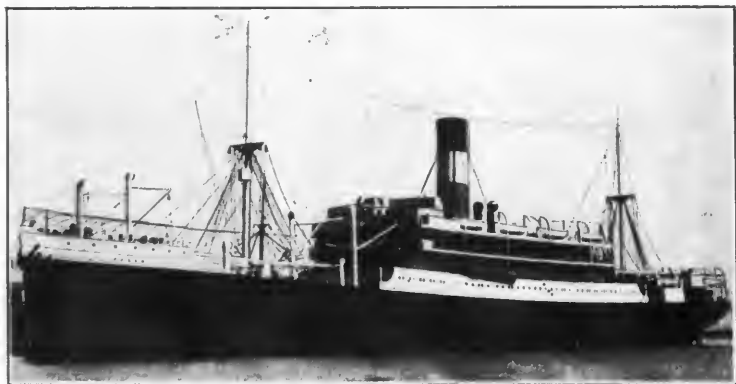
in all probability turn to South America to furnish at lowest cost the surplus production of many agricultural staples.

A kind Providence has been generous to the Southern Hemisphere and wealth of nature is abundant. Brazil, in coffee and rubber alone, supplies the major



PROMENADE DECK, SS. "VASARI."

part of the world's requirements of these products. Rio de Janeiro, the capital city, is situated on one of the most beautiful bays and harbors of this continent. The city itself is already a show city, and the Government is continuing to spend large sums to make Rio de Janeiro probably the handsomest city of South



SS. "VASARI," OF THE LAMPORT & HOLT LINE.

The "Vasari" is the latest addition to the fleet of well-equipped and commodious vessels maintained by this line in its service to Rio de Janeiro and other Brazilian ports.

America. Montevideo, in Uruguay, is charming. Buenos Aires, a city of a million people, the capital of the Argentine Republic, is the metropolis of the Southern Hemisphere, with as many attractions as we are accustomed to in New York, including international baseball.



# ALEJANDRO ALVAREZ AND INTERNATIONAL LAW ..

---

**C**ONSPICUOUS among the valuable papers presented at the meeting of the American Society of International Law held in Washington during April, 1909, was one submitted by ALEJANDRO ALVAREZ, a Chilean jurist of international renown, and in the journal of the society for the quarter April-June the initial article on "Latin America and International Law" is a contribution from the pen of Señor ALVAREZ.

The purpose of Señor ALVAREZ in this review of the position of the Latin-American Republics and their political relation to the world at large is to show in what manner and how far these Republics have contributed to the development of the law of nations. He divides this study into three periods: First, beginning with independence to the middle of the nineteenth century; second, from the middle of the last third of that century; and third, from the end of the second period to the present time.

In the first period, it is the opinion of the author, these States recognized a community of interests among themselves to the extent of desiring political unity or confederation; at the same time the United States was in complete sympathy with its southern neighbors, and in all that concerned the independence of these Republics felt itself as one with them. It was then that the United States began to develop a policy of hegemony on the American continent.

In the second period the idea of confederation among the Latin Republics weakened as the fear of conquest disappeared, but the idea of solidarity in interest grew. They desired close relations among themselves, but at the same time they desired relations with Europe.

In the third period the evolution became more pronounced, a triple bond of interest with Europe, with the United States, and among themselves becoming the ideal.

The United States gave to the Latin-American Republics the model of their political institutions, but here its influence ended. Conditions, usages, and laws, when not Spanish, were for the most part borrowed from France, and it was from the literature of that country that Latin Americans derived practically all of their knowledge of the United States, as in turn the United States derived most of its knowledge of Spanish America from English sources.



DOCTOR ALEJANDRO ALVAREZ.

The fundamental ideas of independence, liberty, and equality were common to all America, and it was these ideas which lay at the root of the Monroe doctrine. The message of President MONROE, says the author—

did not have the object of making any immediate declaration of principles, still it expressed so clearly the situation of the New World with respect to the Old, and contained such an accurate synthetic statement of the aspirations and destinies of America as to become its political gospel. And the tacit acceptance by Europe of the declarations of this document, together with the decided determination of the Latin-American States to maintain them, made possible the final entry of an "American Continent" into the community of nations.

Upon entering thus into that community, the States of America fixed for all time the cardinal points of their foreign policy in those same principles, in opposition to the principles then dominating in Europe. In this manner they not only contributed with new principles to the development of international law, but also laid the basis of that which may be called "American International Law."

As showing the reciprocal relations of these Republics, the author reviews the various international congresses which from time to time have been held among them, and points out how in detail the pacts therein agreed upon constitute a real contribution to the law of nations.

In particular he reviews the work of these international conferences of the American Republics in which the United States took part in Washington, Mexico, and Rio de Janeiro, and in this connection he has this to say of Latin-Americanism and Pan-Americanism:

Latin-American solidarity, based on the fact of the common origin of all the Latin States of America, sought the formation among those States of a complete or at least a partial confederation which would draw closer the bonds created by that common origin. At the present day the field of continental solidarity (Pan-Americanism) has widened, embracing all the problems of the States of America which arise from the fact of their situation on a continent distinct from that of Europe. Latin-American solidarity (Latin-Americanism), in turn, has been restricted, losing its Utopian character and confining itself to those problems derived from or connected with the common origin of the constituent countries. Latin-Americanism thus reduced has had the two tangible manifestations we have already seen in the international conferences; but, in the scientific aspect, it has been manifested in the holding of three scientific congresses, in 1898, 1901, and 1905, in Buenos Aires, Montevideo, and Rio Janeiro, respectively. Those assemblies, while treating of various affairs of special interest to those States, have also served to bring into contact their intellectual elements and scientific centers.

In so far as concerns Pan-Americanism, the United States has realized that in order that it should have a solid foundation the holding of international conferences is not enough, but that it is necessary to destroy the distrust that the Latin States have of its policy in America, a distrust which is furthermore an imminent danger not only for the economic interest of that Republic, but also for its foreign policy, which would be that of isolation on the continent.

According to Señor ALVAREZ another great step in the direction of greater union between the States of the New World is the perfecting and widening of the attributes of the International Bureau of the American Republics created by the first conference. He states that this institution does splendid work furnishing to all the Republics such data regarding any one of them that may be required.

The following sketch of this distinguished lawyer was furnished the Bureau by Señor DON JOAQUIN BERNARDO CALVO, Minister from Costa Rica in the United States, and bears tribute to the noteworthy services rendered to the development of a code of international law by Señor ALVAREZ:

ALEJANDRO ALVAREZ was admitted to the bar in 1892. In 1894 he was appointed professor of civil law in the University of Chile, and in this branch he gave a new trend to the teaching of civil law by substituting for a system of explanations of the text an exposition of the principles on which each subject is based and the construction of the legal doctrine by the exposition of the principles which govern each subject and the doctrinal construction. In 1896 he went to Europe, and there he completed a course of study in the Law School of Paris as well as in the School of Political Sciences, having obtained the degree of doctor of laws in the former and a diploma in the latter. The subject of his graduating thesis was "Concerning the Influence of Political, Economical, and Social Phenomena on the Organization of Modern Society." In 1900 he returned to Chile and inaugurated a course in comparative civil legislation, which was the first course followed in Chile on this subject.

In 1902 he was appointed secretary of the Chilean delegation to the Second International Conference, which met in Mexico, and in this capacity he wrote several of the works submitted by the delegation.

In that same year he made another visit to Europe, and in 1904 published in Paris his work entitled "A New Conception of the Juridical Studies and of the Codification of the Civil Law." This work has a preface written by the eminent Professor FLACH, of the College of France, and had the honor of being edited by the International Library of Superior Instruction. Prominent reviews of France and of other countries highly praised this work, and it has been quoted in several works published by eminent French professors in connection with the centennial of the Civil Code.

In 1905 Professor ALVAREZ was appointed technical counselor of the Department of Foreign Relations of Chile, and in 1907 his Government appointed him member of the Permanent Court of Arbitration of The Hague. In his capacity as counselor he has published several works, especially a reply to the note which the Peruvian

minister presented to the Government of Chile in the month of May, 1908, concerning the question of Tacna and Arica.

He has published several articles on international American affairs in the "Revue Generale de Droit International Public." In 1907 he published in Paris the work entitled "Nationality in the International American Law," in which he studies this important question from an entirely new view point.

He has also taken an active part in scientific congresses. In 1905 he represented Chile in the Third Scientific Congress, which met at Rio de Janeiro, and there he for the first time presented the thesis that has since been instrumental in developing the existence of an American international law, giving to this word a different meaning from that which it has had heretofore.

He was a member of the governing board of the Fourth Scientific Congress, and proposed that said congress should assume a Pan-American character and that only American questions should be discussed in it. Professor ALVAREZ prepared almost the whole of the programme of the section on social sciences, which programme constitutes a catalogue of all the questions of a true American character in the different branches of said sciences. At said congress he submitted his thesis, which was approved, on the existence of American problems or situations concerning international law.



# RECEPTION OF NEW VENEZUELAN MINISTER IN THE UNITED STATES . . .

---

---

**O**N May 4, 1909, the new Minister accredited by the Venezuelan Government to that of the United States was received by President Taft. In presenting his credentials, Dr. PEDRO EZEQUIEL ROJAS spoke as follows:

MR. PRESIDENT: From the time Venezuela declared her independence as a nation—and, I might as properly say, even before that time, when the idea of emancipation began to stir in the breast of the old Colony—the Venezuelan people always felt a deep sentiment of appreciation and just admiration for the Great Republic of the North. We looked up to her as to a sister who had preceded us on the road to liberty, and whose example has always been one of encouragement to us, because of the success attained in the practice of her wise institutions, and the methods so judiciously selected to make of her a wonder of progress and a constant source of happiness to her sons.

As a messenger bearing the expression of such sentiments, as constant as sincere, I come, in the name of the Government and the people of my country, to further strengthen the ever-cordial bonds of friendship between the two nations.

At the same time I have been especially commissioned by His Excellency the President of Venezuela to express to you in his behalf his earnest desire for your welfare and his congratulations on the manifest recognition which your fellow-citizens have shown to your great public service in choosing you for the highest office in your country.

I have the honor to place in your hands the letter accrediting me as Envoy Extraordinary and Minister Plenipotentiary of the United States of Venezuela, near you, Mr. President, and near your honored Government.

President TAFT replied:

MR. MINISTER: It is very pleasing to me to welcome you as the Envoy Extraordinary and Minister Plenipotentiary of the United States of Venezuela near this Government, and to receive from your hands the letters of credence which you present in that high capacity.

The feeling of sympathy and fraternity which has existed since the independence of Latin America, and which I trust will continue and grow stronger with the coming years, between the Republic of Venezuela and the United States of America, naturally calls for close intimacy and friendship between the two countries and peoples. With the noble aspirations of the great Bolivar as the incentive for the principles of freedom and self-government of your nation, it is fitting that your country and mine should clasp hands in fellowship, united in all that tends to strengthen the bonds of reciprocal intercourse, commerce, and good understanding. I have listened with particular pleasure to your expressions of good will, and in your endeavors to further the high duty with which you are intrusted, you may be assured, Mr. Minister, of my most cordial support and cooperation.

I ask you to convey to His Excellency the President of Venezuela my appreciation of his friendly message, and my good wishes for his personal health and happiness and for the welfare of the people of Venezuela.

# RECEPTION OF THE SPECIAL ENVOY OF NICA- RAGUA TO THE UNITED STATES     ∴     ∴     ∴

---

---

**O**N May 17, 1909, the President of the United States formally received Dr. PEDRO GONZALEZ, Envoy Extraordinary and Minister Plenipotentiary of Nicaragua, on special mission. In presenting his credentials Doctor GONZALEZ spoke as follows:

Mr. PRESIDENT: Although the Government of Nicaragua has the most perfect confidence in the high qualities of the personnel of its legation in this Republic, it has been pleased to accredit me in the character of Envoy Extraordinary and Minister Plenipotentiary on special mission to you, in order to show in this way its sincere desire to maintain and strengthen the friendship which the two countries have preserved so cordially and for so long.

The pending difficulties connected with the claim of the corporation called the "George D. Emery Company" are not in my judgment of such a nature as to interrupt or even to lessen this cordiality of relations between the two Governments, and may be disposed of within a short time by a definite agreement.

I have the confident hope that the negotiations which are the object of the special mission which has been confided to me will shortly reach a solution, and to this end I rely, in the first place, Mr. President, on your benevolent cooperation, your high sense of equity being universally recognized.

Mr. President, in placing in your hands the letters which accredit me in the above-named diplomatic capacity, permit me to express the sincere wishes of my Government, the people of Nicaragua, and my own, for the prosperity of this great Nation and for you personally in your administration over the American people, and for the greater extension of their wonderful progress toward the brilliant destiny which awaits them in the concert of the world's Powers.

President TAFT replied in the following terms:

Mr. MINISTER: I received from your hands the letter by which His Excellency the President of Nicaragua accredits you as Envoy Extraordinary and Minister Plenipotentiary on special mission. I am pleased to accept this letter and to receive you in this capacity, knowing that this letter of credence and the full power which you bear give complete authority to sign a definitive settlement of the Emery case, which has so long been an unfortunate obstacle to good understanding between the Governments of the United States and Nicaragua.



DOCTOR PEDRO GONZALEZ,

Special Envoy Plenipotentiary of Nicaragua to the United States.

In performing the acts which constitute your mission I need not assure you that you will be received by this Government with that equitable and kindly disposition which has always characterized the attitude of the United States toward Nicaragua, and which, coupled with mutual trust, sincerity, and regard for justice, is the only sure ground of continued good relations.

While asking you to make known to your President the spirit in which I receive his special envoy, which indicates also the disposition of this Government toward his able Minister and toward the Government of Nicaragua, I am pleased to welcome you, Mr. Minister, to the Capital of the United States and to express the hope that your short sojourn may be agreeable.



# THE EMERALD MINES OF COLOMBIA

---

---

IT is upon the mines of the Republic of Colombia that the markets of the world depend for their supply of the precious stone of the beryl variety known as the "emerald." From this country the most valuable single emerald of modern times was obtained, now forming one of the gems of the collection of the Duke of Devonshire. This is a perfect hexagonal crystal, weighing 8 ounces and 18 pennyweights, 2 inches in length, and measuring across its three diameters  $2\frac{3}{4}$ ,  $2\frac{1}{5}$ , and  $1\frac{1}{2}$  inches. Another fine specimen, in the Hope cabinet, weighs 6 ounces, while larger but less valuable stones are in various royal jewel caskets.

## THE ORIENTAL EMERALD.

The old name of *smaragd*, a development of the Greek verb meaning "to shine," is the origin of the present designation of the emerald, its Spanish name, *esmeralda*, forming the connecting link. There can be no doubt that many ancient writers confounded, under the general classification *smaragdus*, several distinct minerals of green color, such as true emeralds, green jasper, malachite, chryscolla, green fluor spar, etc.

The true emeralds of the ancients are said to have been obtained from the workings of Mount Zabarah, in Upper Egypt, although the reopening of the mines in the nineteenth century by Mehemet Ali did not prove commercially profitable. In this district was probably mined the jewel adorning the breastplate of Aaron, described in Mosaic writings and forming part, possibly, of the spoils carried from Egypt by the departing Israelites. Of Egyptian or Ethiopian origin is, undoubtedly, also, the remarkable emerald in the papal tiara, 1 inch in length and  $1\frac{1}{2}$  inches deep, and which formed part of the pontifical treasure prior to the discovery of America and the subsequent appearance of Peruvian gems in Europe.

The huge emerald used by NERO, in keeping with the belief of the times as a corrective for his poor vision; the engraved emerald set in gold presented by PROLEMY to LUCULLUS on his landing at Alexandria; the robes worn by CLEOPATRA and other famous beauties of the past, whose embroideries were interspersed with emeralds; and the exquisitely graven seals of antique workmanship on view in museums and private collections all prove the esteem in which the jewel was held. Ornaments of emerald have been unearthed in

Theban tombs and excavated from Pompeii and Herculaneum, and in all ages the stone has been classed among the rarest of gems.

Various virtues were ascribed to it by ancient traditions; it was regarded as beneficial to the eyes; effective against evil spirits; and in the East it is still accredited with talismanic and medicinal qualities.

Immense emeralds are mentioned by ancient authors, but they were doubtless either less precious stones or glasslike imitations. Such was the colossal statue of Serapis; also an obelisk in the temple of Jupiter, 60 feet high and 6 feet broad.

The oriental emerald is not, however, like the western emerald, a silicate of alumina and glucina. It is more valuable and is a green, transparent variety of corundum, and therefore nearly pure alumina, differing from the sapphire only in color.

#### EMERALDS IN AMERICA.

Peruvian emeralds were famed from the time PIZARRO sent the first specimens to Europe among his spoils of conquest. Many were obtained in the barren district of Atacama and worked by the native lapidaries with a marvelous skill. In the Manka Valley of Peru the Indians appear to have paid divine homage to a magnificent emerald of the size of an ostrich egg, which they named the Goddess of Emeralds. As these gems were reputed to be peculiarly acceptable to the goddess, offerings of great beauty and value were frequent, and many costly stones, some possibly from the adjacent Colombian territories, fell into the hands of the Spaniards.

Ecuador also contributed its share of emeralds to the spoils of the invader, and the town Esmeraldas is supposed to have obtained its name from the precious stones found so abundantly there.

Among the Aztec treasures of Mexico were emeralds as fine as those of the Peruvian Incas, and it is reported that CORTES was offered 40,000 ducats for one of these stones by some Genoese merchants. The Mexican gems were exquisitely cut, and it is from this source that the magnificent emeralds now forming part of the royal collection at Madrid were supposedly procured. The term "Spanish emerald," as applied to a very high-grade stone, might quite appropriately be altered to "American" emerald.

Sections so far apart as Siberia, India, Salzburg in Austria, Australia, Norway, Brazil, Ireland, and parts of the United States yield certain returns from emerald exploitation, but it is from the Muza and Cosquez deposits near Bogota, in Colombia, that the gems of greatest beauty and perfection are obtained.

The exploitation of Colombian emeralds is under the control of the Government, and the celebrated mines at Muza, or Muza, have recently been leased to an English syndicate which agrees to sell at

least \$1,250,000 worth of stones each year for twenty years, the lease in the original call for bids being valued at \$360,000 annually. The sales are to be under government inspection, and competition is practically impossible by reason of legislation forbidding the sale of uncut stones and by the imposition of taxes on privately exploited mines.

## MINERALOGY.

Minerologically the emerald is essentially a mineral silicate, consisting largely of silica, an oxide of silicon. In the emerald the silica is combined with oxides of two metals, one being aluminum, the basis of the ruby and sapphire, while the other is an exceedingly rare metal known as glucinum or beryllium.

The emerald, the beryl, and the aquamarine are practically the same mineral, the distinction between them being due to differences in color and other characteristics of but slight value to the chemist, though of immense importance to the jeweler as affecting their commercial rating. The emerald is subject to minute feathers, flaws, and other imperfections, from which, however, its allied gems are for the most part free.

Its chemical composition is about 67 to 68 per cent of silica, 15 to 18 per cent alumina, 12 to 14 per cent glucina, and small proportions of peroxide of iron, lime, and oxide of chromium. It is to the presence of a trace of chromium that it owes the velvety green tint for which it is so highly prized. Its specific gravity is 2.577 to 2.725, being in hardness rather inferior to the topaz, of 7½. It occurs in hexagonal prismatic crystals, and the cleavage is in four directions; the only perfect one, however, being parallel to the terminal plane. Its fracture is conchoidal and uneven and its luster vitreous.

The value of emeralds depends first, upon deepness of color; second, upon brilliancy; third, upon freedom from flaws; and fourth, upon

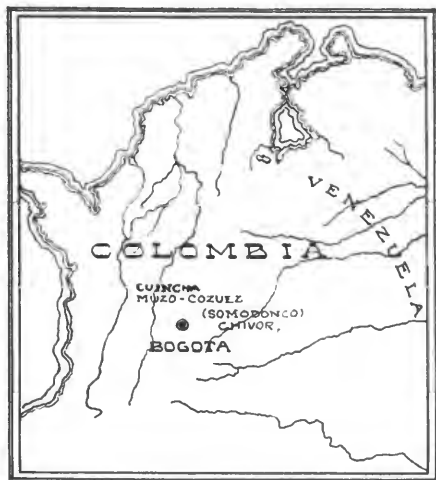


DIAGRAM SHOWING EMERALD MINES OF COLOMBIA.

size. While reckoned inferior only to the diamond and ruby, it does not, like them, increase in value in proportion to the cube of its weight.

One feature of emerald mining which adds greatly to the value of the gem is that flawless stones are seldom found in any considerable size. For an exceptionally fine variety of 6 carats the price of \$5,000 has been paid, but stones of such character are rare. By BEUDANT the value of emeralds of fine color and free from flaws is given as follows: Four grains, 100 to 120 francs; 8 grains, 240 francs; 15 grains, 1,500 francs; and he cites one fine stone of 24 grains which was sold for 2,400 francs.

The emerald is transparent or translucent, being brittle and comparatively soft when freshly mined, but becomes much harder on exposure to air. The gem is cut on a copper wheel with emery and polished on a tin wheel with rotten stone. In a good stone the surface must be perfectly straight and smooth, the form usually given being that of a square table with the edges replaced, the lower surface being cut into facets parallel to the sides.

#### COLOMBIAN EMERALDS.

The Colombian gems exhibit to the highest degree the qualities of color, brilliancy, flawlessness, and size characteristic of the best emeralds, and the Muzo district is at present the principal source of supply. The matrix in which they are embedded overlies a great precipice of black shale or slate. This black rock contains few stones. They are found for the most part in white calcite running in veins through the slate, some being embedded in the matrix and others lying in pockets.

The emerald-bearing rocks consist of a bluish-black clay-state formation, stratified in thin layers and of a particularly friable character, especially after being exposed to the action of air and water.

These rocks dip in every direction in the most extraordinary manner, evidently as the result of repeated volcanic action; and the strata are traversed by numberless cracks or small fissures, which have been filled up by infiltration with silica, alumina, lime, and magnesia, with a little chrome and other minerals, including a considerable quantity of pyrites.

Under great heat and pressure, due, no doubt to further and subsequent volcanic action, these minerals in the fissures or veins have crystallized in different shapes and forms according to the various minerals contained in any particular vein or fissure. Under favorable circumstances, the most beautiful emeralds of a deep green color have been found in these small veins, the tint being due to the presence of chrome in sufficient quantities. In other veins, the emeralds

found are of a light green color, owing to the absence of sufficient chrome. Again, in other veins, where no chrome is present, the crystals are pure white or colored red or yellow by oxide of iron. Many of the crystals are pure silica, and others have various minerals combined with silica.

The importance of the exploitation of these mines is evidenced by extended reports made on the subject by the consular representatives of the United States in Colombia. The Consul-General at Bogota, Mr. JAY WHITE, has forwarded to his Government the latest data in regard to them, embracing technical and official papers of great



EMERALD-BEARING DÉBRIS.

value, which are the basis for the following information in regard to Colombian emeralds.

The emerald mines are unquestionably among the most valuable properties within the Republic of Colombia. At the time of the Spanish conquest the Muzo and other deposits were exploited in a primitive manner by the Indians, and since that period the stones from Colombian mines have been unequalled in richness of color and brilliancy.

The mines of the Republic occur in groups, each covering a considerable area and consisting of several veins or deposits. All are situated within the radius of a comparatively small number of miles,

at altitudes between 2,000 and 7,000 feet above sea level, amidst the precipitous heights of the eastern cordillera of the Andes. They are all within 100 miles of Bogota, the capital of Colombia, the district being reached by a journey from the capital of two hours by rail and two or three days on mule back.

The Muzo group is the only one that has been worked in recent years, but complete data as to the quality and value of the emeralds mined are not issued to the public. The output has varied considerably from year to year as lessees have been more or less fortunate in striking productive veins. Estimates of production vary from 326,600 carats per annum to 768,936 carats. At the latter figures the annual valuation of the stones mined would be about \$900,000. A French company at one time holding the lease of the mines is reported to have worked for fourteen months without finding a stone and then to have obtained enough emeralds in a comparatively short space of time to pay the rental for the full term of the lease.

From 1849 to 1861 the mines were leased for \$14,200 per annum and 5 per cent of the profits; from 1864 to 1880 they were leased for \$14,700 per annum; in 1894 for \$400,000 for a term of five years; in 1901 for \$36,000 per month; and in 1905 for \$30,000 a month, or \$360,000 per annum. In the latest Colombian report on the subject, covering the year 1907, the superintendent of revenues reports receipts by the Government of \$371,301.10 on account of the Muzo and Cosquez mines.

The newly recorded lease to an English syndicate is to run for twenty years and will thereby render the output more uniform and will justify the installation of labor-saving machinery and an improvement in the water supply, which were not profitable in shorter terms.

The Muzo mines are about 75 miles north of Bogota, in the State of Boyaca, and extend over an area of about 140,000 acres, of which only about 50 acres have been exploited in the last twenty-five years. Their general appearance somewhat resembles an inactive volcanic crater, in the sides of which the emeralds are found.

Close by is the Cosquez group, though at a somewhat greater elevation, covering an area of nearly 5,000 acres. It is from these mines that the Spaniards obtained many of their gems, but the exact location of the valuable deposits has been lost.

The Cuincha mines are about 6 miles east southeast from the Muzo group and about 78 miles north of Bogota at an altitude of 1,950 feet, covering an area of 1,100 acres. This group has been favorably reported on, but not yet worked.

The Somondoco or Chivor group consists of five separate mines, about 80 miles east northeast of Bogota, situated at an elevation of 6,500 feet above sea level. At the time of the conquest, the group was

being worked by the Indians, and the Spaniards continued the work, but in the subsequent struggles their location, as in the case of the Cosquez group, was lost. The law authorizing private exploitation of the emerald mines led to new efforts to locate them, so that they were rediscovered and denounced by a small syndicate, which, however, did not succeed in adequately developing them before further legislation rendered their exploitation unprofitable. The strata were found full of old tunnels and abandoned workings left by the Spaniards. It is estimated that the probable profits from working these mines would be about \$500,000 per annum.

#### THE MUZO GROUP.

The Muzo group is known under the name of "Mina Real," or royal mine, and embraces the San Antonia, Jerena, El Aguardiente, Las Animas, El Playon, La Isla, Miguel Ruiz, Jaramillo, Tequendama, and other mines of less significance.

The Muzo mines were first made known to the Spaniards through Capt. JUAN PENAGON, and the first scientific examination made in 1764 by JOSÉ ANTONIO DE VALLEGAS Y AVEDAÑO, who rediscovered the large vein that had disappeared and arranged for its exploitation. Prior to this, however, FRANCISCO TOBAR ALVARADO worked the mines and presented the King of Spain with a necklace containing 25 stones valued at that time at \$10,000. Organized work in the mines was carried on under control of the Spanish Government until 1793, when they were rented at public auction.

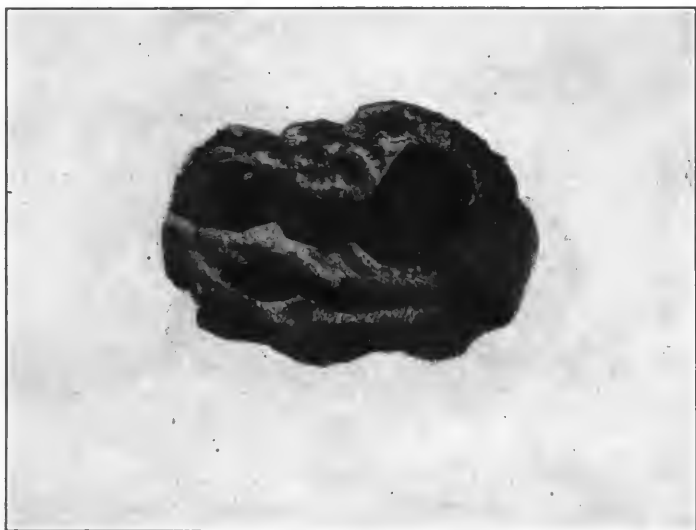
The present workings of the Muzo mines are in a valley called "Quebrada Desaguadero," situated north-northwest from Bogota and about 5 miles from the town of Muzo and a mile from the Minero River. The country is very mountainous and broken, having streams running in all directions, with deep narrow valleys covered with thick forests. The altitude is about 2,755 feet above the level of the sea, the temperature varying between 65° and 90°.

The geological formation of the emerald-bearing regions has been determined by the ammonites found in the lower chalk formation as belonging to the Necomian period of the Cretaceous system. The main body of the deposits consists of a bituminous dark limestone impregnated with iron pyrites and intersected in every direction with horizontal veins in which the emeralds are found, generally in nests or groups, embedded partly in dark bituminous, partly in translucent calcite, somewhat like the Icelandic double-refracting spar, accompanied by beautiful rock crystals as well as by green quartz and well-crystallized pyrites called "parasite," after the discoverer, Paris, and also carbonate of lanthanum, Greek gypsum, and rhomboids of black dolomite.

In places the stratified limestone shows signs of having been subjected to enormous pressure, the strata being considerably folded and crumpled.

The veins now being worked under government contract are located on the west side of the Quebrada, but immediately opposite, on the east side, is an exposed bank of emerald-bearing deposit of similar formation known as "La Jerena," but which is peculiar by reason of the fact that it is always smouldering with volumes of smoke pouring out. This is caused by the decomposition of the iron pyrites contained in the deposit.

The emeralds found in these mines are beautiful hexagonal crystals, their value depending upon freedom from flaws and the deepness



THE SOUTH AMERICAN EMERALD IN MATRIX.

of their color, the classifications being from "First, extra," downward. The veins worked vary in width from 1 to 12 inches, the thickness of the vein-bearing strata varying from 100 to 200 feet. While it is not possible to procure any exact information as to the actual output and value of the stones found, it is known that in a single day the yield has been 100,000 carats. This is, however, an unusual return for the labor, as during one period of five years the average was only 22,386 carats per year, and in the latest published report, in 1905, ten months' output was given at 768,938 carats.

In working the mines, it has been found more economical and satisfactory to operate them as open cuttings or quarries. The sur-



face soil is stripped off and the limestone broken down with heavy bars, thus exposing the vein. The cutting down is considered preferable to the use of explosives, as the shock is apt to shatter the emeralds. As the rock is cut the débris is washed away by means of water supplied from Pavas and Minabuco creeks, stored in reservoirs, and led to the required place through open canals or ditches. The main reservoir has a capacity of 100,000 gallons.

A report made by the engineer commissioned by an English syndicate to investigate the cost of exploitation fixes the outlay for one year, covering administration, labor, and repairs to buildings, machinery, and roads, at \$97,000, exclusive of rental to the Government.

A year's estimate of the quality of the emeralds found in the mines gives 262,548 carats of the first class, 467,690 second class, 22,700 third class, and 16,000 fourth class, though by some the proportion of first-class stones is stated as 10 per cent.

#### THE COSCUEZ GROUP.

The Coscuez group, bearing the name of an Indian princess, is composed of the mines of Coscuez, Guacamayas, Don Marcos, and Doña Urraca, while near by lie several others of practically unknown worth.

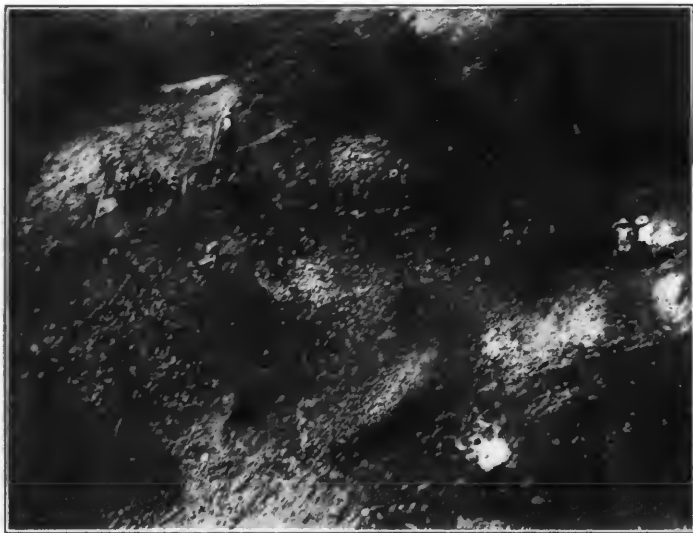
Only the first named was worked in the eighteenth century, the exploitation having been interrupted by the war for independence. It is these mines, however, which gave to Colombia the important position in the emerald market, as they were extensively worked by the Spaniards, traces of whose operations are said to still exist. There is a tradition that 300 men were killed by the caving in of one of the tunnels, and this accident caused the work to be suspended. Prior to the war for independence organized exploitation was undertaken and then abandoned, since which time the mines have lain idle and their exact location is practically unknown. From these mines the class of emeralds known as "canutillo" was formerly procured, and by reason of the high quality of their product, as well as through the favorable climatic conditions surrounding the mines, they may be regarded as the most important group.

At the mouth of the Coscuez mine are to be found several adits with corresponding embankments for the dumping of earth and rocks. There is no water convenient, but at a distance of 100 meters two reservoirs could be built for the storage of waters from near-by creeks. Sections of a ditch or canal, which, according to the natives, was commenced previous to the war for independence, are still visible.

## THE SOMONDOCO GROUP.

The Chivor mines were known in the days of Spanish dominion as "Somondoco," because it was to that town that the stones were taken for assorting. It is not unusual to find rejected emeralds and crystals when turning over the ground for cultivation in the vicinity, and small deposits have been found from time to time, but it is evident that the real Somondoco mine is yet to be rediscovered.

Explorations made in 1906 showed an ancient Spanish ditch and a reservoir of Spanish workmanship, with remains of many tunnels and other workings. Before the great war the proprietors had cleaned and restored the ditch and repaired the masonry, so that it



EXPOSING EMERALD-BEARING STRATA.

was possible to flush the face of the old workings. In the quarry, the formation in which emeralds are found was seen—a black deposit of very friable limestone, strongly resembling slate, soapy to the touch, crumbling easily in the hands, and permeated by white veins of varied thickness from mere threads to many inches. These white veins are soft at the surface, granulated farther in and hard and crystalline where deeply embedded. The deposit is overlaid by a few feet of ash-colored rock, containing nodules of iron pyrites with an efflorescence of sulphur. This peculiar rock is always a sure sign of an emerald deposit below.

It is not known how long the Chivor or Somondoco mines were worked by the Indians before the Spanish conquest of Colombia,

but the number of valuable emeralds in the hands of the natives and buried in the graves of their chiefs shows that much labor must have been expended in their exploitation. The earliest notice of the discovery of the mines by the conquerors is contained in a book entitled "*Noticias Historiales de las Conquistas de Terra Firme en las Indias Occidentales.*" by FRAY PEDRO SIMON, published in Bogota in 1891 from manuscripts in the National Library. An account is given of the stratagem by which the Cacique of Bogota, in 1540, sought to get rid of QUESADA, the Spanish leader, by making him presents of emeralds, food, and clothes, and by inducing him to leave his territory for that of his enemy, the Zipa of Tunja, where the mines were located. An emissary was dispatched to verify the statement of the Cacique, and on his return QUESADA was delighted not only with the jewels brought back, but also with the information concerning the country.

After the Spaniards had seized the mines, 1,200 men were employed in them, and remittances of gems were made to the Crown every three months. The emeralds were carried to the coast on the backs of Indians, and it is reported that on one occasion a stone of such size, color, and brilliancy was forwarded to the King of Spain that he ordered the finder rewarded by release from further bondage in the mines.

The Spaniards continued work for about one hundred and fifty years, when the mines, together with those of the Muzo district, were shut down by order of CHARLES II of Spain. The step was taken because for two years expenditures had exceeded the returns in the working of the deposits, it being probable that a barren spot in the mine had been struck.

The site of the mines was subsequently concealed under the mantle of the dense forest.

Between eleven and twelve years ago, in the latter part of the nineteenth century, the mines were rediscovered mainly through the description of their situation given by FRAY PEDRO SIMON; the ditches, reservoirs, and extensive workings brought to light sufficiently identifying them with those so glowingly described by the writer.

Experts have given the opinion that although the emeralds of Muzo and Chivor are similar in most respects, those of the latter mines exceed in brilliancy.

The working of the mines is covered by five claims. On two of them taxes were paid for twenty years in advance, which, according to Colombian mining law, exempts from taxation in perpetuity; the tax on the other three claims has been paid up to the year 1910.



WASHING DÉBRIS FOR EMERALDS IN COLOMBIA.

## THE CUINCHA GROUP.

The Cuincha mines, situated in the State of Boyaca, are separated from the Muzo mines by the Minero River, the channel of emerald-bearing ground having the same direction. The geological formation indicating the presence of true emerald-bearing veins is everywhere evident, and the rocks in the immediate vicinity are at times much stained or coated with layers of chromic talc, and at some places very fine groups of radiated crystals are found, having the form of the mineral called "wevellite." The occurrence of this mineral in the Muzo mines is regarded as an absolute indication of the proximity of a deposit of emeralds.

The engineer reporting on the value of this group comments on the favorable configuration of the ground for mining operations, it being possible to discharge all the rock débris into the channel of the Minero River, while an abundant water supply is close at hand.

The commercial exploitation of the Colombian emerald mines, as indicated by the prospectus of the English company organized at the close of 1908, is to be carried on with modern equipments in all branches, and returns in consonance with the past history of the country are anticipated.



# BRAZIL THE HOST OF PAN AMERICA

---

---

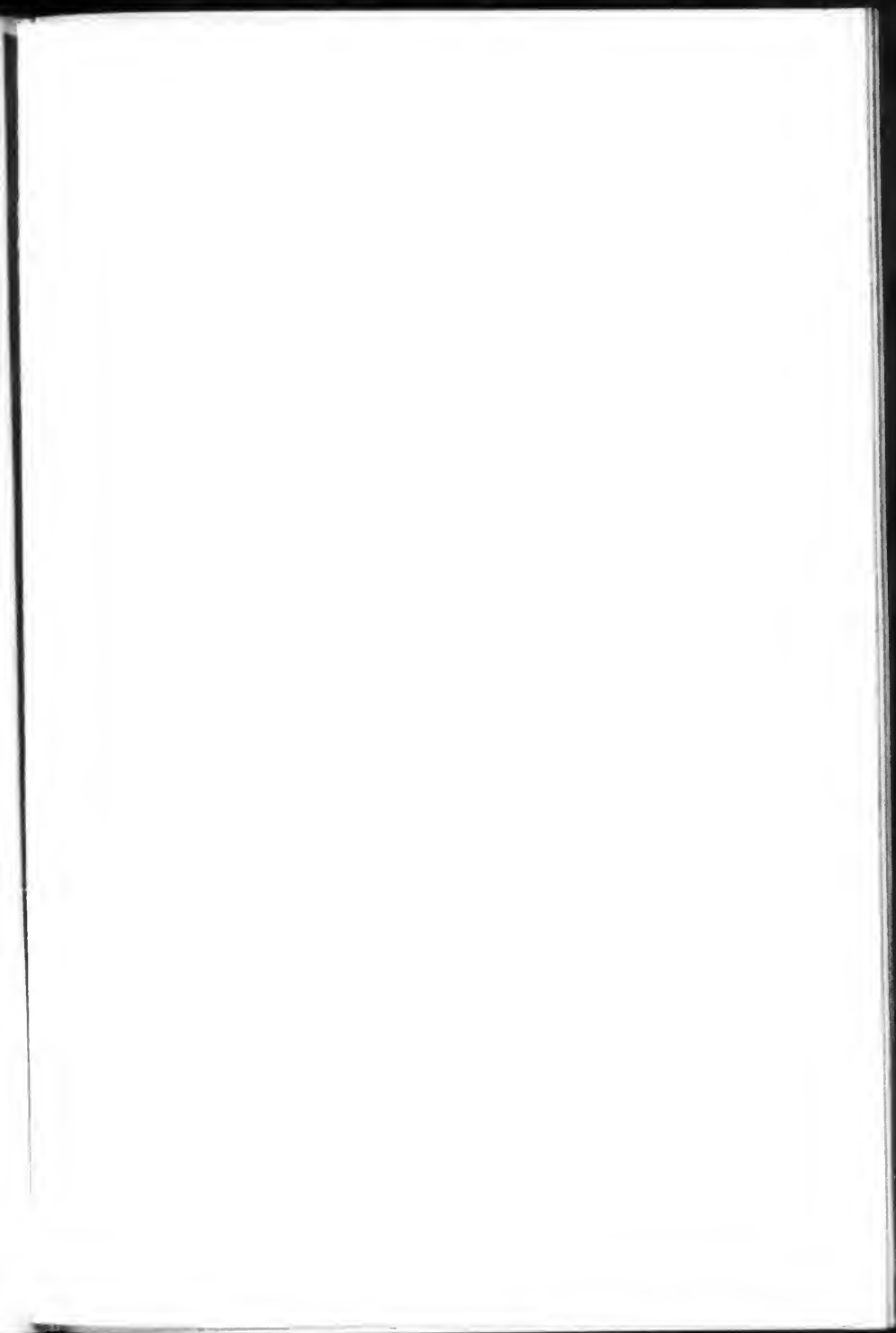
A TRIBUTE to the press of the Western Continent and to all the Republics of America was offered through the courtesy of Ambassador JOAQUIM NABUCCO on the occasion of a superb banquet tendered to the Gridiron Club of Washington, composed of representatives of leading newspapers in the United States, which, on May 6, 1909, was invited to meet J. C. RODRIGUES, editor of the "*Jornal do Commercio*," of Rio de Janeiro.

To meet the guests of honor were distinguished statesmen and public men, and amid a scene of fairylike beauty felicitous speeches were exchanged in harmony with the fullest development of the Pan-American spirit.

Ambassador NABUCCO in welcoming his guests said:

GENTLEMEN OF THE GRIDIRON CLUB: It is with the greatest pleasure that I welcome you here to-night, together with the eminent editor of the "*Jornal do Commercio*," of Rio de Janeiro, Mr. RODRIGUES. [Applause.] We feel very sorry that owing to a severe illness your president could not be one of us, but we rejoice in the news that he is on his way back to life, and to a long one, we hope. [Applause.] I must confess I feel among you like a Rip Van Winkle, because the first time I came to this country you were not born—I mean as a club—and I find you enjoying a national reputation. If I can explain it well, it seems to me, remembering the struggles of that time, the fight between HAYES and TILDEN, that the atmosphere of Washington was then too hot for your gridiron, which seems so pleasantly cool for those you place upon it. At least, the two times I had occasion to observe your method of grilling, President ROOSEVELT and President TAFT, on the coals of your laughter, did not remind me of Guatimozin, but seemed on a bed of roses. Your good sense, your good taste, and your good humor, have changed the mythical pistol shots of old American journalism into dessert crackers.

Really, in that time and long before, the American newspapers were like salamanders, they lived in fire, while now they seem to me in their evolution to live in ice, like seals, and day after day, election after election, one can notice the lowering of your temperature. [Laughter and applause.] In that time the press was called the "Fourth power," although I do not think it ever contented itself with that rank; even when a baby, it aspires to be the first. Now some people pretend your influence is on the decline. I do not think the United States ever depended so much on its press. The greater a nation, the less able it is to dispense with the press, as beyond a certain limit nations can see and hear only through their newspapers. What has happened seems to me to be a very different thing: The press being so belligerent among itself neutralizes a good deal of its action, and every day it becomes more conscious of it; the consequence is a greater tendency to unity, to become harmonious, and as the hindrances which you opposed to each other are no longer so visible, they think



THIS CHART WILL  
FOURTH CHART A  
AT THE END OF T



WILL BE THE  
PART APPEARING  
OF THIS FILM.



your action is lessened, while really the help you lend is each day greater. You are not the fly on the coach [laughter]; you are not only the motor of the car, but also the light of the road. [Applause.] The only question is, if you care as much to lead.

I was very much afraid that it would seem strange to you to be seated at a dinner without interludes between its courses, but I hear with pleasure that you have brought your entertainment with you, and I thank the club beforehand for the delight it will cause to all the guests around these tables. Gentlemen, very few people know how difficult the task of diplomacy would be if the press did not work so hard in the hours of the evening to collect the news for us. [Laughter.] We used to be assiduous at collecting international news, but now I am afraid we are reduced to the condition of those ants which must entirely depend on another class of ants for their food. I can not conceive how we could find our supply of news if you were not so diligent in bringing it to us twice a day. On that account, while thanking you for your presence, I must express the fear that dining out might become the principal function of your profession as, thanks to you, it has become of ours. [Laughter and applause.]

I ask the whole company to join me in wishing prosperity and ever renewed popularity to the Gridiron Club, drinking to Vice-President BONE.

SPEECH OF MR. SCOTT C. BONE, VICE-PRESIDENT OF THE GRIDIRON CLUB.

MR. AMBASSADOR AND GENTLEMEN: Acknowledging your generous toast, I voice the pleasure that the members of the Gridiron Club feel to-night in being in this pleasant company. It is not only a pleasure, but a privilege, to extend and strengthen friendships made on other occasions. We feel to-night that we are in the house of our friends. Looking over this company the faces I see I recall having seen at our own dinners, many of them.

The name "Gridiron Club" suggests song and jest and merry-making. Above all it suggests good fellowship. That is the element we prize the most. It is an organization that takes liberties with the great. It exploits the foibles of those who occupy the seats of the mighty. It contributes its part to the gaiety of the nation. But, your excellency, all is not song and jest and merry-making with the Gridiron Club. Its members are newspaper workers. Only a fraction of their time, and a very small fraction, is given up to the frivolities of life. [Laughter.]

We know something of the Southern Hemisphere. Perhaps we do not know as much as we ought to know. We know that you have great countries, of great resources. We know that you have great cities, great statesmen, and great newspapers. We are honored to-night to meet and greet the editor of one of your great newspapers, Señor RODRIGUES, of the Brazilian Journal of Commerce. [Applause.]

The Ambassador has said something about the press of this country. Our papers are as varied as the hues of the rainbow. Their opinions also vary in the same degree, particularly on the tariff. [Laughter.] Our press speaks for itself. It would be assurance on the part of any newspaper man to attempt to speak for the press of America. It speaks every day in the year. In some instances it speaks several times a day, Mr. Ambassador. [Laughter.] It speaks in all styles of type. It speaks in color, sometimes called "yellow." [Laughter.] But, Mr. Ambassador, whatever the peculiarities of our papers, as a rule they are animated by the spirit of fair play, and are intensely patriotic and intensely ambitious. [Applause.] They are ambitious for this country of ours. It is no assurance on my part, Mr. Ambassador, to say for the whole of our press that it stands to-day for close and helpful relations with the

southern Republics. [Applause.] It has appreciated the splendid services rendered by Mr. Root, our Secretary of State. [Great applause.] It confidently believes that that work will be supplemented by his successor, Mr. KNOX. [Applause.] This club recalls with especial pride that one of its number, Mr. WILLIAM ELROY CURTIS, was identified with the Bureau of the American Republics in its formative stages. The present Director of the Bureau is not a member of our craft, but we look upon him as a most important adjunct of that craft, [Great laughter and applause.] He is a gifted and resourceful press agent [laughter]—I use that term in the complimentary sense. Mr. BARRETT is more than a press agent, he is an avant courier, a pathfinder, a sort of ambassadorial representative of all the republics of this hemisphere. [Applause.] May his shadow, his personal magnetism, and his persuasive powers never grow less. [Applause.]

For myself and for one newspaper, and that the one I happen to control, I venture to say to-night that in the framing of our new tariff there will be national shortsightedness, deplorable national shortsightedness, if Congress fails to so adjust the schedules as to promote our trade with the southern Republics and not retard it.

Better acquaintance between the men of different countries makes for better relations between the countries themselves. And now, gentlemen of the Gridiron Club and friends, I ask you to drink to the President of the Republic of Brazil and his Ambassador to the United States, our host to-night, His Excellency, Mr. NABUCCO.

SPEECH OF HON. ELIHU ROOT, SENATOR FROM THE STATE OF NEW YORK.

MR. AMBASSADOR, MR. RODRIGUES, AND GENTLEMEN: In accepting your invitation to meet the Gridiron Club this evening, with my mind preoccupied and my vision narrowed by the engrossing occupations of the last few weeks, I confess that I entered this room with a vague impression that in meeting the Gridiron Club I was to find Senator ALDRICH [laughter], with Senator DOLLIVER and Senator CUMMINS in full action. [Laughter.] I had some question as to whether your position had not been usurped, and whether you had not been put out of business for the time being. But I speedily came to a realization that I was in the presence of the Gridiron of the future, upon which is to be laid the tariff bill in each of its schedules, after the Senate gridiron has gone through with its office, and when there is no possibility of amendment and nothing remaining but the roasting. [Laughter.]

I rise, sir, for the purpose of proposing a toast, which must meet with a sympathetic response from all the representatives of the American press who are here; from all the lovers of America who are here, and all the lovers of All-America who are here [applause]; a toast to a great power which is molding the sentiment and determining the future not only of South America, but of all the Americas, and with that toast it will be my pleasure to couple the name of a gentleman who enlists, and long has enlisted, not only my respect, but my admiration and my warm regard. [Applause.]

It seems to me that the great things of life, the great achievements which affect the course and development of civilization, are as a rule accomplished by men who have no thought at the time that they are playing a great part. As a rule, when a man is thinking about himself, about what he is doing, is conscious, or thinks he is conscious, that he is doing great things, he is really doing nothing. But the great accomplishments of life are those things which are done by men who are striving to do what lies at their hands to do the best they know how, and are interpreting, each in his own coin and in the performance of his

own duties, the spirit of their time. [Applause.] Therein lies the strength of the press. You are not doing work from which you expect great fame. You are not conscious of producing results that will make your names forever known, but you are, from day to day, in news item and news item, in editorial and editorial, doing the thing that lies at your hand, expressing the thoughts that arise in your minds, communicating the facts that come to your knowledge, interpreting the spirit of your time, and the net and general result of what you do is the movement of mankind along the pathway of human progress. [Great applause.]

Without what you do here, without what your colleagues do in all the countries of progress, progress would be impossible, and all the inventions and discoveries of modern science would fall fruitless to the ground. The greatest work done by the electric telegraph is carrying the truth regarding what is being done in the world to the printing press. The greatest thing done by the railroad and the steamship is carrying from the printing press to the intelligence of mankind the universal knowledge of what is being done in the world [applause], and it is that, more than anything else, more than all else put together, which differentiates the civilization of our day from the civilization of the past; it is that which, by the bonds of telegraph and railroad and steamship, carries knowledge to all the minds of mankind, knowledge to the formation of judgment, to the education and development of character, that affords the one and only guaranty that we have for the perpetuity of our civilization which has been denied to the civilizations of the past. [Applause.] It is your work that creates and cements the partnership of all men with all governments, which makes all men a part of every advance in social and in political development. But you are powerless except as in this great work you are interpreting the spirit and the tendencies of your time.

You know, because you are interested in your profession, what comparatively few of our people in the United States know, that in the Latin-American countries of this hemisphere there exists a great, free, and an enlightened press. [Great applause.] You know, and I would like to carry the knowledge to every one of my countrymen, that an enlightened and highly educated and thoughtful and a wise people, in all the great countries of Latin America, find expression for their opinions, and are engaged in spreading through the masses of their countrymen, the best knowledge, the loftiest ideals, and the purest patriotism, through the medium of a press second to none in all this world. [Applause.]

It is a happy thing for the United States, fortunate for the maintenance of those sentiments of friendship which have so long existed between the United States and the great Republic of Brazil, that at the head of one of the great journals of South America, the great journal of Brazil, one of the great journals of the world, the "*Jornal do Commercio*," of Rio de Janeiro, stands a man bound to the people of the United States by the ties of intimate knowledge and perfect understanding. [Great applause.] Long a member of the staff of one of the great journals of the city of New York, long the editor of the great journal in the Portuguese language in the city of New York, whom I remember with interest and affection as a member of the University Club in New York, he has carried to the control and direction of that great newspaper a knowledge that excluded all misunderstanding, all prejudice, all passion, but included the same kindly feeling, the same community of purpose and of ideals, that actuate the members of this organization; that actuate all the well-informed and thoughtful people of the United States in regard to the relations between North and South America. [Applause.]

He and his great newspaper are interpreting to the people of South America sentiments of their time; and what are they? Can anyone doubt that, as a century and a quarter ago the tendencies of the people, in all the discordant colonies that lined the Atlantic shore of North America, were steadily toward union and the formation of a great nation; that as in Germany, amid all the discord and jealousies of the petty German principalities, the time came, within our memory—or mine [laughter]—when the general trend of public sentiment made for a united Germany; that as the world over, whatever personal ambition or personal jealousy might dictate, the tendencies of men are toward union, harmony, organization—can anyone doubt, in view of what we have seen in the last few years, that the peoples of South America and North America are urging forward, voiced or voiceless, whatever any one man may do to the contrary, whatever obstacle there may be in the way, all with the undertow of public sentiment urging steadily forward toward union in sentiment, in purpose, and in ideals, of all the Republics of the Americas? [Great applause.] That sentiment, more potent than any man's voice, superior to the control of any man or of any government, a part of the foreordained development of the race along the line of the march of civilization, that sentiment the "*Jornal do Commercio*" and Mr. RODRIGUES are interpreting for the people of South America. [Applause.]

I ask you to join me in drinking to the prosperity, the power, and the efficacy of the journalism of South America, and to the health, the prosperity, and the long life of our old friend, Mr. J. C. RODRIGUES, the editor of the "*Jornal do Commercio*."

SPEECH OF MR. J. C. RODRIGUES, EDITOR OF THE "*JORNAL DO COMMERCIO*," OF RIO DE JANEIRO.

YOUR EXCELLENCY AND GENTLEMEN: It has seldom been my lot to find myself fastened to a more exacting task than the present one of thanking the toast with which I have just been honored. As if it were not enough exaltation to have my humble name linked to that of the Gridiron Club as guest of this bountiful and brilliant hospitality, the Brazilian Ambassador has commanded me to rise, and, for the Latin-American press, respond to the eminent Senator Root, whose remarks carry such weight and authority, on the relations of our two continents, and who made my task much more difficult on account of the very kind, though unmerited, words with which he has honored me, and for which I have no expression strong enough to thank him.

I would naturally be inclined to ascribe this great, but perplexing, distinction to the friendship with which the Ambassador has honored me for more than thirty years. I remember that it was in this country that I first met the then second Secretary of the Brazilian Legation, of whom my deceased friend, the Minister Mr. BORGES, used to tell me that he would be ashamed to give him dispatches to copy. [Laughter.] Young Mr. NABUÇO was already a fine scholar, a brilliant writer, a great orator, and has since developed into one of the most accomplished and perfect men of our times in his own country. [Great applause.]

But I will not belittle the Ambassador's lofty ideas of duty by attributing to private reasons his mandate to me. It was certainly suggested to him by two facts. First, by this, that I have been a journalist for nearly half a century, and for forty years I have been connected with the oldest and most influential paper of my own country, as its contributor; and for the last two decades, as its director. Then, in the second place, our honored host must be fully con-



MR. J. C. RODRIGUEZ,

A distinguished Brazilian journalist and the guest of honor at a banquet tendered to the members of the Gridiron Club, of Washington, D. C., by Mr. Joaquim Nabuco.



MR. SCOTT C. BONE,  
Vice-President, Gridiron Club, Washington, D. C.



vinced that no one in the Brazilian press has espoused more sincerely and zealously than myself his own overpowering aspirations in accepting his present high post in Washington. If our Government has always aimed at maintaining the closest friendly relations with your great country, their first Ambassador here, gentlemen, has raised that commission to the height of a great principle, to a far-reaching policy, which he has persistently upheld with as much tact as consummate competency. I am proud to say that our newspaper has been the enthusiastic supporter of these statesmanlike exertions of our most accomplished representative abroad.

And, gentlemen, as one who has lived among you for twelve years as journalist, and who has since followed your political and industrial evolution with the keenest and most admiring interest, I ought, indeed, to greet the era of closer relations not only between your glorious country and ours, but between it and the whole of independent America. I always did believe, and I do believe more forcibly than ever, that there is a continental policy of the New World that their populations should know each other better: that the greatest and most powerful one of all should try to dissipate any apprehensions, fears, or misgivings of the smaller States; and that a thoroughly good understanding should be established, based on the mutual respect of all toward all.

With the true American instinct, these views were unfolded by your Mr. BLAINE, in 1882 and then in 1889. The gifted Secretary of State planned to call together a conference of the American countries with the purpose of, he said, creating an "American sympathy as broad as the New World." Owing however, to several circumstances, some of which it would be painful to recall, the generous idea of the conference hardly ripened into a definite programme. It was only later on that the Pan-American gathering at Rio de Janeiro assumed the desired continental character. You all know of its performances and excellent results, which fully justified what was expected from it, and is now expected from the forthcoming conference at Buenos Aires.

But, gentlemen, if the issues of congresses like those are, undoubtedly, fruitful of good will among the countries concerned, and may even settle important rulings of international policy, they alone could never lead us in South America to know you better if they were left unsupported by some vivid and striking evidence of your disinterested concern for our own welfare and progress. Now, it happens that just before the Rio conference met a most felicitous inspiration moved your Secretary of State to take a momentous step that foreboded the opening of a new era in the political history of our continent. Mr. Root conceived the high-minded idea of going to the Rio de Janeiro conference. It was the first time, I believe, that an American Secretary of State was to leave his country in his official capacity on a visit to another one. His intention went further, and it was then expanded into a visit not alone to the conference, but to all countries of our southern continent the capitals of which were not far from the sea.

You can not overestimate the far-reaching effects of that mission. That we in South America fully apprehended its whole significance is witnessed by the most respectful, solicited, and hearty reception given unanimously and everywhere to the great Secretary. He did not go there to confer with governments or make treaties. As a true missionary he carried to the South American people themselves the message of good will from their greater and stronger neighbors [applause]; he extended to them the hand of a hearty American support and encouragement in their struggle for better government, for loftier political ideals, for a higher civilization. It was your great people offering to our people, through him, a covenant of true friendship, of generous mutual regard.

As a member of the press I can say, gentlemen, that your chivalrous message not only was not listened to in vain, but is yielding already abundant fruit. The misgivings as to your ultimate policy toward South America, which might have existed in the minds of the ill informed among us, have given place to absolute reliance in the nobleness of your intentions, in the scope of your continental views, views that were exactly our own dreams and aspirations. [Applause.]

But it was not through the character of his mission alone that Mr. Root conquered our hearts. Not to speak of his own captivating personality, a happy blending of earnest vigor, of serene and commanding authority, with the most gentle and refined manner, he gave his message to South America in such a forceful way that they became forever memorable. [Applause.] I can not refuse myself the honor of recalling here, in its integrity, the striking declaration he made at the Congress of Rio, and which is a literary gem as well as one of the most profound pages in America's political history. Mr. Root said:

"We wish for no victories but those of peace; for no territory except our own. We deem the independence and equal rights of the smallest and the weakest member of the family of nations entitled to as much respect as those of the greatest empire. We neither claim nor desire any rights or privileges or powers that we do not freely concede to every American Republic. We wish to increase our prosperity, to extend our trade, to grow in wealth, in wisdom, and in spirit; but our conception of the true way to accomplish this is not to pull down others and profit by their ruin, but to help all friends to a common prosperity and a common growth, that we may all become greater and stronger together. \* \* \* Let us help each other to show that for all races of men the liberty for which we have fought and labored is the twin sister of justice and peace. Let us unite in creating and maintaining and making effective an all-American public opinion whose power shall influence international conduct and prevent international wrong and narrow the causes of war." [Great applause.]

This momentous and unmistakable declaration, already consecrated in the text of one of your President's annual messages, is indelibly impressed on the hearts of all Latin Americans. Their newspapers, I can assure you, Mr. Root, will try to keep alive and lend effectiveness to the all-American public opinion. They are fully wakeful to their responsibility in constantly bringing before their readers the consequential import of your voyage through their countries. Your mission will not be frustrated, sir, and as we to-day commemorate gratefully the names of MONROE, JOHN QUINCY ADAMS, HENRY CLAY, and RICHARD RUSH, as fast friends of our Southern Continent, so posterity will confirm us in adding to that luminous roll in the most radiant letters the honorable name of ELIHU ROOT. [Great applause.]

And now, American gentlemen, one word more and I will have finished. Your country is already quite full. You have amassed a vast sum of capital that you begin to have difficulty in employing at a fair rate of pay. Do look to Latin America as a field for your great and practical activity. It is worthy your best endeavors. It will repay you for it bountifully.

In one of his speeches at Santiago de Chile, Mr. Root uttered a prognostication that flattered us much, by saying that the twentieth century will be that of the phenomenal development of the South American Continent. Of course we can not tell if events will confirm the prophecy. But the United States have taught us to place unhesitating reliance on the marvelous power of man's work, when, emboldened by free institutions, he multiplies the potency of his activities. We have already a South American country, the Argentine, which has quadrupled her exports in ten years, and even our enormously extensive

Brazil, without hardly any immigration, has nearly doubled her production in the same period, and about trebled it in twenty years.

As we contemplate the weakness of the United States a century ago in their struggle against England and France for free commercial action—and that at a time when the Mississippi basin was little more than a wilderness and the whole population of the country did not exceed the present eight millions of New York State alone; when the government receipts were barely fifteen millions of dollars, and the whole value of exports eighty millions, smaller than that of either your wood manufactures or mineral oils exported last year—when we consider all that, if we can not covet for our evolution a rotation corresponding with that of your amazing progress, we can at least long for a rate of speed that would justify your great Secretary's prophecy, so that we may appear to you as creditable planets circling around the mique resplendency of your example, of your prodigious work for man and civilization. [Great applause.]



THE NEW BUILDING OF THE "JORNAL DE COMMERCIO," RIO DE JANEIRO, BRAZIL.

# WHALING IN BRAZIL<sup>a</sup>

WITH PHOTOGRAPHS BY THE AUTHOR.

**W**HALING in Brazil is practically confined to a region extending along the coast of the State of Bahia from Assu da Torre,  $12\frac{1}{2}^{\circ}$  south latitude, to Caravellas,  $18^{\circ}$  south latitude.

According to Monk VINCENT DO SALVADOR, contemporaneous with the time, its history dates back to 1603, when PEDRO URECHIA came from Portugal, bringing two whale boats with crews expert in hunt-



SETTING OUT AT DAYBREAK FOR THE HUNTING GROUND.

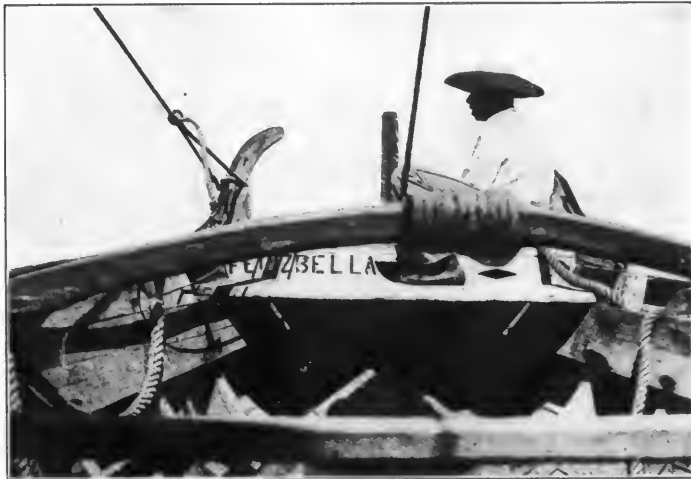
ing. Soon others learned whaling, and it was not long before there was quite a fleet engaged in this pursuit. The industry has continued from that day to the present time, though it has been gradually on the wane during the last twenty years, chiefly due to decline in price of whale oil as a result of the introduction of the cheaper competitor, petroleum and its products.

The variety of whale hunted is the *Balaenoptera Musculus* (Linnaeus). The family of *Roquais*, to which it belongs, is characterized by the large folds running along the lower jaw and forward half of the abdomen.

<sup>a</sup> By Hon. Henry W. Furness, United States Minister to Bahia, 1948.

This is a "whale bone" whale, having on an average about 360 plates of whalebone hanging from the roof of its upper jaw. The plates of bone are short as compared with those of the "right whale." They average about 32 inches in length and because of their shortness have little commercial value. The length of this variety of whale is said to reach from 60 to 70 feet. The largest one taken in this section gave 5,104½ quarts of oil from blubber and 412 quarts from scraps. Its lower jawbone was 17.3 feet long and its total length is given as 70 feet. The average size killed is from 30 to 50 feet.

Each year this variety of whale migrates northward as winter approaches the South Pole, and the return commences as soon as spring sets in there. They are first sighted off Caravellas. They



HARPOONER IN THE BOW OF THE BOAT LOOKING FOR A WHALE.

reach Bahia about the middle of May, and have entirely disappeared south by November, occurring in such quantities in July, August, and September that the number which may be killed is only limited by the number of boats in their pursuit. As they pass along the coast they may be encountered from a mile and upward out at sea, frequently entering Bahia Bay. It is no uncommon sight to see them gamboling in the steamer anchorage.

Other varieties of whales, such as the "right whale" and the "sperm whale," have from time to time been encountered along this coast, but their appearance has been very rare.

At present there are 13 whaling stations. Of these, 8 are in the vicinity of Bahia City and 5 are located on Itaparica Island, in the

bay facing the city. The other stations, with the exception of that at Caravellas at the extreme south, are all to the north of Bahia City.

The boats used in whaling are very heavy, hand-made native affairs, capable of standing great strain. Their sides are from 1 to 2 inches thick. The ribs, keel, etc., are not bent to form, but are hewn from pieces naturally approximating the desired shape. The boats average 30 feet in length, with 8-foot beam and 3½-foot depth. On each side of the prow is arranged a horn-like projection of natural bent wood, around which pass the ropes attached to the harpoons. The sail is practically quadrangular, of immense area, averaging 30 by 40 feet. It is lashed to a yard which is tied at its outer third to a long rope passing through a single pulley at the top of a mast, which is 42 feet



TIING UP A WHALE OUT AT SEA.

high, and situated slightly forward of the center of the boat. By this arrangement the sail can be raised or lowered speedily, and without much trouble can be changed for a tack. The boats are constructed on such lines that they are very buoyant, seaworthy, fast sailing, and easily managed.

In a boat's equipment are from 8 to 12 harpoons, each attached to about 50 feet of 1-inch manila rope. The harpoons are of various shapes and makes, from those of local manufacture and ancient pattern to the latest American model, though the latter are few and far between. A boat also contains from 2 to 4 lances, spear-pointed rods of iron mounted in long poles, to which are attached 35 feet of



PREPARING TO CUT UP A WHALE.

three-quarter-inch manila rope, which lances are used for killing whales; a large knife used for cutting away the rope should danger threaten; on each side forward a 580-foot coil of 2-inch rope, to which is attached the harpoon rope; and on each side aft a 440-foot coil of similar rope, to be attached to the 580-foot rope if necessity warrants; a couple of pairs of oars; and provisions and cooking utensils for the crew.

A boat has a crew of 10 men, each having his particular duty and all under the direction of the harpooner, who is stationed in the prow of the boat and directs the movements.

The boats leave for the open sea at sunrise and put in port each night. When a whale is sighted it requires considerable seamanship



REMOVING WHALEBONE FROM THE UPPER JAW.

to sail near enough to permit throwing the harpoon, the chief use of which is to hold the whale. As soon as a harpoon is thrown, if it strikes, the whale leaps in the water and starts away at great speed, the rope whistling as it pays out round the horns already mentioned. At once the sail is lowered and the rudder taken in. As soon as opportunity will permit a bight is taken in the rope, and then the boat, towed by the whale, shoots forward at torpedo-boat speed. From time to time the whale slackens his speed, and opportunity is given to shorten the tow rope, until finally the whale is near enough to permit lances to be thrown into it. The lances easily penetrate the whale, and are as easily jerked out to be hurled again, until either



a vital point is struck or a whale succumbs from loss of blood. Often when a whale has been frequently lanced it suddenly turns, the boat gives a lurch, the harpoon pulls out, and the whale escapes. Perhaps three-fourths of the whales harpooned get away. The system leaves much to be desired, but the harpooners are averse to trying new and improved methods. Guns shooting explosive bullets, darts, etc., have been imported, but their use is by no means common.

When the boatmen are successful in killing a whale it is the particular duty of one of the crew to dive under the whale as soon as dead and pass a rope with which to tie up the mouth; otherwise such a quantity of water would be taken in that the whale would soon sink. As this takes place usually on the high sea and the whale is always surrounded by voracious sharks which have been attracted by



REMOVING THE BLUBBER.

the blood flowing from it, the task requires no little courage and skill. Later on, the diver assists in passing the three other ropes with which the whale is lashed alongside the whaleboat that it may be towed to the station.

Arriving at the station, the whale is drawn up on the beach and cut up, the fat, called "blubber," being separated from the meat and bones. The pieces of blubber are then taken to the oil factory, where they are placed in large caldrons and the oil is tried out.

There is no modern machinery in these factories, not even presses for expressing such oil as may remain in the pieces after rendering. The meat is cooked and smoked, and so prepared finds a ready sale at Bahia and in the country. It frequently happens, however, that within a short time so many whales are brought to a station it is

impossible to do more than look after the blubber, and the meat is allowed to remain on the beach to be washed into the sea and consumed by sharks. On one occasion 13 whales were landed at a station within thirty-six hours.

There is a large amount of refuse and bones which could be used to make fertilizer, but there is no local demand for such a product.



PREPARING WHALE MEAT FOR MARKET.

The expense of bringing the bones to Bahia is so heavy that they could not be shipped at a profit. As a result there are immense accumulations of bones in front of each station, while the odor emanating from the refuse is disagreeable to the extreme.

The average catch during the past few seasons has been from 300 to 400 whales.



# A BOTANICAL GARDEN IN BUENOS AIRES" ∴ ∴ ∴

---

---

**D**RIVING out the beautiful avenue of Santa Fe, that practically begins at the Plaza San Martin, and after a due western extension of some 500 yards, bends to the north-west and follows roughly the course of the La Plata for a distance of 3 miles (40 squares), the entrance to the Botanical Garden of Buenos Aires is reached.



RESIDENCE AND OFFICE OF SUPERINTENDENT.

Beyond this lies the Zoological Garden, and still farther on the far-famed Park of Palermo. From both of these the Botanical Garden is distinct in spirit and style. It is the embodiment of a refined and artistic taste, a really marvelous blending of the beautiful and the useful.

In 1892 this land was granted to the General Director of Public Parks, M. THAYS, for the establishment of the Botanical Garden and the garden was opened to the public in September, 1898. One must know something of the soil and the seasons here to understand how,

even with a masterly hand at the helm, such marvels have been accomplished in so short a time.

Certain students of medicine and pharmacy from the National College, and other schools of the city, frequent the garden and spend hours in interesting study. Indeed, they have a rich field from which to glean, as there are, in what is called the School of Botany, over 6,000 species, all perfectly classified according to the system of De Candolle.

The garden contains about 20 acres of ground, half of which is level, the other half very uneven and ending on the northern side in steep banks that overlook the street, Las Heras. This street is named in honor of the hero whose ashes were recently brought home from



LOUIS XIV GARDEN.

Chile, and received with such pomp and ceremony by his appreciative countrymen.

The entire area is triangular in form and is divided into 14 different sections, each plainly marked and devoted to the flora of a distinct region.

The three pronounced styles of gardening, which, in a comparatively small area might have produced an inharmonious effect, or at least a lack of unity, are so charmingly blended to give, instead, the fine delight of variety.

The Garden Louis XIV is, of course, the most pretentious bit; the "finished coquette," some one calls it, with its statues and foun-

tains and its well-trimmed borders of box. It must not be inferred that the French garden is superficial (except as this is the usual characteristic of gardens), for there is, both in this and in the Roman garden, a whole history written for those who know how to read it.

To one not bent on special study and whose knowledge of the art of gardening, past and present, is limited, and who prefers a quiet walk to dress parade, the English garden, as it is called, appeals most strongly.

Not only are the two Americas royally represented, but Europe, Asia, Africa, and Australia as well. These sections are separated by beautiful walks with exquisite curves and turns; here a magnificent tree, there a flowering shrub, everything in accordance with an artistic taste.

In the South American section, particularly of the Argentine Republic, the collection is wonderfully complete, and exceedingly



MEXICAN SECTION OF BOTANICAL GARDEN.

varied and interesting, from the *Anthurium* of the North to the *Fagus Antarticus* of the South. The *Tipa*, a species of *Acacia*, is chief of the ornamental trees; when properly cared for, it grows into a beautiful, shapely tree. The leaf is much like that of the locust, and the blossoms, though of the same form as the locust, are a brilliant yellow instead of white. The fame of this tree has gone abroad. One of Rio Janeiro's most beautiful avenues is, in part, adorned by *Tipas*. France, too, now boasts some fine specimens. It grows in any soil, and its bark contains an insect poison that renders it invulnerable to these enemies.

The *Quebracho* (ax-breaker) is a leguminous tree also, and is the most valuable and costly of the Argentine woods. Its color is a dark, rich red, and it is so hard and heavy that it seems like iron. It is much used for all kinds of posts, also in tanning, and is highly prized by shipbuilders, as the water does not injure it.

Several varieties of the *Algarrobo* grow here. In one province—San Luis—not only are the cattle fed on the long pods, but the poorer people find them a nourishing food.

The *Jacarandá* is another ornamental tree much admired for its fern-like foliage and beautiful purple-blue flowers.

The *Mahogany* tree is a native of the province of Buenos Aires, and there are several fine specimens in the garden, with the characteristic bifurcated leaf. The blossoms appear in December; they are white, and in form something like a small magnolia bloom.

The *Naracatía*, from one of the northern provinces, attains great size and is of unusual service to the people. The pith is edible and



ONE OF THE PRINCIPAL AVENUES.

is cooked and served in many ways. The bark is made into casks and barrels. As the tree sometimes has a diameter of more than a meter, one length of bark serves for a cask.

The *Paradise* tree and the *Ceiba* are great favorites; the former, on account of its rich purple flowers, the latter on account of its brilliant red ones. This is said to have been the favorite tree of ROSAS.

There is a beautiful large tree from Misiones, the *Celtis Tala*, whose delicate leaves are very like smilax, just a shade darker and thicker. The really ugly tree of the garden is the *Palo Borracho* (drunken stick), with a shapeless swelled trunk, covered with thorns, and having small, irregular branches. It is, however, very useful, as it furnishes a species of vegetable silk.

In the Tierra del Fuego section, or subsection, there is a most lovely *Araucaria*, a fine dark green, except the tips of the branches, which are of a softer, lighter color. The leaves really seem a sort of developed thorn.

Of all the Argentine trees, the *Ombú* is the most remarkable, with its thick, soft bark, its spongy wood, its dense foliage, and long clusters of white blossoms. It is of rapid growth and attains an enormous size. The soil here is too rich for it; so, in self-defense, its immense roots, after a few years, seek the surface. The older trees have numerous little tender branches that spring directly from this surface root and grow straight up through the thick branches, trying



YERBA MATE.

Paraguayan tea plants.

to reach the light. There is one in the garden, 8 years old, with a height of 50 feet and a diameter of 3. At about 2 feet above the ground the trunk divides into two smaller trunks, each sending off long, straight branches. Its roots are just beginning to appear. It is an ideal tree for a children's playground, with possibilities for climbing about and even for keeping house among its hospitable branches.

The section of acclimatization is very interesting. Here may be seen the result of assiduous efforts to cultivate various exotic as well indigenous plants. One very notable success has been that of the cultivation of the *Yerba Maté* of Paraguay. After a number of fruitless efforts M. THAYS succeeded by the following method: The seeds

were placed in water almost boiling hot: every six hours the hot water was renewed. This was kept up for four days: then the seeds, three in number, were pressed out of their little sheath and planted in a special soil, covered to a certain depth and kept constantly moist. Six months' time, and even a year in some instances, was needed for the sprouting. When the plants grew to be  $2\frac{1}{2}$  inches high they were placed in separate pots: when 12 inches, they were planted in the garden, where some of them have now reached a height of 12 feet. What is particularly promising is that the seed from these plants will grow without any special preparation. There has been some discussion as to whether this manner of germination is a modern idea or a rediscovery of the process used by the Jesuits, the secret of which they carried away with them when expelled from their possessions in Paraguay. The maté consumed in the country costs \$4,000,000



BOTANICAL SECTION.

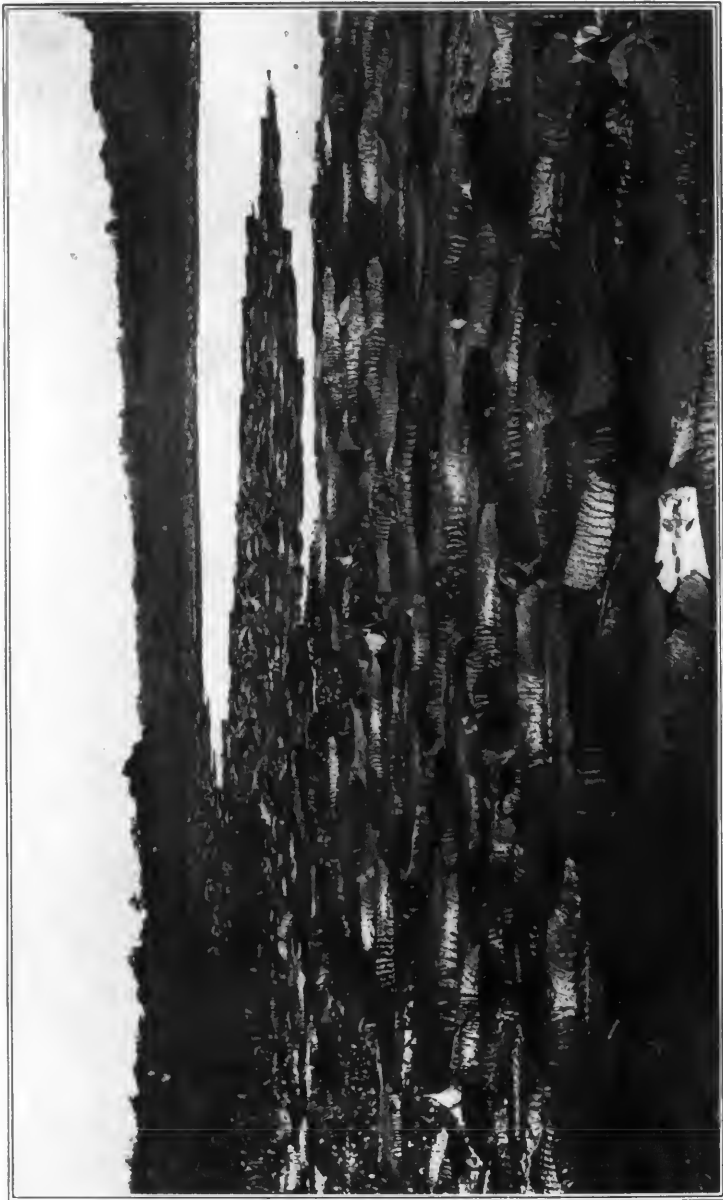
annually, so it is well worth while to develop its cultivation. As, however, the Argentine Republic becomes more Anglicized, it demands tea instead of maté, regardless of the advice of physicians, who claim that maté is the more wholesome beverage.

The collection of ferns is very large, from the innumerable varieties of the dainty maidenhair to the tree fern.

The cactus in number and variety almost equals the fern. One very rare variety from the region of the Andes is always shown to visitors. It is particularly ugly, with its long, stiff stalks in spiny ridges.

Among the water lilies, the *Victoria Regia*, with its enormous pads, is a great curiosity to foreigners, though it abounds in the northern provinces of the Republic, and is called Irupé by the Guarani Indians. It is also said to have a leaf so thick and strong that it will bear the weight of a baby several months old. There is only





VICTORIA REGIA LILIES ON THE UPPER PARAGUAY, NORTHERN ARGENTINA.

one large plant growing "al aire libre" in this garden, and it is the pride of the pond.

Of orchids there are some lovely specimens.

The representative flora of the Old World deserves extended space, Europe almost suggesting a world's fair, with here a bit of Spain or Italy, there of Norway, and still farther on a glimpse of Germany. Asia is not more interesting, but more unusual, than Europe. There is, of course, the bamboo, with its suggestion of marvelous tales, and from the north a bush covered with lovely white flowers, a sort of spiraea. Among the Japanese trees is the *Ginkgo*, with its small and graceful fan-shaped leaves.



EAST INDIAN SECTION OF BOTANICAL GARDEN.

Africa is chiefly conspicuous for palms of many kinds, with an occasional royal cedar towering above. Where a bit of the great Sahara is pointed out, it requires a stretch of the imagination to see more than the oases.

Australia is extensively represented. There are 60 different varieties of eucalyptus in this section and the saltbushes are no longer allowed in the main part of the garden; though the gardeners still seem proud of the ugly, scraggy bushes. They grow prodigiously in this soil, and thrive in any. The Australian variety has a thicker, more succulent leaf than the others.

Besides the sections mentioned, there is one for industrial and medicinal plants, the section of fruit trees, and still another section

devoted to the various methods of reproduction, whether by seed, grafting, or budding.

There are also two conservatories. One of them is beautiful and almost new. The older one was awarded a premium in the Paris Exposition of 1889, both for its artistic construction and for the excellent arrangement for heating and ventilating its three divisions, which are kept at a temperature of 25°, 18°, and 12°, respectively. The substantial building is an inheritance from the Department of Agriculture, which formerly occupied this plot of ground. It contains the residence of the director, various offices, and a small museum.

Agricultural explorers who have visited the most famous botanical gardens of both the Old and the New Worlds have written of this one in words of highest praise and appreciation.

Buenos Aires has reason to be proud of its Botanical Garden, not only because it is one of the richest and most varied in the world, but also because of the persistent effort made here to cultivate to the utmost the plants and trees indigenous to the country.



# DRY FARMING IN BRAZIL

---

---

THE necessities and possibilities of dry farming in Brazil were discussed in a valuable paper presented before the Third Trans-Missouri Dry Farming Congress meeting at Cheyenne, Wyoming, in February, 1909, by the Brazilian delegate to the Congress, Mr. L. BAETA-NEVES.

This distinguished mining and civil engineer has been named Vice-President of the Fourth Congress, and his views on the subject demonstrate the thought and attention he has given to its consideration.

Mr. BAETA-NEVES said:

In the invitation that came to me through the courtesy of Mr. JOHN T. BURNS to attend the Congress, this gentleman asked me to tell you something about the necessities and possibilities along the line of dry farming in Brazil. And to respond to this additional compliment which he paid me, I beg for a few minutes your attention.

Brazil is not indifferent to the solution of the problem that is discussed in this meeting. Independently of the interest that is being awakened in all the world in this system of cultivation, increasing the vital resources of the earth and transforming desert land into homes for new generations, Brazil



MR. L. BAETA-NEVES.

would have sufficient reason to consider it. We have also a semi-dry region which must become prosperous and not lie perpetually unproductive.

In our immense area, about 250,000 square miles greater than the United States proper, there is one northern part, near the Atlantic coast and below the Amazon basin, where drought occurs almost periodically, bringing serious troubles to the many thousands of Brazilians who live there.

This part of the country, though small in comparison with the total surface of Brazil, is considerable in area, contains lands of great fertility, lacking only moisture to be productive. Any light rain transforms it, covering the land with green vegetation in a very few days. With moisture everything grows there. Such lands are not, on an average, more than 2,000 to 2,400 feet above sea level and the dominant rocks are gneiss.

You know that we have no snow or ice in Brazil, and certainly we can not have them in that land of which I speak, which lies a few degrees below the line of the equator and at no great elevation. Its driest part is between something like  $2^{\circ} 5'$  and  $7^{\circ}$  south latitude, in the State of Ceara. Therefore the moisture to render the soil productive only comes from the rain, but this, although enough for productiveness if its annual average be taken (about 25 inches in the driest time), does not produce the expected result because of its extraordinary irregularity, combined with great evaporation noted there. Sometimes there is no rain for many months.

The Brazilian Government is applying irrigation, but certain parts of such lands require different methods, because of the difficulty or impossibility of getting water enough for irrigation purposes. For that reason the Government wishes to try the dry-farming process. And, as I spoke about it before the Sixteenth National Irrigation Congress, Brazilian Central and State Governments are interested in the Campbell system, and experiments with it have been ordered in some places in order to establish dry farming in semi-arid zones of the country. Such a process results so well in your country, when properly applied, that it will be of great importance to us, principally in the northern States, if we can apply it successfully.

Besides, in a very few years the dry-farming process will also be a necessity for other zones where the cutting of the forest is changing the regularity of rains and diminishing the sources of water supply.

In the semi-arid zone of Brazil it is necessary to prevent the trouble arising from an excessive rainfall that sometimes comes after months and months of drought. If such a thing can be done, if we can get something along this line, I think dry farming may be successfully applied in the semi-arid zone, provided that we adopt the system of biennial or triennial crops to overcome the lack of sufficient rainfall in years of excessive drought such as we had some time ago.

Lands to be cultivated must be divided into two or three portions, each holding two or three years' moisture for one good crop. One-half or one-third of the lands must be put in crops every year, while the other one-half or two-thirds retain the moisture. Thus the land will become productive; but more than this is necessary for the permanent establishment of the system.

It is necessary that the farmer surround himself with some comfort for the complete happiness of his home. It is necessary that, in the excess of sunshine, he find some comfortable shade near his home given by the trees, which will render the temperature of the air more agreeable. Furthermore, fruit trees and a small vegetable garden are valuable additions.

For these purposes our soil, even in the semi-dry lands, is not lacking in fertility, and we have sufficient underground water for irrigation of limited areas, that may be easily pumped from wells by windmills or other more convenient machinery, the water being stored in reservoirs with sufficient capacity to regulate irrigation.

Even without such consideration, which to many people would seem of little importance in dry climates, wells are a great necessity to supply water for the household and stock purposes, avoiding the hard work entailed by obtaining water from a distance.

From what I know by my own observation of the dry lands in my country, combined with the lessons that I have learned in the great West of America, I really do not know if we can do better by another way along the line of dry farming. This is my humble opinion, but certainly I give it to you with my

highest appreciation of your great experience with this so important subject, in which I am scarcely yet initiated.

As an engineer I have been working principally in waterways, and I am especially interested in irrigation systems, but, besides this, I am investigating dry-farming processes.

This must be the complement of irrigation, for, although entirely different in appearance, they are similar in results, being two ways of getting the same thing—moisture for the plants.

In order to obtain the most profit from the irrigation systems in dry lands, the water which remains in the irrigated field could be used without great expense for dry-farming purposes in limited area for orchards, etc., located below the field, downstream, and when a little higher than the first the water may be stored and pumped.

JOÃO PUNHEIRO DA SILVA was one of the greatest of all Brazilians of our time, one of the founders of our Republic, and one of its best statesmen. He reclaimed the State of Minas Geraes from the primitive methods of cultivation and established scientific agriculture, introducing the most advantageous system of treating the soil. Unhappily for Brazilians, this exceptional man died recently, when by the whole country he was spontaneously called to be candidate for the Presidency for the next term of the Republic of Brazil.

Brazilians love him as you do the memory of your greatest man.

He knew that the greatest benefactor of a country is the man who makes its soil productive, and among other important problems of his most excellent administration he brought about the agricultural transformation of his State. His value was too great to be confined within the boundary of my country. By his death, in the history of Brazil a new page is opened from which, when his work shall have been recorded, will radiate a light strong enough to shine beyond the frontier of my country, and he will be known wherever the history of America is studied without sectional prejudice, when the flags of American countries will form together a large flag of peace and fraternity, which shall wave over all parts of the Western Hemisphere, testifying to the world the complete victory of the Monroe doctrine.

Dry farming if successfully applied would be the best thing we could get for northern Brazil, below the Amazon basin, that can offer to the farmer the most favorable conditions of climate and fertility of land.

Brazil, throughout the largest portion of its territory, is highly endowed by nature, and our resources are now securing more recognition from the world, while the foreigners turn to us their eyes, attracted by our rapid development and extraordinary progress. They, surprised by our civilization, begin to study us more carefully.

In a very few years our population, now so small in comparison with the great area of the country—something like 22,000,000 of inhabitants—will be increased by several millions of foreign people who are going to live with us, assured of success in Brazil.

Mr. JOHN BARRETT, one of the most distinguished American diplomats, Director of the International Bureau of the American Republics at Washington, describing the opportunities of my country for legitimate exploitation of North America's capital, said: "The simple fact that Brazil covers a greater area than the United States proper; that out of the Amazon River every day flows three or four times more water than out of the Mississippi; that the city of Rio Janeiro, its capital, has now a population of 800,000 (we have 1,000,000 or a little more), and spent more money last year for public improvements than any city of the United States, excepting New York; and that to-day the

central Government and the different States are spending larger sums for harbor and river improvements than the Government or States of the United States, all convince the most skeptical that Brazil is a field for the investor to study thoroughly and thoughtfully."

The same distinguished American, in his interesting article under the title "The Land of To-morrow," made true statements regarding my country, principally in regard to Rio de Janeiro, the federal capital of Brazil, which he states to be growing as fast as Boston, St. Louis, or Baltimore, and which to-day is one of the most interesting national centers of civilization, industry, art, literature, and education in the world.

Rio really is an advanced town, worthy of serious study, where the old civilization has much to learn. But our progress is not only concentrated in Rio, for it may be noted all over the country.

And it was because he was surprised at such progress that Mr. ELIHU Root paid a very nice compliment to us, counselling all North Americans to think a little more of Brazil, advising them to go to South America instead of spending their vacation time in Europe.

Brazil shows rapid progress in every line, and the Federal and State governments are doing all they can to promote such a result. If in any way an improvement is considered necessary, we do not delay in starting it, and in a short time results are reported.

In the last few years we have begun and finished in Brazil permanent work that in many most advanced countries would take years to accomplish.

A country that thus devotes itself to progress, with daily advances in civilization, can not be indifferent to the solution of a problem like dry farming, of such vital importance to its future. It can not leave unproductive, dry, and parched by the excessive sunshine, one of the most beautiful and fertile parts of the national territory, and sooner or later there will be seen the fruits from the lesson of this Congress.

The International Bureau of the American Republics issues every month one of the best publications, full of interesting and valuable information, with fine illustrations, descriptions, and official figures from reports of all American Republics. This Bulletin is an excellent source of study of all the American countries maintained by the Bureau to promote commerce and trade, and develop among the Republics of the Western Hemisphere a better acquaintance, and certainly, from this acquaintance, will come "closer relations and more intimate intercourse along material educational, intellectual, and social lines."



# INDORSEMENT OF THE WORK OF THE BUREAU

---

---

**T**HE Board of Trade of Wilmington, Delaware, at its April meeting, passed a set of resolutions indorsing the work of Hon JOHN BARRETT in his capacity as Director of the International Bureau of the American Republics.

A draft of these resolutions was forwarded to President TAFT, to the Secretary of State of the United States, and to the Senators and Members of Congress from the State of Delaware.

The text of the resolutions is as follows:

Whereas the Hon. JOHN BARRETT, Director of the International Bureau of American Republics, did at our late banquet deliver a forceful and convincing exposition of the advantages of closer trade relations between the United States and the Republics of Latin America; and

Whereas this board is convinced that the suggestions of Mr. BARRETT present matters of great importance to the city of Wilmington and all other manufacturing centers of the country:

*Be it resolved*, That the Board of Trade of Wilmington express to the President of the United States and the Secretary of State their appreciation of the practical work that is being done by Hon. JOHN BARRETT as Director of the International Bureau of the American Republics, and the hope that the administration may give him that support and assistance which will enable his splendid effort in advancing the trade relations and governmental comity between the American Republics to be increased and multiplied.

The Hispanic Club of Yale University addressed to the Secretary of State of the United States, who is ex officio Chairman of the Bureau Governing Board, the following communication, wherein further confirmation is given of the general appreciation accorded the efforts being made by the Bureau for the Pan-American propaganda:

444 FAYERWEATHER HALL.

HON. PHILANDER C. KNOX,

*Chairman of the Governing Board of the*

*International Bureau of the American Republics, Washington, D. C.*

DEAR SIR: The Hispanic Club of Yale University voted at its last meeting that its formal thanks be extended to Hon. JOHN BARRETT for his kindness in coming to New Haven to address the club on progress and opportunity in South America, and furthermore for the interest which he has shown in the study of Latin America at Yale. The club also puts on record its appreciation of the excellent work which Mr. BARRETT has done and is doing in order to make the Latin-American Republics better known to us, and especially commends the marked services he has rendered the United States in helping to improve the relations, both commercial and political, with those Republics.

JAMES B. GRANT, *President,*

JOSEPH K. HOOKER, *Manager.*



# SUBJECT MATTER OF CONSULAR REPORTS

## REPORTS RECEIVED TO MAY 15, 1909.

Title.	Date of report.	Author.
ARGENTINE REPUBLIC.		
Annual report on commerce and industries for 1908.....	Apr. 9, 1909	Alban G. Snyder, consul-general, Buenos Aires.
BRAZIL.		
Floating dock at Rio de Janeiro.....	Mar. 8, 1909	Geo. E. Anderson, consul-general, Rio de Janeiro.
Dental and surgical supplies in Brazil.....	Mar. 9, 1909	Do.
New variety of coffee.....	Mar. 10, 1909	Do.
Cotton goods production and taxation.....	Mar. 11, 1909	Do.
Brazilian tariff revision commission.....	Mar. 13, 1909	Do.
The Brazil nut trade.....	Mar. 15, 1909	Do.
Coffee shipments at Santos.....	Mar. 19, 1909	Dirk P. de Young, deputy consul, Santos.
TRADE NOTES.—Organization of Brazilian Warrants Co., in London, to take over the Companhia Paulista de Armezeiros Gereas and the Companhia Registrada de Santos—The company proposes to build large warehouses and establish better banking, commission, and exporting facilities for the coffee trade of the State of São Paulo; reduction of 10 per cent by the Paulista Railway Co. on all of its lines.	.....do.....	Do.
The hardware outlook.....	.....do.....	Do.
Export taxes in Brazil.....	Mar. 23, 1909	Geo. E. Anderson, consul-general Rio de Janeiro.
Madela Mamore Railway lease.....	Mar. 27, 1909	Do.
New discovery in photography.....	Mar. 28, 1909	Carleton B. Taylor, vice-consul, Bahia.
Leasing docks at Rio de Janeiro.....	Mar. 30, 1909	Geo. E. Anderson, consul-general, Rio de Janeiro.
Progress in the State of Parana.....	Mar. 31, 1909	Dirk P. de Young, vice-consul, Santos.
TRADE NOTES.—Authorization by the governor of Rio Grande do Sul for the floating of bonds for the purpose of building bridges and improving rivers and harbors in that State; coffee business in Santos; extension of Funilense Railway running from Campinas to Arthur Nogueira; contemplated building by the Mongyana Railroad Co. of an extension from São José do Rio Preto to Santo Antonio da Barra; dividends paid by the São Paulo Light and Power Co. (an American and Canadian company) for the last quarter of 1908; progress of work on the Blumenau Railway in the State of Santa Catharine.	.....do.....	Do.
Agricultural developments in the State of São Paulo.	.....do.....	Do.
CHILE.		
Annual district report for 1908.....	Mar. 12, 1909	A. A. Winslow, consul, Valparaiso.
Cessation of the nitrate combination in Chile.....	Mar. 31, 1909	Rea Hanna, consul, Iquique.
Manufacturing and industrial conditions.....	.....do.....	A. A. Winslow, consul, Valparaiso.
Improved mail service.....	.....do.....	Do.
Government car and locomotive works.....	Apr. 5, 1909	Do.
Tree planting in arid lands.....	.....do.....	Do.
COLOMBIA.		
Banking.....	Feb. 16, 1909	Jay White, consul-general, Bogota.
Platinum in Colombia.....	Mar. 4, 1909	Do.
New steamboat service on the Magdalena River.....	Mar. 31, 1909	Charles C. Eberhardt, consul, Barranquilla.
Emerald mines of Colombia.....	.....do.....	Jay White, consul-general, Bogota.
Tariff on wines.....	Apr. 3, 1909	I. A. Manning, consul, Cartagena.
Coffee culture in the department of Santa Marta.....	Apr. 8, 1909	Charles C. Eberhardt, consul, Barranquilla.
Santa Marta, Colombia, and the banana industry in its adjacent territory.	Apr. 10, 1909	Do.

## 1070 INTERNATIONAL BUREAU OF THE AMERICAN REPUBLICS.

REPORTS RECEIVED TO MAY 15, 1909—Continued.

Title.	Date of report.	Author.
COSTA RICA.		
Signing of contract by the Government of Costa Rica and Warren H. Knowlton, an American engineer, for the completion of a railroad between San Jose and the Pacific coast.	Nov. 8, 1908	John C. Caldwell, consul, San Jose.
Export returns for 1908.....	Feb. 8, 1909	Do.
CUBA.		
Annual report on commerce and industries for 1908....	Mar. 23, 1909	R. E. Holaday, consul, Santiago.
DOMINICAN REPUBLIC.		
Supplementary report to annual report for 1908.....	Apr. 19, 1909	Ralph J. Totten, consul, Puerto Plata.
HONDURAS.		
Congressional Decree No. 32, placing certain restrictions on the importation of whisky, brandy, rum, etc.; Congressional Decree No. 33, fixing tonnage and light dues to be paid by foreign vessels.	Mar. 31, 1909	W. E. Alger, consul.
MEXICO.		
Topo Chleo cider.....	Mar. 27, 1909	Clarence A. Miller, consul, Matamoros.
Report on Matamoros consular district; agriculture and stock raising; minerals and mining; transportation; industrial; commerce and trade; principal towns.	Apr. 6, 1909	Do.
Mail-order business.....	.....do.....	Louis Hostetter, consul, Hermosillo.
Industrial and commercial notes.....	Apr. 15, 1909	F. W. Votter, consul, Saltillo.
Agricultural items.....	Apr. 17, 1909	Clarence A. Miller, consul, Matamoros.
Mexican items.....	.....do.....	Do.
Annual report for 1908.....	Apr. 20, 1909	A. T. Haeberle, consul, Manzanillo.
Tree cotton or Caravanica cotton.....	Apr. 22, 1909	Clarence A. Miller, consul, Matamoros.
NICARAGUA.		
The cultivation of cacao in western Nicaragua.....	Apr. 8, 1909	Jose de Olivares, consul, Managua.
PANAMA.		
Forming of an express, baggage, and transfer company to operate in the cities of Panama and Colon.	Mar. 31, 1909	Claude E. Guyant, consul-general, Panama.
PARAGUAY.		
Foreign corporations doing business in Paraguay.....	Dec. 29, 1908	Edward J. Norton, consul, Asuncion.
Prepared roofing in Paraguay.....	Dec. 30, 1908	Do.
Tobacco in Paraguay.....	.....do.....	Do.
SALVADOR.		
Exports from San Salvador to the United States for 1908.	Apr. 7, 1909	Arthur Hugh Frazier, consul-general, San Salvador.
URUGUAY.		
Minerals of Uruguay.....	Mar. 13, 1909	Frederic W. Goding, consul, Montevideo.
Rural Uruguay.....	Mar. 17, 1909	Do.
Exports of animal products from Uruguay.....	Mar. 20, 1909	Do.
Corn growing in Uruguay.....	Mar. 22, 1909	Do.
VENEZUELA.		
Commerce and industries.....	Feb. 25, 1909	James W. Johnson, consul, Puerto Cabello.

## CACAO TRADE AND CONSUMPTION.

The German cacao trade journal "Gordian" gives the following figures covering the world's crops of cacao during the years 1907, 1908, and 1909, the latter as estimated:

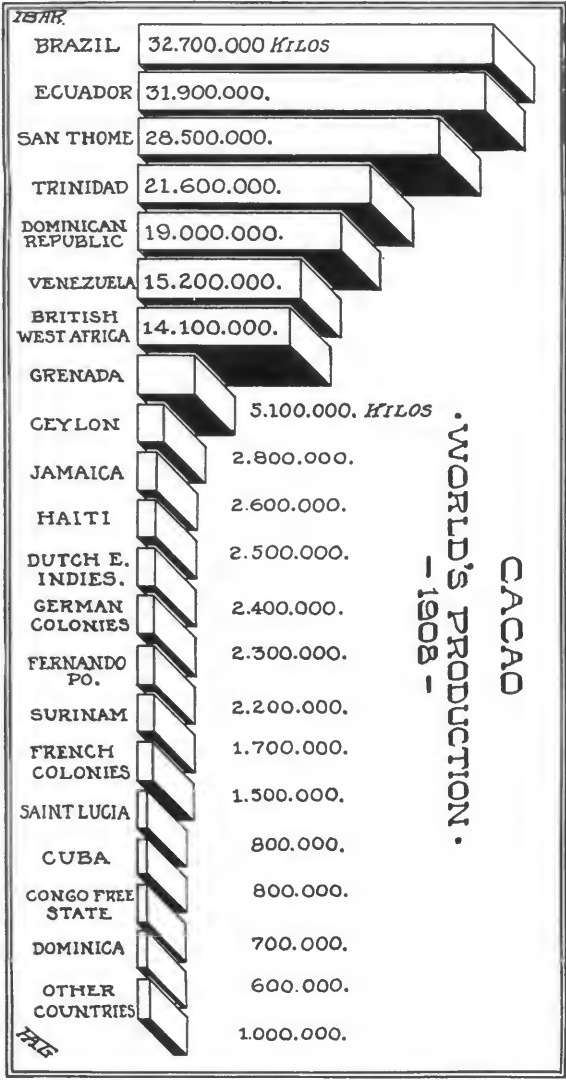
Producing country.	Crop.		
	1907.	1908.	1909.
	Kilos.	Kilos.	Kilos.
Brazil.....	24,530,000	32,700,000	33,000,000
Ecuador.....	19,670,000	31,900,000	29,000,000
San Thome.....	24,200,000	28,500,000	27,000,000
Trinidad.....	18,610,000	21,600,000	21,000,000
Dominican Republic.....	10,150,000	19,000,000	17,000,000
Venezuela.....	13,470,000	15,200,000	14,000,000
British West Africa.....	10,475,000	14,100,000	15,000,000
Grenada.....	4,610,000	5,100,000	5,100,000
Ceylon.....	4,700,000	2,800,000	3,000,000
Jamalea.....	2,200,000	2,600,000	2,500,000
Haiti.....	1,850,000	2,500,000	2,500,000
Dutch East Indies.....	1,800,000	2,400,000	2,400,000
German colonies.....	1,970,000	2,300,000	2,600,000
Fernando Po.....	2,440,000	2,200,000	2,000,000
Surinam.....	1,625,000	1,700,000	2,000,000
French colonies.....	1,390,000	1,500,000	1,500,000
Santa Lucia.....	750,000	800,000	800,000
Cuba.....	1,690,000	800,000	1,200,000
Congo Free State.....	550,000	700,000	800,000
Dominica.....	580,000	600,000	600,000
Other countries.....	1,000,000	1,000,000	1,000,000

From data prepared by the Department of Commerce and Labor, it is found that the United States is the largest consumer of cacao, the world output of which is about 340,000,000 pounds. The leading countries supplying the American markets are the British West Indies, which sent 27,945,871 pounds in 1908, while 17,026,116 pounds came from elsewhere in the West Indies and Bermuda; Brazil furnished 15,301,524 pounds, while 18,773,986 pounds came from elsewhere in South America. Crude cacao ranks as twenty-fifth in importance as to value among the imports of merchandise into the United States.

The imports in the calendar year 1908 amounted to 97,419,700 pounds, valued at \$12,999,836. The imports the year previous were 912,147 pounds less, but the total value was \$2,165,743 greater. In other words, the market value dropped from 17½ cents per pound in 1907 to 13¾ cents in 1908.

Out of the 613,316 bags of cacao arriving in New York in 1908 Bahia supplied 107,447 bags and Para 12,113; Brazil as a whole supplying substantially 20 per cent of the total imports in that American city. Yet the cacao industry in Brazil at present is little more than the gathering of the cacao beans from semi-wild trees, there being little or no cultivation in most places and not even regular employment of workmen in some.

The exportation of prepared cacao and chocolate from the United States is making some headway, the amount having reached \$403,509 in the fiscal year 1908, against \$376,467 in 1907, and \$279,819 in 1905.



Great Britain has an export trade of about \$250,000 a year in chocolate preparations, but makes more money from handling the raw cacao, of which 66,981,882 pounds were imported in 1908 and 46,411,625 pounds retained for home consumption. A large portion of the surplus is sold to the United States. Great Britain also purchased for consumption in 1908 from the Continent 10,255,238 pounds of prepared cacao and chocolate, valued at \$4,365,382.

France imports annually over 50,000,000 pounds of raw cacao, and Germany a little more than 70,000,000 pounds. The Netherlands imports 25,000,000 pounds per year, and in its manufacture there are 2,000 people employed in Amsterdam alone. The prepared Dutch cocoa is shipped to every country in the world. Switzerland imports about \$15,000,000 worth of raw cacao yearly, and manufactures for export nearly \$6,000,000 worth, about one-tenth being sent to the United States. Shipments to the latter country, however, are decreasing because of the erection of an American factory by one of the largest Swiss chocolate makers.

The exportation of cacao from Lisbon—the product of the Portuguese islands, San Thome and Principe—is becoming more important each year. These islands produce only one variety, fine African or superior Thome. In regard to quality and price, it runs between fair Bahia and fine Bahia. Last year it sold as high as 28 cents per pound, and in the same year went as low as 10 cents; at present it is selling at 11½ cents. For a cacao of medium fine quality, manufacturers claim that the San Thome product is the most even and reliable on the market. It is graded according to quality. The second grade is called "Paiol," and is the poorly-cured cacao raised by the small negro farmers. This grade sells for one-half to four-fifths of a cent per pound less than the fine African. The third grade is called "Escolha," and consists of the broken beans and beans of poor quality, sorted from the good cacao, and sells at from 2¼ to 2½ cents per pound less than the fine African. These two grades only amount to about 15 per cent of the whole crop, and neither are exported to the United States. The receipts at Lisbon from the colonies in 1908 amounted to 477,175 bags, against 402,221 bags in 1907, of 132 pounds per bag. Stock on hand January 1, 1909, 126,136 bags, which is all sold for early delivery. All the transactions in this market are under the old Portuguese measure, the arroba, 33 pounds.

At least one-fifth of the crop of San Thome and Principe is exported to the United States through Lisbon. The value of the declared exports to the United States during the years 1906, 1907, and 1908 was \$1,251,780, \$1,571,851, and \$1,717,708, respectively. The quantity exported to the United States in 1908 amounted to 91,869 bags, or about 12,127,000 pounds.

## TRANS-ISTHMIAN TRAFFIC IN 1908.

Traffic between the eastern and western coasts of the United States by way of isthmic railways and steamship lines amounted to practically \$50,000,000 in value in 1908, a marked increase over any earlier year.

Two railway lines now carry freights across the narrow neck of land connecting North and South America—one at the Isthmus of Panama, the other at the Isthmus of Tehuantepec. One of these railways, that of Panama, is 40 miles in length; the other, at Tehuantepec, 190 miles. The one at Panama, owned by the Government, is, of course, largely devoted to work and traffic growing out of the construction of the Panama Canal; the one at Tehuantepec, 190 miles in length, constructed chiefly with British capital and controlled in part at least by the Mexican Government, is built especially for the purpose of handling freights between the Atlantic and Pacific, and, although opened only at the beginning of 1907, carried during 1907 and 1908 between \$60,000,000 and \$70,000,000 worth of merchandise passing between the Atlantic and Pacific ports of the United States.

Figures relating to the trans-isthmian traffic routes between the eastern and western ports of the United States, from reports received by the Bureau of Statistics of the Department of Commerce and Labor, show that the Tehuantepec Railway, which crosses the isthmus at Tehuantepec, in the southern part of Mexico, carrying the freights received from the steamship lines plying between the great ports of the United States and its eastern and western termini, carried in the first year of its operation, 1907, between \$25,000,000 and \$30,000,000 worth of merchandise; and in the second year, 1908, nearly \$38,000,000 worth. The Panama Railroad, engaged chiefly in work on behalf of the Panama Canal, carried in 1907 about \$12,000,000 worth of merchandise originating in the United States and bound either for other parts of this country or for foreign countries, and in 1908 about \$9,500,000 worth.

Of the merchandise crossing by way of the Panama Railway, \$8,500,000 worth moved from the Atlantic to the Pacific and only a little over \$1,000,000 worth from the Pacific to the Atlantic. Of the \$8,500,000 crossing from the Atlantic side to the Pacific coast by the Panama line, \$2,750,000 was destined to the western ports of the United States and \$5,750,000 to foreign countries located upon the Pacific coast of North and South America, a little over \$1,000,000 worth going to Ecuador, nearly \$1,000,000 to Peru, nearly \$1,000,000 to Salvador, \$750,000 to Panama, nearly \$500,000 each to Honduras and Nicaragua, \$333,000 each to Colombia and the western coast of Mexico. Of the \$2,750,000 from the eastern to the western coast by way of Panama practically all originated at New York and nearly all was sent to San Francisco. The eastbound merchandise passing through Panama amounted to a little more than \$1,000,000 and was shipped exclusively from San Francisco, all of it to New York City.

## AMERICAN WHEAT PRODUCTION IN 1908.

According to the "Crop Reporter," an official publication of the United States Department of Agriculture, the wheat crop of the world is estimated for 1908 at 3,142,150,000 bushels. American production, as compared with the preceding year, was as follows:

Country.	1907.	1908.
NORTH AMERICA.		
United States.....	<i>Bushels.</i> 634,987,000	<i>Bushels.</i> 664,602,000
Canada.....	96,007,000	114,534,000
Mexico.....	9,000,000	8,900,000
Total North America.....	739,994,000	787,136,000
SOUTH AMERICA.		
Argentina.....	155,993,000	192,480,000
Chili.....	15,776,000	17,000,000
Uruguay.....	6,867,000	7,430,000
Total South America.....	178,636,000	216,919,000



HARVESTING GRAIN IN CALIFORNIA.

## SHIPPING FACILITIES BETWEEN EUROPE AND SOUTH AMERICA.

United States Consul-General GEORGE E. ANDERSON, of Rio de Janeiro, furnishes the following information concerning the shipping facilities European countries are providing for the trade of South America:

In the European-South American shipping service, which has been characterized of late months by an extraordinary development of service in fine, new, modern, fast ships in the English, German, and Italian lines, there is to be no lagging even in the slower vessels if subsidies will keep them going. The Austrian Government has made arrangements for a continuation of the present arrangement with the

Austrian Lloyd for a triweekly service between Trieste and Santos, Brazil, the only question about the indefinite continuance of the arrangement being as to whether or not the present order will be merged into a more comprehensive one involving all the principal Austrian shipping organizations.

The continuation of the present arrangement is provided for in the agreement recently submitted to legislative approval in Austria between the Government and the Lloyd whereby the Government is to pay a subsidy of 4 kroner (81.2 cents) per sea mile on all voyages of ships of 9 sea-miles speed per hour or over, the company agreeing to make at least 9 voyages in the year, such number to be extended to 12, 6 of which voyages will be continued to Buenos Aires, if business justifies.

If the earnings of the company from such service exceed the average earnings of the service given between 1902 and 1906, the subsidy will be reduced to 3.4 kroner (69.02 cents) per sea mile on all voyages. The company agrees to maintain the service during 1910 if before November of the current year an arrangement is not made by the Government with the shipping companies for a permanent subsidy for this service, the understanding being that the Government is waiting for an agreement between the Lloyd, the Austro-Americana, and the Navigazione Libera Trientina for the working of the South American service.

This granting of a subsidy by Austria for ships of no higher speed than 9 miles is not exceptional, several other nations having adopted this policy in the South American trade at least, but it is of more than ordinary significance in its bearing upon South American trade. There is not the least doubt that this Austrian line of ships, though not frequent in sailings, enables Austria to keep its flour in the markets of Brazil in competition with American and Argentine flour. It is a notable fact that Austrian flour is sold in Brazil in the districts reached only by this Austrian subsidized ship service.

A somewhat important change in the course of the shipping service between Europe and Brazil and return is taking place in the increased number of fast ships making the voyage between Brazil and Lisbon without stop. This direct route enables the fast ships to make the trip between Rio de Janeiro and the Portugal capital in about ten days, instead of the fourteen days required with stops at Bahia, Pernambuco, and Madeira or St. Vincent. The fast new German steamers commenced this service, and now other lines are preparing to send one ship a month out of the four they send usually by the direct route. The number of fast ships sailing out of Rio de Janeiro for Europe will not interfere materially with the usual number of ships serving the other ports in Brazil, while it will give added facilities for fast trips for busy people traveling between Europe and Brazil and the Argentine Republic.



# TRADE AND CREDIT CONDITIONS IN SOUTH AMERICA

---

---

[Abstract of address delivered by Prof. L. S. ROWE, of the University of Pennsylvania, before the National Association of Credit Men, on June 18.]

**B**EFORE visiting South America I was under the impression that we were the most cosmopolitan, and in many respects the most adaptable, of modern peoples. My faith in these national qualities was seriously weakened during my first trip and completely undermined after completing a second tour of the continent. Instead of being the most cosmopolitan, as well as the most adaptable, among modern nations, one is gradually forced to the conclusion that we have greater difficulty in appreciating the point of view of foreign nations than any of the peoples of continental Europe and are less disposed to change our standards to meet foreign requirements.

The question is not whether our foreign commerce will or will not expand. Such expansion is an inevitable consequence of our industrial development. The real question is whether our commerce will expand in proportion to the opportunities for such expansion; whether, in a word, we desire to take full advantage of the opportunities now presenting themselves in Latin America.

In considering this field for commercial expansion, it is important to bear in mind an important contrast with the Far East. The Far East is at best but a temporary market. The imitative power of the Chinese and Japanese soon leads to the supplanting of foreign-made goods with local imitations. The low standard of living of the people, with the corresponding low rate of wages, enables them soon to undersell and then dispense with the foreign product. This is not the case in any of the Latin-American countries. For many reasons, they will for a long time to come be essentially agricultural communities. Even where home industries are established, the relatively high rate of wages does not exclude competition. Latin America is, therefore, a permanent market for American goods in a sense far more real and permanent than the Far East.

We must always bear in mind, however, that the commercial traditions of Latin America were inherited from Spain and have been developed under essentially European influence. These commercial traditions present two leading characteristics of special importance to the American manufacturer—first, the adaptation of styles to Latin-American tastes; and, secondly, the system of long-term credits.

The first point has been dwelt upon in every investigation relating to Latin-American trade. The unwillingness of the American manufacturer to study local needs has been pointed out so often as to become tiresome in reiteration. It may be true that this lack of adaptability is due to the fact that, until recently, the foreign market was merely a makeshift for the purpose of reducing surplus stocks in times of business depression in the United States. Whatever its cause may be, the fact remains that if this market is to be enlarged one of the first requisites is a careful study of local needs. Our expanding market in agricultural implements can be increased five-fold through a careful adaptation of such machinery to peculiar local needs. The United States can command the Latin-American shoe market if we will but adapt our styles to the peculiarities of local taste. If time permitted, this list might be increased indefinitely.

The question of long-term credits is in many respects more complex, and the change in our business methods will probably be more difficult to effect. The first step may seem to you to be trivial and unimportant, and yet it is probably the most difficult. Our trade with Latin-American countries is now managed as if every Latin-American merchant were intent on defrauding the American manufacturer. It may surprise many of you to learn that the standards of business morality are quite as high, if not higher, in Latin America than in the United States. This is in part attested by the fact that bankruptcy involves a degree of social obloquy unknown in the United States. The precautions against fraudulent bankruptcy are more thorough than in the United States, and the number of losses through bankruptcy is surprisingly small. In spite of these facts we treat the Latin-American merchant as if it were exceedingly hazardous to extend any credit to him. With reference to this matter of credits, permit me to cite one instance that occurred to a friend in Buenos Aires. He is a large dealer in agricultural implements, and commands practically unlimited capital. An order for over \$200,000, placed with an American firm, was not filled until payment had been made prior to shipment.

You will readily understand that the superiority of our goods over competing European products must be very great to withstand such tests, especially when European manufacturers are prepared to give sixty or ninety days' credit.

It will probably be said by all of you that our present business arrangements will not permit of such credits. The only reply is that if they do not permit of such credits we must renounce for a long time to come the share in Latin-American trade which our industrial position warrants.

Another factor of great importance is a higher standard of commercial honesty in dealing with Latin-American merchants. I do

not wish for a moment to impugn the good faith of the American manufacturer. In many cases, however, he loses this fine sense of commercial honor in transactions with a foreigner, and especially with the Latin-American countries. I have seen numerous instances of a complete failure of goods to conform to the standards set forth in printed catalogues. This failure has contributed very largely toward arousing a distrust of the American manufacturer. We must realize that most of the Latin-American peoples are accustomed to receive and to demand the best products of European manufacturers, and if we are to secure their trade we must offer them the best that we produce.

I have confined myself to the absolutely necessary changes in our management of Latin-American trade. There are minor changes upon which I might dwell, but which will naturally follow these fundamental reforms.

We are now in the midst of a period of general good will of the South American countries toward the United States, and it is a question whether our manufacturers are sufficiently interested in this market, which is bound to expand with each year, to adapt their methods to the business requirements of these countries.



LOADING HIDES IN A SOUTH AMERICAN PORT FOR SHIPMENT TO UNITED STATES.

# ARGENTINE REPUBLIC

## REPORT ON THE BOUNDARY WITH PARAGUAY.

The commission appointed for the demarcation of the boundary line between the Argentine Republic and Paraguay has presented its report to the Minister of Foreign Affairs, covering the work up to March, 1909, in connection with the determining of the true arm of the Pilcomayo River, as referred to in the boundary treaty of the two countries. The topographical works and report have been signed by the Paraguayan expert.

From the investigations of the commission it appears that the source of the Pilcomayo is in the cordillera of Bolivia, to which the commission has given the name of the upper Pilcomayo, while the lagoon into which it empties is known as the Patiño swamp, or Estero, having a superficies of more than 1,500 kilometers. From this there are three outlets emptying into the River Paraguay. The first, named Congreso, is the most important of the three rivers in the opinion of the experts, on account of the magnitude of its bed, the volume of its waters, and because of its close connection with the upper Pilcomayo, taking its rise about 115 kilometers from the point where that river empties. For this latter reason it is believed to be a continuation of the bed of that river.

Inasmuch however as it flows immediately afterward into territory clearly Paraguayan, and, furthermore, empties into the Paraguay River to the north of the latitude indicated in the boundary treaties, the river has been excluded from consideration by the commission.

The other two rivers have their sources in the Estero about 100 kilometers lower down, but they afterward meet at Funtas Fontano, continuing as one until they reach the Paraguay River. Of these rivers, known as north and south arm, respectively, on account of their relative position, the latter has a less tortuous bed but a greater capacity than the north arm, from which conditions the superiority of the south arm over the north may be proclaimed. The superficies between the two rivers is 1,114 square kilometers.

There remains a district 100 kilometers in length, comprised between the mouth of the upper Pilcomayo and the source of the south arm, occupied by the rest of the swamp, within which it has not been found possible to determine the bed.

## MEAT AND CATTLE TRADE WITH GREAT BRITAIN.

According to "*La Prensa*," of Buenos Aires, the meat shipments by the Argentine Republic to Great Britain in 1908 increased to the extent of 526,278 quintals as compared with 1907. This places the Argentine Republic in the first rank in the commerce of Great Britain in the meat-producing countries of the world.



While the imports of frozen beef into the United Kingdom from Argentina are steadily increasing, amounting in 1908 to 402,047,632 pounds, valued at \$29,696,823, as compared with 129,047,632 pounds, valued at \$9,994,179 in 1903, there have been no imports into the United Kingdom of Argentine live cattle since 1903, when the imports were 27,807 head, valued at \$2,219,124, in a total import of 519,794 head, valued at \$39,035,471. The cause of the cessation of imports of live Argentine cattle was the closing of British ports thereto on account of foot-and-mouth disease. The cattlemen of the Republic are now seeking to have this embargo lifted and to make British ports once again free to Argentine live stock.

#### CENTENNIAL CELEBRATION IN 1910.

Article 1 of the law of February 13, 1909, outlining the programme for the celebration in 1910 of the centennial of the May revolution in the Argentine Republic, makes the following provisions:

(1) To erect in the Plaza de Mayo, Buenos Aires, a centennial commemorative monument.

(2) To dedicate in the metropolis a public park in front of the building of the National Congress, and erect therein two monuments commemorative, respectively, of the National Assembly of 1813 and of the Congress of 1816.

(3) To erect a monument dedicated to Spain.

(4) To erect in some of the public parks of Buenos Aires statues to MARIANO MORENO, BERNARDINO RIVADAVIA, ALMIRANTE BROWN, and General ALVEAR.

(5) To erect in the capital of the Republic, in the Plaza de San Jose de Flores, a statue of PUEYRREDON.

(6) To erect in the Plaza General San Martin a monument to the armies of independence, and on Martin Garcia Island, in the River Plate, a monument in honor of the Argentine Navy.

(7) To found a model agricultural school at Yapeyn, the birth-place of General SAN MARTIN.

(8) To contribute to the erection in Boulogne-sur-Mer of a monument to SAN MARTIN.

(9) To acquire the house in Boulogne-sur-Mer in which General SAN MARTIN died.

(10) To erect in Rosario, Province of Santa Fe, a monument to the national flag.

(11) To erect in the city of Cordoba a statue to DEAN FUNES.

(12) To construct in the cities of La Plata, Santa Fe, Santiago del Estero, Catamarca, San Juan, Parana, and Corrientes, large edifices to be used as graded schools, with a maximum and minimum capacity each of 450 and 600 pupils, respectively, equipped with gymnasiums, libraries, and conference halls, and dedicated to the

"Centennial of National Independence 1810-1910." These edifices to be constructed in separate parks or squares and to be the property of the respective provinces.

(13) To erect a monument in honor of the battle of September 24, 1812, on the site where same occurred in the Plaza Belgrano, city of Tucuman.

(14) To erect an equestrian statue of General GÜMES in the city of Salta.

(15) To construct a monument in the city of Jujuy intended for the preservation of the flag given by Gen. MANUEL BELGRANO to that city.

(16) To construct in the city of Rioja a school edifice similar to those mentioned in paragraph (12), erecting a statue to Dr. PEDRO IGNACIO DE CASTRO Y BARRIOS in front of the building.

(17) To erect a statue to PRINGLES in the city of San Luis.

(18) To erect a monument in the city of Mendoza to the army of the Andes.

(19) To provide a model practice ground for firearm exercises in the city of Bahia Blanca.

(20) To erect a monument to Gen. MARIANO NECOCHEA in the principal town of the district of Buenos Aires that bears his name.

The remaining articles of the law provide for the holding in the capital of the Republic of an agricultural, stock, and industrial exposition, and of an exposition showing railway and other land transportation methods.

Facsimiles of the most important documents relating to the May revolution and to the war of independence will also be published, and three paintings will be selected, by competitive methods, on the following subjects: (1) The independence epoch; (2) national customs; and (3) a historical picture for the National Museum of Fine Arts. An international exposition of fine arts will also be held.

It is proposed to hold an American international scientific congress and an exposition of hygiene in the capital in 1910, and the executive will encourage literary productions concerning the epoch of the May revolution and the celebration of Olympic games.

A model gymnasium will be constructed in the federal capital by the State in commemoration of the centennial, and the national universities, historical, literary, and scientific societies will be encouraged to make contributions in honor of the Centenary of National Independence. The Argentine Geographic Institute will publish a map and geography in honor of the occasion.

The sum of \$128,758 is to be expended in completing the work and adornment of the Metropolitan Church of the capital and the mausoleum of General SAN MARTIN.

The President will invite the foreign Governments having diplomatic representatives in the Argentine Republic, and especially Spain, to participate in the celebration of the centennial.



# BOLIVIA

## FOREIGN COMMERCE IN 1908.

"*Hacienda E Industria*," published by the Department of Finance and Industry of the Bolivian Government from the beginning of the year 1909, covers in its monthly reports the latest available statistics of the Republic relating to the specified branches of the country's economic life.

The March issue contains data covering the commercial movement of the Republic during the years 1907 and 1908. For the later period the total foreign commerce is valued at Bs.84,594,054.41 (\$33,837,000), exports figuring for Bs.43,786,198.21 (\$17,514,000), and imports for Bs.40,807,857.20 (\$16,323,000). As compared with the preceding year the entire trade shows a decline of \$1,454,600, the gain of \$1,164,000 in imports being more than offset by the decline of \$2,618,200 in exports, though a trade balance of Bs.2,978,342 (\$1,191,000) in favor of exports is to be noted.

Tin, which constitutes the most important item on the Bolivian export lists, was shipped abroad to the value of Bs.29,501,021.24 (\$13,800,000), a decrease as compared with the preceding year of Bs.390,982.17 (\$156,400).

Silver, the next ranking item, was exported to the value of Bs.7,007,037.19 (\$2,802,000), an increase of Bs.523,573.29 (\$209,400) being recorded.

Rubber shipments declined nearly 50 per cent, the total valuation for 1908 being given as Bs.4,905,493.49 (\$1,962,000), showing a loss of Bs.3,935,886.76 (\$1,574,000).

Exports of copper were valued at Bs.1,233,194.59 (\$493,200), a decrease of Bs.1,329,497.59 (\$531,700); bismuth, Bs.306,522.20 (\$123,200), a loss of Bs.629,569.87 (\$251,800); while gold shipments, valued at Bs.51,500 (\$20,600), showed a gain of Bs.41,770 (\$16,700). Miscellaneous exports were valued at Bs.781,429.50.

The relative rank of the countries supplying imports to Bolivia, as indicated by a diagram for 1907, is as follows: Germany, 16 per cent; the United States, 14 per cent; Great Britain, 10 per cent; Chile, 7 per cent; France, a little over 5 per cent; Peru, 4 per cent; Belgium, 3 per cent; and Italy, 3.5 per cent, other countries showing diminishing ratios.

## FOREIGN COMMERCE, FIRST HALF OF 1908.

Figures published in the valuable review issued by the Department of Finance and Industry of the Bolivian Government, under date of



February 15, 1909, cover the trade of the Republic during the first six months of 1908.

Import values are given as Bs.18,996,705.16 (\$7,598,400), as compared with Bs.17,700,434.80 (\$7,080,000) in the corresponding period of the preceding year, a gain being thus indicated of Bs.1,296,270.36 (\$518,400).

Exports are valued for the first half of 1908 at Bs.22,965,631.15 (\$9,186,000), against Bs.23,575,846.35 (\$9,430,000) in the same months of 1907, showing a decline of Bs.610,215.20 (\$244,000).

The leading articles of export were tin, silver, copper, bismuth, gold, and rubber, the following valuations and comparisons being reported:

Articles.	Values, first half of 1908.			Comparison with first half of 1907.
	Kilos.	Bolivianos.	Bolivianos.	
Tin.....	14,336,269	16,601,790.51	+1,075,301.87	
Silver.....	2,301,312	3,459,278.64	+ 318,898	
Copper.....	1,573,800	713,808.16	- 562,816.89	
Bismuth.....	94,361	184,799.60	+ 26,101.53	
Gold.....	22.07	31,500	+ 24,300	
Rubber.....	756.350	1,974,454.24	-1,491,999.71	

#### THE GOLD STANDARD.

The mine owners of Bolivia have agreed with the Government to sell to the banks of the Republic, for a period of three months from March 1, 1909, a minimum of £50,000 monthly in drafts on London, at the rate of 18½d, the banks promising to draw thereon at the rate of 18¾d. This arrangement has been made for the purpose of preventing abuses by commission men in the sale of exchange and in order to strengthen the confidence of the people in the banks of the country. The banks also agree to exchange bank notes for gold coin, and to use a uniform rate of interest of 11 per cent in the transactions of the banks with each other. The Government will exchange the silver coin now on hand in the banks for gold coin in London without other charge to the banks than the expense of transporting the coin to Bolivia.

The "*Hacienda é Industria*" of La Paz, Bolivia, in its issue of March 20, 1909, states that the silver pieces coined in Birmingham, England, for the Government of Bolivia, will probably be received in time to be put in circulation in June of the present year. Bs.700,000 have been ordered in 50 *centavos* pieces, weighing 10 grams each and being 0.833½ fine, and Bs.300,000 in 20 *centavos* pieces, of the same fineness and weighing 4 grams each.

"*La Tarde*" of La Paz, Bolivia, in its issue of March 27, 1909, states that the coined silver on hand in the banks of the Republic on

December 31, 1908, amounted to Bs.1,291,501.46 (\$502,393), which amount will be exchanged for government gold drafts on London at the agreed rate of exchange.

#### TIN MINING IN THE REPUBLIC.

The figures of tin production in Bolivia for 1908 show an increase in production as compared with 1907 of more than 2,000 tons, the market value of which, by reason of the decline in the price of the metal, declined by more than \$1,000,000. The year's output is given as nearly 30,000 tons, worth \$10,756,800.

Bolivian tin, or "barrilla," assaying 60 per cent pure, has its market price regulated by that of the Straits product, and the first drop in price reported in 1908 caused a reduction of staff and of costs in the mines of Bolivia, both of which had been allowed to increase during more favorable seasons.

A writer in the "Mining Journal" for March 27, 1909, says that half-castes form the bulk of hand-drill men, and their daily wage ranges from about 65 cents to \$1.50, according to the altitude of the mine, the lower figure being the average at an altitude of 13,000 to 14,000 feet. As an example of working costs, a good mine not far from the railway in the Oruro department has regular reefs, a full stoping width, regular values, a good stamp mill, but run at less than half capacity, and has workings costs at \$20 a ton, making \$60,000 as yearly profit. This mine, by an outlay of not more than \$20,000 for the installation of absolutely modern equipment, might be made to yield \$500,000 annually.

Freight-smelting charges, commissions, etc., are high, varying from \$140 to \$175 per ton of barrilla. Transport in the country is cheap, being effected by means of llamas at a cost of less than 2 pence per mile for 100 pounds. A llama carries from 40 to 100 pounds as a load.

The small property of San Salvadora, adjoining the Llallagua mine, has the distinction of being at present the premier mine in output. On an average width of reef of 5 feet and an average grade of ore of 12 per cent tin, the production averages 580 tons of barrilla a month. The Huanuni mine ranks second, and next on the list of producers are the Choroloque, in a mountain of the same name, and the Aliada mine, in the rich silver district of Colquechaca. A new district, which has received considerable attention, is the Tres Cruces mine of Inquisivi. This mine is situated at an altitude of 17,000 feet, and officials and workmen are difficult to secure.

The Llallagua mine, with a monthly output of 400 tons of barrilla, has passed through some difficulties, owing to extravagance in management, which has, however, been remedied, and more favorable conditions are anticipated.

The tin ore in the majority of Bolivian mines carries a little silver, some of the mines showing a rich, fairly pure tin zone, then a zone of impure tin-silver ore, and lastly a zone of silver ore with but little tin.

The geological features of the country are very regular. South of Oruro the whole country is covered with several hundred feet of a recent—probably Tertiary—acid lava flow; but in several places the underlying Silurian or Devonian sedimentary rocks can be clearly seen. Intruded among the sedimentary rocks and projecting in many cases 1,000 or 2,000 feet above the lava capping are many isolated mountains and ranges of quartz porphyry, the tin-bearing reefs in many instances starting in the porphyry and running into the sedimentary slates, etc., where they change greatly in character.

#### **AUTOMOBILE SERVICE IN THE REPUBLIC.**

"*El Estado*," of La Paz, Bolivia, publishes a decree dated November 13, 1908, authorizing Mr. LUIS CURTCHET to establish and maintain, for a period of ten years, an automobile service for the carriage of goods between the point at present reached by the Central Northern Argentine Railway in La Quiaca and the towns of Uyuni, Tupiza, Potosi, and Sucre. No import duties will be levied on the importation of any material necessary for the establishment and maintenance of the service during the term of the concession.

#### **EXPORT DUTY ON COPPER AND BISMUTH.**

On August 12, 1908, the Congress of Bolivia enacted a law, which was promulgated on November 18 of the same year, providing that the export duties on copper and bismuth concentrates shipped from the Republic should be paid in accordance with the grade of the same and the price of these metals in Europe on the day of shipment from Bolivia. Copper and bismuth ores, not concentrated or treated, are free of duty.

#### **UNIVERSITY AND NEWSPAPER CONGRESSES.**

An appropriation of Bs. 10,000 (\$3,890) has been made by the Bolivian Government to defray the expenses of the university and newspaper congresses, the first of which is to be held in Sucre on May 25, 1909, and the second in La Paz on July 16 of the same year.

#### **STATUS OF TAXES ON COCA.**

A law promulgated December 9, 1908, exempts the coca-producing lands of the Department of Cochabamba, Bolivia, from the *catastral* (relating to the census) tax. The export duty on coca still remains in force.

# BRAZIL

## OPERATION OF TARIFF CONCESSIONS TO UNITED STATES PRODUCTS.

The total imports of goods subject to preferential treatment when coming from the United States are as follows for the years 1907 and 1908:

Articles.	1907.		1908.	
	From all countries.	From United States.	From all countries.	From United States.
Paints.....	\$334,474	\$72,749	\$405,930	\$87,309
Wheat flour.....	9,308,861	1,937,806	8,893,260	1,910,072
Pianos.....	278,086	12,875	345,959	25,246
Condensed milk.....	703,712	22,041	740,615	39,186
Scales.....	97,256	34,065	84,371	36,951
Windmills <sup>a</sup> .....				
Refrigerators <sup>a</sup> .....				
Watches.....	310,918	42,205	221,933	42,061
Clocks.....	144,090	67,202	138,957	84,960
Manufactures of rubber.....	502,725	56,913	426,364	46,184
Typewriters.....	120,359	105,465	128,472	115,624
Total.....	12,000,481	2,351,321	11,385,861	2,387,593

<sup>a</sup> Not specified in returns.

In most of the items covered by the preferential concessions the trade is still so small that its aggregate is not a very material sum in the trade of the two countries concerned. The item of flour is nearly five-sixths of the whole.

### OUTPUT OF PARA RUBBER IN 1908.

A statement prepared by United States Consul GEORGE H. PICKRELL, at Para, fixes the total exports of rubber from his consular district, in 1908, as 37,686,487 kilograms (37,686 tons), as compared with 37,514,152 kilograms in the preceding year.

### THE DOCK SYSTEM OF RIO DE JANEIRO.

The first section of the great dock system at Rio de Janeiro is reported by the United States Consul-General at that port, Mr. GEORGE E. ANDERSON, to be nearing completion. Over a mile of the finished section has been accepted by the Government and 1,312 feet more have been completed. This section includes modern warehouses and all other appliances needful for the economic management of the installation. About \$57,000,000 have been expended in the improvements, including expenditures on the Avenida Central, but on the dock proper, as last reported, the sum of \$41,660,000 had been spent.

At present small vessels are making use of the docks, but further dredging will be required before the larger ships can safely come alongside.

It is intended by the Federal Government to lease the entire system, although formal bids will not be made until further legislation is decided upon in regard to them. The Santos dock lease has been operated with profit by the company obtaining it, being regarded as the most profitable enterprise in South America.

#### FLOATING DOCK AT RIO DE JANEIRO.

In the "*Diario Official*" of March 8 the Government of Brazil, through the Ministry of Public Works, has called for bids for the construction of a great floating dry dock to accommodate war and merchant vessels, and especially the new war ships of the *Dreadnought* type now being constructed in England for the Brazilian Government, the bids to be opened on April 12. The dock is to be of the "self-docking, floating, steel dock" type, capable of receiving vessels of war and merchant vessels of the largest size, "and above all the great war ships of the type of the *Minas Geraes*, which have a length of 543 feet," etc. The dock must have a length of 542 feet, or 500 feet between perpendiculars. It is to have a width of at least 83 feet at the mouth, a depth of 42 feet 3 inches, and a keel length allowance of 428 feet, its measurements thus providing for berthing a vessel with a displacement of 19,295 tons or less.

The dock is to have three compartments formed by transverse sections. When submerged the riders or blocks must be at least 30 feet below the level of the water, while the outside walls of the dock must be at least 8 feet above the level of the water. The dock must be capable of "sustaining 22,000 English tons or 22,352 metric tons;" it must be so equipped that it can be floated with the riders dry in four hours from the beginning of work; it must allow plenty of free working room about vessels of the *Minas Geraes* type; each section must be usable separately and must be equipped with its own pumping system. The whole is to be equipped with electric or hydraulic cranes, windlasses, etc., with electric light and power. In addition to the requirements thus outlined, the Government asks for a modern, finely equipped docking plant, capable of handling the largest ships likely to come to Brazil for some time to come. The contract is to be let, in addition to the specifications outlined, upon (1) the element of time, which in any event must not exceed one year; (2) the matter of price; and (3) all other considerations going to make up the best plant of the sort called for and the one best suited to the uses of the Government.

**NEW BANKRUPTCY LAW.**

The "*Diario Official*" of December 19, 1908, publishes in full the text of the new bankruptcy law of Brazil, approved December 17, 1908.

The law comprises 15 chapters, namely: I. The nature and declaration of bankruptcy. II. The legal effects of the declaration of bankruptcy. III. Officials administering bankruptcy. IV. Collection and holding of the property, books, and papers of the bankrupt. V. Verification and classification of the claims. VI. Meeting of creditors. VII. Creditors' agreement. VIII. Collection of assets and payment of liabilities. IX. Replevin of goods in bankrupt's possession. X. Discharge in bankruptcy. XI. Agreement in avoidance of bankruptcy. XII. Enforcement and effect of foreign bankruptcy decrees. XIII. Frauds in bankruptcy or in the agreement in avoidance of bankruptcy and the respective procedure. XIV. Special provisions. XV. General provisions.

In order that an agreement may be valid, when the dividend offered is more than 60 per cent, it must be accepted by a majority of the creditors, representing at least 60 per cent of the claims; if the dividend is more than 40 per cent, the agreement must be approved by two-thirds of the creditors, representing 75 per cent of the claims; if the dividend is less than 40 per cent, it must have the approval of three-fourths of the creditors, representing at least 80 per cent of the claims. In an agreement in avoidance of bankruptcy the debtor must offer not less than 20 per cent of the value of the claims.

Proceedings in bankruptcy and forced liquidation of stock companies which, prior to the promulgation of this decree have already been begun shall be regulated by the former law, except as regards the agreement, the taking of accounts by the trustees, and bankruptcy discharge, which are subject to the provisions of the present law.

**STATUS OF THE FLOUR MARKET.**

In a report on the Brazilian flour market the United States consul-general at Rio de Janeiro states that the record of flour imports into Brazil in 1908 contains much that is significant to the trade. In line with the record of 1907, as compared with that of the year previous, the record for 1908 shows an increase in imports from "other countries" than the Argentine, the United States, and Austria-Hungary, which means the further development of mills in Uruguay. Indeed, the only increase in the shipments of flour into Brazil in 1908 was from that country and, while the total imports from Uruguay as yet do not amount to much, the growth of the business in that Republic is significant as regards the future.

The record of flour imports in general is also significant for the notable increase in average price for the year on flour for all of the



PRUDENTE DE MORAES SQUARE, BELEM (PARA), BRAZIL.

This park, which is part of the municipal improvements recently undertaken by the authorities, was opened to the public in December, 1905. Climatic conditions are such that but a short time is needed to transform a barren tract into a flowering garden.



BAND STAND ON THE MALECON, HAVANA, CUBA.

The malecon, or sea wall, extends from the northwest bastion of La Punta to the west end of the Prado. Along this entire distance runs a broad promenade, in the center of which is a music stand of classical design. Here it is that the Cubans congregate to enjoy the cool breezes of the evening and listen to the band concerts.



several countries concerned. In the quantity of imports there was a falling off in imports of 19,177 metric tons, or about 11.2 per cent, as compared with the imports of 1907. In values there was a falling off in the imports of \$624,601, or about 6.5 per cent. The general course of the trade in amounts is indicated by the following table of imports covering the past five years, the years covering the larger development of Argentina's trade at the expense of the trade of the United States (in kilos of 2.204 pounds each) :

Year.	Argentina.	United States.	Austria-Hungary.	Other countries.	Total.
	<i>Kilos.</i>	<i>Kilos.</i>	<i>Kilos.</i>	<i>Kilos.</i>	<i>Kilos.</i>
1904.....	86,806,911	30,241,434	9,212,826	4,787,950	131,049,121
1905.....	108,577,803	20,000,484	6,741,582	5,144,546	140,464,415
1906.....	122,282,483	24,526,155	6,334,679	802,690	153,946,007
1907.....	126,379,414	29,542,695	8,034,046	6,296,841	170,252,996
1908.....	112,074,753	25,712,273	6,437,111	6,851,940	151,076,077

The decreases in values are not as great as the decreases in quantities of imports. The decrease in the quantity of imports from the Argentine amounts to about 11.1 per cent, or almost exactly the same as the proportionate falling off for all the flour imports. The decrease in value, however, amounted only to about 9 per cent, the imports of 1907 being valued at \$6,662,757 and in 1908 at \$6,053,854, the difference in values being \$608,903. The decrease in the amount of imports from the United States was about 3,831 metric tons, or about 13 per cent, being the greatest decrease of all countries. The value of these imports in 1908, however, was \$1,910,072, as compared with \$1,937,807 in the preceding year, the decrease in the value being only \$27,735, or about 1.6 per cent, which is the least rate of loss of any of the countries except Uruguay. The value of the imports from Austria-Hungary in 1908 was \$542,297, as compared with \$579,831 in 1907, the loss of trade being \$37,534, or about 6.4 per cent. The value of the imports from all other countries, chiefly Uruguay, in 1908 was \$387,037, as compared with \$328,468 in 1907, a gain of \$56,569, or about 14 per cent. The value of the total imports of flour in Brazil in 1908 was \$8,884,260, as compared with \$9,508,861, a loss of about 6.5 per cent.

#### RESULTS OF PERINI FIBER CULTIVATION.

The announcement several years ago that a plant known as "Perini fiber" had been developed in Brazil, which gave promise of seriously affecting the fiber culture of the world, awakened unusual interest, and resulted in inquiries concerning the plant from every part of the world.

In Brazil the cultivation of the plant has been conducted on a scale large enough to give some reliable figures. The results of the

last year's working, as forwarded by United States Consul-General ANDERSON, from Rio de Janeiro, were obtained from the discoverer of the plant, who states that his company in 1908 had planted an area of 680,000 square yards with the Perini fiber plant. Contracts were also made with planters in the States of Rio de Janeiro, Minas Geraes, and São Paulo, about 1,650,000 square yards being thus planted, making a total area of 2,330,000 square yards cultivated for the fiber. Its quality is such as to make the fiber in demand in all the markets of the world, the quotations for fiber of first quality being at the same price as Italian linen. The jute fabrics made from this fiber have the qualities of linen and hemp, with certain advantages in printing and dyeing. The company has made provisions to utilize the fiber for local uses and all plantations are producing seed.

It has been found impracticable to take more than two crops a year from one planting, instead of the three to four crops expected and actually secured in experimental work. It is expected that this will be changed with the introduction of more modern methods of cultivation. The rate of production given is for finished fiber, and is at the rate of 3,194 pounds per acre per planting of fiber of all grades. Of this amount about 1,300 pounds is of fine fiber and about 1,900 pounds is of coarser fiber.

The prices at which recent sales have been made are at the rate of 16.4 cents per pound for the first grade, 8.7 cents for the second grade, and 5.5 cents for the third grade, or substantially 10 cents per pound for all the fiber grown. At this rate the earnings per acre amount to about \$320 for each planting.

During the past two years the Brazilian company has raised crops and sold the product. It has also secured patents upon and made preparation for the cultivation of the plant in most countries in which it can be raised, including the United States. In the United States the development of the industry was placed in control of a private company, and one reason detailed results of experiments have not been obtainable is due to the fact that the American concern was making experiments with the plant in Texas. While it is announced that the plant has been successfully grown in Texas, no details of such growth or information as to whether or not the plant has proved to be a commercial success have been given out.

#### REPORT OF THE BANK OF BRAZIL FOR 1908.

The total operations of the Banco do Brasil for the year ending December 31, 1908, amounted to 345,141,458 milreis (\$172,570,729), as against 274,268,013 milreis (\$123,634,006) in 1907, which shows an increase of 70,873,444 milreis (\$35,436,722).

The amount of the reserve fund on December 31, 1908, was 1,081,902 milreis, having been increased during the year by 668,014 milreis.

Out of the net revenues, which amounted to 5,410,105 milreis, the bank paid a dividend of 8 milreis per share during the first half of the year, and another of 9 milreis per share during the second half, which left a surplus of 1,424,357 milreis to be carried forward.

The net revenues in 1908 show an increase of more than 67 per cent over those for 1907. The shares of the bank are now quoted at 197 milreis.

#### PARTICIPATION IN HEALTH CONGRESS.

Mr. JOAQUIM NABUCO, ambassador from Brazil, has addressed the following note to the United States Government inviting participation in the Congress and Exposition of Hygiene to be held in Brazil during the summer of 1909:

I have the honor to transmit, in conformity with instructions just received from Rio de Janeiro, the invitation of the Brazilian Government to the United States Government to participate in the fourth Latin-American Medical Congress to be held in Rio de Janeiro from the 1st to the 9th of August, and also in the International Exposition of Hygiene that will take place in the same city from the 1st to the 30th of September, in conjunction with the same congress.

The Brazilian Government hopes the United States will render to the progress of medical science in our continent the great service of being represented in that meeting and in that exhibition.

#### THE MANUFACTURE OF TEXTILES.

Textile manufacture in Brazil is subject to a so-called "consumption tax," collected by affixing a revenue stamp to each bundle of cloth as it is manufactured and prepared for the market.

The city of Rio de Janeiro during 1908 yielded over \$500,000 to this tax, collected on a total output from the mills of the federal district of 91,802,037 yards.

United States Consul-General ANDERSON reports in this connection that as a rule the cotton factories in Brazil, especially in the neighborhood of large cities, carry on the most prosperous business enterprises of the country, but at present some of the smaller concerns are suffering from overproduction.

#### EXPORTS OF NUTS.

Total shipment of nuts from Brazil are reported by United States Consul-General ANDERSON, at Rio de Janeiro, to have amounted to 480,602 bushels, valued at \$1,121,278, in 1908, as compared with 512,237 bushels, worth \$1,219,778, in the preceding year.

The United States received 255,310 bushels, England ranking next with 195,332, the remainder being shipped to the continent of Europe. Manaos, Itacoatiara, and Para are the principal distributing points, the last named being the most important port of shipment, the whole of the trade being confined practically to the Amazon district.

**LEASE OF THE MADEIRA-MAMORÉ RAILWAY.**

The company which is building the Madeira-Mamoré Railway has obtained from the Brazilian Government a sixty years' lease of this line, beginning with January, 1912. The line will be turned over to the company in sections as soon as they are completed. The first section extends from the port of Santo Antonio on the Madeira River to Jaey Parana station. During the tenure of the lease the company will be exempt from all state or municipal taxes, and will have the right to import free of duty railway material, and to disappropriate lands along the route of the line which may be necessary.

**MISCELLANEOUS NOTES.**

A company known as the "Alves Braga Rubber Estates and Trading Company" (Limited), has recently been incorporated in Liverpool, with the object of engaging in the cultivation, manufacture, and exportation of rubber in Brazil and Bolivia. The company will be associated with the "Alves Braga Company," of Belem, Para.

The Government of the State of São Paulo has granted a twenty years' concession to CHARLES E. GIDDINGS to engage in gold-mining operations in the bed of the Ribeiro de Ignape River, between the city of Xiririca and the mouth of the Pardo River.

It is reported that a representative of European capitalists is in negotiation with the administration of the State of São Paulo for the purpose of organizing the agricultural bank, authorized by this State, and which enjoys a State guaranty of 6 per cent on a maximum capital of £2,000,000.

An executive decree of the Brazilian Government dated March 11, 1909, fixes the percentage of toxic impurities allowed in imported cognacs at 5 grams per 1,000 grams of 100° alcohol, or 2.50 grams per 1,000 grams of 50° alcohol.

# CHILE

## STATUS OF THE NITRATE INDUSTRY.

As a result of the agreement reached on March 29, 1909, the nitrate combination (*Asociación Salitrera de Propaganda*) which has for many years controlled the output of Chilean nitrate, ceased to exist on March 31, following.

The United States Consul at Iquique, Mr. REA HANNA, states that until a new combination is formed there will be unlimited production and exploitation by the several *oficinas*, the association continuing, however, to act as an advertising medium and as a statistical department for the industry.

The present condition is desired by many of the producers who possess rich lands and whose cost of production is low, and the general opinion is that the nitrate market will suffer only a temporary fluctuation.

Figures issued by the association show the production of nitrate during the year 1908 to have been 42,847,267 quintals of 101 pounds each, and exports 44,587,177 quintals, while the world's consumption is given as 39,923,489 quintals.

On March 9, 1909, the Chilean Treasury Department appointed a commission of nine nitrate experts, whose duties are to furnish the Government with the information the latter may request concerning the nitrate industry and the questions relating thereto. The following are some of the questions with which the commission will have to deal: Nitrate propaganda at home and abroad; production and purification of nitrate; centralization of nitrate sales; estimated quantity of nitrate on hand, and the relation of similar fertilizers to nitrate, etc.

### FAST STEAMSHIP LINE FROM VALPARAISO TO PANAMA.

The Government of Chile has contracted with the Pacific Steamship Navigation Company and the South American Steamship Company, under the designation of the "Combined Companies," for the maintenance of rapid steamship communication between Valparaiso and Panama. A fortnightly service has been inaugurated, and the time required in making the voyage between the two ports is not to exceed twelve days.

The Combined Companies have the privilege of transferring passengers and correspondence at Callao, Peru, and of continuing the journey from the latter port direct to Panama. Printed time tables showing the ports of call must be submitted by the Combined Companies to the Government for approval. The contract will remain in force for one year from March 1, 1909, and may be continued in-

definitely at the option of the parties in interest, provided always that Congress appropriates sufficient funds for the payment in monthly installments of the annual subvention of £20,000.

This new service will enable the trip to be made from Valparaiso, Chile, via Panama, to New York, and vice versa, in eighteen days—that is to say, twelve days from Valparaiso to Panama and six days from Panama to New York.

#### COMMERCIAL INSTITUTE, VALPARAISO.

The "*Mercurio*" of Valparaiso in a recent article on the Commercial Institute of that city, now under the able management of Prof. J. A. BENET, states that this important educational institution has been enlarged and specially fitted up for day and night courses in the commercial branches, and that it is now one of the most complete and best equipped schools of its kind in Chile. In 1908 there was an average attendance of 276. The school edifice at the present time has ample accommodation for 300 scholars. A sample room of commercial products and a model bank or commercial bureau are the new features of the institution for the present scholastic year.

#### ABROGATION OF VALPARAISO HARBOR CONTRACT.

The contract made by President MONTT with a French company for the construction of extensive improvements in the harbor of Valparaiso, to cost \$19,466,000, subject to the approval of Congress within six months, has been annulled, as the Chilean Congress refused to indorse the President's action. United States Minister Hicks reports that it is quite likely, however, that an attempt will be made to renew the contract and get Congress to indorse it at the next session, which begins in June.

#### NEW INDUSTRIAL COMPANIES.

The "*Diario Oficial*," of Chile, dated December 15, publishes a decree authorizing the formation of a company called the *Sociedad Anónima Importadora y Exportadora de la Patagonia*. This company, which will be domiciled in Punta Arenas, will have a capital of £180,000, and is empowered to engage in general trading, agency business, financial and banking business, the working of mines, the establishment of a steamboat service, etc. The duration of the contract is for twenty years as from June 30, 1908.

The "*Diario Oficial*" of December 16, 1908, contains a decree authorizing the establishment in Santiago of a company called the *Sociedad Carbonífera de Boca Lebu*, which will have for its object the taking over and working of the coal mines purchased by Mr. JUAN B. DUHART in Boca Lebu and in Coihuerche. The capital of the company will be ₡200,000 (about \$75,000) and the contract will be for forty years from the date of the ratification of the statutes.



# COLOMBIA

## FINANCIAL ADMINISTRATION.

The report of the superintendent of revenues of the Colombian Government, Señor LINHO DE POMBO, covering the year 1907, furnishes valuable information concerning the administration of national finances and shows satisfactory gains in nearly all departments as compared with previously issued estimates.

Receipts from all sources, which had been estimated for the year at \$15,744,583, actually amounted to \$16,053,750.97, showing an apparent surplus of \$309,167.97. As, however, expenditures amounted to \$15,992,863, a sum in excess of the original estimate, the actual surplus was reduced to \$60,887.97.

Customs receipts are given as \$7,121,874.37, receipts from this source during the first half of 1908 being \$3,370,401. The bulk of these sums is collected on imports, on which, in 1907, the collections amounted to \$6,966,652.73, and in the first six months of 1908, to \$3,210,099.52.

Gross revenues from the salt mines under government exploitation and from marine salt were \$1,153,019.47, the net revenues from both aggregating \$705,284.95.

For the first six months of 1908 the mines yielded \$321,081.60. The most important of these mines are situated at Zipaquirá, about 30 miles to the north of Bogotá, in which the old development methods are followed. The salt obtained from sea water is under the administration of the Central Bank, which receives 5 per cent of the net receipts.

The receipts from the stamp tax, which is administered by the Central Bank, amounted to \$409,564.04 gross, the cost of collection, including the bank's commission, amounting to nearly 9½ per cent.

On posts and telegraphs receipts were \$335,644.57, the expenses of exploitation being \$889,076.35, a deficit of \$553,431.78 being the result of the year's operations.

The consular fees levied in the Colombian consulates abroad in connection with the issue of invoices, and concerning which there have been many complaints, yielded \$498,029.49.

The emerald mines of Muzo and Coscuez, which are the property of the Government and are administered by a syndicate, yielded \$371,301.10 to the government revenues, and fees in respect of private

mines produced \$20,740.63, making a total from this source of \$392,041.73.

From licenses and trade-marks fees to the amount of \$514.60 were received, and from public buildings in Bogota and elsewhere \$17,338.77. The alligator fishery is let for \$1,250 yearly.

The monopoly of the production and sale of liquors by the Government was introduced in 1905, and the transfer of its administration to the Government is under consideration. This monopoly produced \$2,095,001.21 in 1907.

The tax on cigarettes yielded \$517,534.89 and the tobacco excise tax \$749,376.07. This latter tax has recently been diminished by one-third, as it was found to be a discouragement to the cultivation of tobacco in certain districts where the manufacture is an important industry.

From matches \$233,850.69 were received and from hides \$1,489,237.64. The hide monopoly was abolished in the early part of 1908 and replaced by a slaughter tax on cattle of \$2.50 for every ox and \$3 for every cow.

From the Sabana Railway, the only state-owned line in the Republic, and administered by the Central Bank, the excess of receipts over expenditures for 1907 was \$113,649.83, of which the Government received \$106,964.05, of which sum \$77,769.65 was paid into the exchequer and \$29,194.40 applied to the purchase of new material.

Collections from certain specified sources to be applied to combating leprosy in the Republic amounted to \$104,647.71, and the 2 per cent tax on import and export dues applied to a campaign against locusts yielded \$142,437.48.

Arrears of taxation were received in the amount of \$409,518.43, and miscellaneous receipts aggregated \$166,940.11. In regard to light and tonnage dues, for which the receipts in 1907 were \$138,133.04, the light-houses were erected and worked by private companies paying the above sum in yearly rents to the government.

According to official reports, the floating debt of Colombia at the end of the last fiscal year was \$3,063,012, to which must be added a government guarantee of 5.5 per cent on \$690,000 in bonds of the Puerto Wilches Railway, interest secured on 5 per cent of the customs duties collected at the Atlantic ports and a government guarantee of 6 per cent interest on \$2,225,000 in debentures of the Colombian National Railway, interest secured on 4 per cent of the customs receipts of the Republic. In addition to this floating debt, there is a so-called consolidated internal debt consisting of payments due various denominational (religious) schools and other institutions by agreement of the Government. The foreign debt is \$13,500,000, bearing 3 per cent interest, payment of which is secured by 15 per cent of



the customs receipts of the Republic under the Avebury-Holguin agreement of the council of foreign bondholders. To this must be added \$526,500 arrears of interest on the foreign debt, to be paid in cash on the termination of negotiations with the United States, whereby Colombia should receive certain moneys from them. To this also must be added \$935,600 in 5 per cent interest-bearing bonds of the Sabana Railway, secured by its profits, constituting part of the foreign debt. To the payment of these debts and their interest, to the redemption of "vales de extranjeros," and subvention of railways and other similar expenditures, were applied, in the year 1907, about 28 per cent of the receipts of import duties.

#### NEW NAVIGATION SERVICE ON THE MAGDALENA.

In addition to the two companies engaged in the service of navigation on the Magdalena River, United States Consul MANNING reports from Cartagena that another company, operating under the name *Compañía Antioqueña de Transportes*, has been organized. It will enjoy all the rights and privileges accorded to the two older companies, with the exception of the mail-carrying contract and its attendant subsidy.

The company is capitalized at \$300,000, of which 90 per cent was subscribed in Medellín and the remainder in Bogota, Barranquilla, and Manizales.

The inauguration of the increased service is regarded as a further evidence of the business prosperity which signalized the conditions in Colombia during 1908, as it is practically a resumption of operations which were suspended four years ago, when the river traffic did not seem sufficient to warrant three companies over the same route.

The other two companies are the "Louis Goeseken Navigation Enterprise" and the "Magdalena River Steamboat Company (Limited)," having fleets of 21 and 15 steamers, respectively, besides smaller craft, such as lighters and barges.

#### REVENUES FOR SECOND HALF OF 1908.

The February Bulletin of "*Las Rentas Reorganizadas*," published in Bogota, Colombia, for February, 1909, gives the government revenues collected through the Central Bank during the last six months of 1908 as \$3,469,726.13.

#### MUNICIPAL IMPROVEMENTS AT BOGOTA.

Concerning the light and water supply of the capital of Colombia and the proposed erection of a new electric plant to meet its requirements, United States Consul-General JAY WHITE states that it is proposed to erect the new plant on a private estate, about 3 miles

from Bogota and 656 feet above the level of the city. This estate, of 1,900 acres, is intersected by four streams, which form part of the headwaters of the Rio Cristobal. These streams, having running water even in the driest seasons, can give the city a sufficient supply of water and electric light enough not only sufficient to meet street and house demands, but power enough, during the day, to run small motors, etc., the demand for which is rapidly increasing. The present plant has its power station 20 miles from the city.

The city could be well lighted with 250 arc lights or with 25 arc lamps and 1,000 25-candlepower incandescent lamps. The cost for the installation of these systems is estimated as follows: The all-arc-lamp system, about \$47,000; the arc and incandescent system, about \$42,000.

It is said that the Government offers about \$25,000 per annum for lighting the streets. In addition to the offer of the Government for street lighting, it is estimated that a yearly income of \$10,000 would be derived from renting power to private parties. Deducting the working expenses, this would leave an annual net revenue of over \$24,000.

To arrive at a close estimate for supplying sufficient water for the city it would be necessary to make a thorough survey in the vicinity of the ground where the stream passes through a narrow rock canyon and thence along the route of the mains to a position suitable for the filtering beds and tanks.



#### MODIFICATION OF CUSTOMS TARIFF.

Executive orders of April 16 and 17, 1909, modify the customs tariff as follows:

Imports of potatoes, garden stuffs, and vegetables will pay duty at the rate of \$0.25 of a *colon* (\$0.1165) per kilogram. Imports of unwrought cardboard shoe points, used to give form and shape to shoes, as well as eyelets, shoestrings, elastic cloth, etc., and all articles constituting unwrought parts of shoes, and which neither interfere with the domestic manufacture of shoes nor the consumption of leather in the country, are dutiable in conformity with order No. 27 of September 17, 1901.

**EXPLOSIVES FOR INDUSTRIAL PURPOSES.**

The contract which the Standard Explosive Company (Limited), of Wilmington, Delaware, made with the Government of Costa Rica on April 6, 1906, and which expired on the 6th of the same month of the present year, has been extended, subject to the approval of Congress, for a period of three years from April 6, 1909. The contract



A VIEW OF THE NATIONAL PARK, SAN JOSE, COSTA RICA.

referred to permits the company to import explosives used for industrial purposes and to maintain a depot for the same in the Republic.

**FREE IMPORTATION OF CORN AND BLACK BEANS.**

The President of Costa Rica, in exercise of the power conferred upon him by section 4 of article 94 of the Constitution, decreed, on April 17, 1909, the free importation of corn and black beans until August 31 of the present year.



## MESSAGE OF THE PRESIDENT.

On April 5, 1909, on the occasion of the assembling of the Congress, the President of the Republic of Cuba delivered an interesting message to that body, in which he expressed his faith in the loyalty of the Cuban people and discussed in a clear and able manner the principal questions now confronting the nation.

In touching upon the general welfare of the island, the Executive stated that the capital cities of the Republic are active in the construction of buildings, the making of improvements and extensions, the encouragement of agriculture, and the building of public roads and bridges. He called attention to the fact that the fertility of the Cuban soil is a gift of Providence and the source of an inexhaustible fountain of riches when easy access is had thereto by means of cheap and rapid transportation facilities. The roads, railways, and water highways are powerful auxiliaries in successfully solving the problems of the country. At present only about 10 per cent of the territory of the island is under cultivation, and the rest awaits development at the hands of the agriculturists.

The President expressed his earnest desire that a new commercial treaty be made with the United States in a manner mutually beneficial to the interests of both countries, and in this view the Executive is supported by the principal business organizations of the island.

The President requests Congress to study the matter of the payment of the principal of the bonds issued by the revolutionary government in 1896 and 1897 in order to find the proper solution of this problem.

President GOMEZ reported the condition of the national treasury as fairly satisfactory, the balance on hand on March 27 being \$2,515,363, with obligations amounting to \$12,856,000, including credits authorized under preceding administrations. He expresses full confidence that customs receipts will provide sufficient revenue to cover these obligations without recourse to the bond issue authorized by the provisional government.

An urgent plea is made for a new commercial treaty with the United States, and a reduction of import duties on certain necessities of life and on machinery, especially for agricultural purposes, is favored.

### COMMUNICATION FACILITIES IN THE REPUBLIC.

The signing of a presidential decree in March, 1909, for the payment of a subsidy of \$6,000 per kilometer by the Government of Cuba

to the Cuba Railroad Company for the extension of the line to be built from Marti southeast to Bayamo, thence east to Jiguani, Baire, and Palma Soriano, with a branch from Bayamo to Manzanillo, is in line with the purpose to provide adequate communication facilities in the island.

The extension of the Cuba Railway will be in all about 155 miles, for which a subsidy of \$1,500,000 has been accorded, and will open up a fertile territory.

To June 30, 1908, there existed 1,015.72 kilometers, or approximately 631 miles, of railways in Cuba, while bridges numbered 140. The amount expended by the Provisional Government in the construction of macadamized roads is stated by President Gomez in a recently delivered message to have been \$9,448,170.52, and to terminate the 589 kilometers, or approximately 300 miles, under construction will require an additional outlay of \$1,500,000. Of the bridges, 57 are steel structures and 12 concrete.

#### PROPOSED IMPROVEMENTS AT HAVANA.

In the message delivered by President Gomez to the National Congress of Cuba on April 21, 1909, elaborate improvements in Havana, whose estimated cost will be about \$6,500,000, are proposed.

The items covered in the plan include a presidential palace, \$1,300,000; a congressional building, \$1,400,000; a palace of justice, \$600,000; buildings for the departments of state, justice, interior, public instruction, public works, and sanitation at a cost of \$400,000 each; a provincial institute and school, \$300,000; a jail, \$300,000; and an appropriation of \$200,000 to make the present building devoted to the department of education available for the department of posts and telegraph.

It is designed to erect these buildings on the Villanueva Station property of the United Railways and on adjacent city property. From the sale of the old buildings at present occupying the site it is estimated that \$3,500,000 may be procured, so that the net cost to the Government is given as about \$3,000,000.

#### FOREIGN CAPITAL IN THE REPUBLIC.

The Review, "*Boletín Oficial de la Cámara de Comercio, Industria y Navegación*," is authority for the statement that the total amount of American capital invested in Cuba aggregates \$141,000,000, distributed as follows: In railways, \$34,000,000; sugar and tobacco, \$68,000,000; real estate, \$18,000,000; small agricultural industries, \$4,000,000; banks, \$5,000,000; navigation companies, \$1,500,000; mortgages, \$3,500,000; and miscellaneous investments, \$7,000,000. The English capital invested in the island amounts to \$90,000,000, \$5,000,000 of which is in steamships and \$5,000,000 in real estate.

# DOMINICAN REPUBLIC

## REPORT OF SECRETARY OF FOREIGN RELATIONS.

The "*Gaceta Oficial*" of April 7, 1909, publishes an interesting report made by the Dominican Secretary of Foreign Relations to the President of the Republic, in which it is stated that at the present time the diplomatic service of the Dominican Republic consists of ten legations, four of which are now occupied, namely: The United States, Haiti, Cuba, and Germany. The Secretary of Foreign Relations recommends that France, Germany, and Italy be combined under the direction of a single minister and the appointment of a chargé d'affaires near the Government of Spain.

Owing to the increasing commercial relations with Panama and Central America, the secretary suggests that the legation at Caracas, Venezuela, be transferred to Panama, and that the legation at Guatemala be intrusted with the representation of the Dominican Republic for all of the Republics of Central America, and that a legation be established in Bogota, Colombia. The consular service of the Republic consists of 25 consuls-general and 151 consular representatives of lower grades.

The secretary calls attention to the fact that the natural market of the Dominican Republic is the United States, but observes that trade in sugar and tobacco is at present hampered by the operation of the tariff, for which reason a large part of those products are sent to Europe. The same observations apply to cacao and coffee.

Referring to the treaty of extradition between the Dominican Republic and Cuba, the secretary mentions that the same continues in successful operation, and cites a number of instances in which the Dominican Republic has made use of this treaty in the extradition of such citizens as have rendered themselves liable to the effects of its provisions. The American minister resident in Santo Domingo has proposed the celebration of a treaty of extradition with the United States, and the matter is under consideration by the representatives of the two Governments.



PRIVATE RESIDENCE, QUITO, ECUADOR.

The capital of the Republic, although situated on the equator, enjoys a climate approaching that of continental spring. It is embellished with many handsome private residences.



HIGHWAY FROM TEGUCIGALPA TO SAN LORENZO, HONDURAS.  
This road, recently completed, is one of the best highways of the Republic.





# ECUADOR

## SCHEDULE OF TELEGRAPH CHARGES.

According to "*El Telégrafo*," of Guayaquil, Ecuador, on and after April 1, 1909, the charge for telegraphing over the state telegraph lines was fixed at 3 centavos a word, provided the messages are sent in the Spanish language, double that rate if in a foreign language, and triple that rate for coded messages, no charge being made for the date and address. The charges to the press are one-third the aforesaid rates.

## RAILWAY FROM HUIGRA TO CUENCA.

The construction of the railway from Huigra to Cuenca, Ecuador, contracted for by Mr. EDWARD MORLEY, is, according to the "*Diario del Ecuador*," still in its preliminary stage, the contractor not having been able to proceed with the work owing to the fall of Ecuadorian securities in the markets of the world. Because of this unforeseen circumstance, the contractor has requested a modification of the contract on the part of the Government, with the object of removing the difficulties encountered in building the line, and in order to enable him to proceed at once with the work of construction. The Government has taken the modifications of the contractor under consideration, and it is hoped that a decision will be reached that will be equitable to all the parties in interest, and that active construction may soon commence on this important railway.



# GUATEMALA

## RATIFICATION OF CONVENTIONS OF THE THIRD PAN-AMERICAN CONFERENCE.

The Government of Guatemala ratified on February 15, 1909, the following conventions adopted by the Third International Conference of American States, held in Rio de Janeiro in 1906: Convention establishing the status of naturalized citizens who again take up their residence in the country of their origin; convention on international law, and the convention on patents of invention, drawings and industrial models, trade-marks, and literary and artistic property.



# HAITI

## RAILWAY AND INDUSTRIAL CONCESSIONS.

United States Consul JOHN B. TERRES, of Port-au-Prince, reports at length on the concessions granted in Haiti, and the need of foreign capital to advance the work already started. He states that the Plain-Cul-de-Sac Railroad Company has four concessions that hold out promises of reward if the grants can be properly developed. The first of these is a fifty-year franchise for street tramways in the city of Port-au-Prince. On this concession  $6\frac{1}{2}$  miles of track have been put down and cars are run on a fifteen-minute schedule. The line is well patronized and will develop into a remunerative enterprise. With the restoration of the country's currency upon a stable basis this franchise will become a valuable property. The material for the equipment and maintenance of this tramway is purchased in the United States.

The second concession is for a railroad extending northward from Port-au-Prince through the plains of the Cul-de-Sac to the lakes, a distance of 27 miles. This line has been completed and is in operation, with every promise of becoming a valuable property to its owners as well as a great stimulus to the development of the region through which it passes. A plan is on foot to rebuild the large reservoir in the plain, which in former years irrigated that entire section during the dry season. With the reestablishment of irrigation agriculture will regain its former productiveness, and then the railroad will be taxed to its utmost to carry the freight to the city.

The third concession is also for a railroad which is to be built from Port-au-Prince to Leogane, a distance of 22 miles through one of the richest agricultural sections of the island. About one-third of this line has been completed. Good returns are confidently looked for as soon as the line is put into operation. The other concession held by this company is for a copper mine which shows signs of large deposits of a high-grade ore. The company is also developing a manganese mine located on its concession.

The Plain-Cul-de-Sac Company is composed of five or six members, two of whom are Americans, and a considerable part of the sums invested in these various enterprises is American capital. The company has a representative house in New York, where the president, an American, is now endeavoring to effect a reorganization of the company on a stronger financial basis for the purpose of more fully exploiting these properties.

Concessions have been granted: (1) For a railroad from Port-au-Prince to Petionville, a summer resort about 10 miles from the city and up in the mountains; (2) for construction of wharves at Port-au-Prince, Cape Haiti, and St. Marc; (3) for the erection, by parties of Port-au-Prince, of a paper factory, with workshop for printing, bookbinding, etc., attached; (4) for electric-light plants at Port-au-Prince, Cape Haiti, Port de Paix, Aux Cayes, and Jeremie. Practically nothing has been done toward developing this group of concessions for want of capital.

Concessions, which have been transferred to an American company, have been granted for two railroads. One of these is to run from the city of Gonaives on the coast to the town of Hinche, about 70 miles in the interior, near the Dominican frontier, with a branch line of 20 miles running to the village of Gros Morne. The other concession is for a line running from Cape Haiti on the northern coast and passing through the interior of the island at a short distance from the Dominican frontier and connecting with the first-mentioned road at Hinche. From the latter place it passes through the plains of l'Archaie to Port-au-Prince, a total distance of 200 miles. On this trunk line, between Cape Haiti and the town of Grande Riviere, a line will branch off to Ouanaminthe on the Dominican boundary, passing through the rich plains of the northern portion of the island.

On the first of these lines, from Gonaives to Hinche, about 15 miles have been finished and trains are run, while on the trunk line from the Cape of Haiti to Port-au-Prince 20 miles are completed and in operation, and surveys are being made for the rest of the line. This company has a guaranty from the Government of 6 per cent per annum on the estimated cost, \$15,000 per kilometer (kilometer=0.62 mile), of the road when completed and in operation.

Concessions have been granted for two copper and gold mines at St. Michael de l'Atelaye, and for coal mines at Maissade and Hinche. The copper and coal mines are along the route of the proposed railroad, and have been sufficiently developed to give promise of becoming valuable property.

Nearly all these concessions, the most promising ones, perhaps, ever granted by the Republic of Haiti, are now the property of corporations which are controlled by an American company.

# HONDURAS

## CONCESSION FOR RAILROAD FROM TRUJILLO BAY TO JUTICALPA.

The Government of Honduras granted a concession on February 15, 1909, to Dr. JAMES P. HENDERSON for the construction of a railroad from a point on Trujillo Bay, or Guaimoreto Lagoon, to Juticalpa, with a branch line to Tegucigalpa. The line is to be a wide-gauge road, and construction is to begin not later than August of the present year.

According to the terms of the concession, the concessionaire is to receive alternate lots of 500 hectares (1,235 acres) of public lands for each kilometer of railroad constructed, and the Government agrees not to sell the public lands situated in the strip of territory 10 kilometers (6.2 miles) on each side of the railroad for a period of three years from the date of the granting of the concession. If for any reason the concession should lapse, persons acquiring lands thereunder may perfect their titles in conformity with the agrarian law of the Republic.

The concessionaire has the right to the free use of national timber in the construction of the road and the use of water in the adjacent streams for motive power. The materials required in the construction and equipment of the railroad may be imported free of duty and laborers for construction purposes, with the exception of Chinese, may be freely brought into the country.

## CABINET AND DYE WOODS ON GOVERNMENT LANDS.

The law of March 4, 1909, concerning cabinet woods and useful trees on government lands, promulgated by the President of Honduras on the 20th of the same month, reserves to the State the ownership of cedar, mahogany, ebony, walnut, and other fine woods exported from the Republic, as well as rubber, balsam, liquidambar, medlar trees, and all trees producing dyes, gums, or resins. Concessions made by the Executive under the powers granted him by the mining code, the agrarian and agricultural and other laws, or concessions or contracts made by the legislative power, do not include the ownership of the aforesaid precious woods and useful trees. Persons desiring to exploit these products on the government lands of the Republic must describe in detail the land to be exploited and the number of trees it contains, and after their statements have been verified by the Government special arrangements must be made for the exploitation of the property, and permission must be obtained by competitive bids in the open market.

## ENCOURAGEMENT OF AGRICULTURE.

On January 29, 1909, the Secretary of Agriculture made an interesting report to the Congress of Honduras, in which he stated that for the purpose of encouraging the development of the agricultural resources of the country a new bureau had been established under date of March 2, 1908, for the purpose of giving careful attention to the extension and development of all branches of the agricultural industry.

Touching upon some of the most important agricultural products of the country, special attention was called to the tobacco industry and of the favorable results that could be derived from the proper and careful cultivation of that crop, so greatly in demand at high prices both at home and abroad, and to the adaptability of the soil of Honduras for the raising of the highest quality of tobacco. All the conditions being favorable for the development of this industry in the Republic, the Government decided to found a school in the district of Danli to teach the most approved and scientific methods at present in use in the cultivation of this product. This school was placed under the direction of Mr. ANTONIO BERNAL BRITO, an able agriculturist, who had had several years' experience as a tobacco planter in Cuba, and the instruction imparted by him has given a considerable impetus to tobacco raising in the Republic, and the outlook is most promising at the present time in this particular branch of agriculture.

Regarding the cultivation of coffee, the Secretary believes that the lack of good roads has prevented the extension of this industry. In order to encourage its development, about eleven years ago the exports of coffee were made free of export duties for a period of ten years. It was recommended that this period of time be extended, and the President of the Republic, in exercise of the power conferred upon him by the agricultural law of 1895, decreed, under date of April 28, 1908, that exports of coffee should not be subject to an export duty for a period of ten years from May 1, 1908. This wise measure, it is hoped, will greatly increase within the next few years the area of coffee now under cultivation.

Attention is called to an important contract made by the Government on April 21, 1908, with ANDRES CORTES MELGARES, for the exploitation of Peruvian balsam in the Department of Cortes, in a zone contiguous to the Chamelecon River comprising an area of about 4,500 hectares (111,195 acres). Before the MELGARES concession was granted the extract and export of balsam was open to anyone without the payment of a tax or duty to the State, but under the terms of the concession referred to, balsam extracted is subject to a tax of 10 *centavos* per pound, plus such export duty as may in future be levied.

A government official recently sent a flask of balsam extracted from the area covered by the MELGARES concession to the department of agriculture, and this balsam was found to be equal in quality to the best balsam of Peru or Salvador.

At the present time wheat flour is imported into Honduras in considerable quantities. Wheat grows in many parts of the Republic, and in order to encourage the raising of this cereal, concessions were granted in 1908 to THOMAS W. TROY and DANIEL FORTIN, authorizing them to grow wheat on a large scale and to erect flour mills in different parts of the country.

In 1908 a concession was granted to Mr. COE for the use of 10,000 hectares (24,710 acres) of land for the establishment of a large banana plantation near the Ulua River. Mr. COE failed to make the deposit called for under the terms of the concession, and a forfeiture resulted. Mr. ALLEN C. BRUNER requested that the concession be granted to him, which was done, with slight modifications, and the latter gentleman has taken steps to engage in the cultivation of bananas, on a large scale, on the lands comprised in the concession.

#### PUBLIC INSTRUCTION.

An interesting report made by the Minister of Public Instruction to the National Congress of Honduras on January 28, 1909, states that in 1908 there were 648 schools devoted to primary instruction; in May, 1907, there were 775 schools in the Republic, 720 of which were public schools. The number of teachers employed in these schools was 912, and the average attendance 47,000 pupils, of both sexes. The school census of the Republic shows that there were 109,353 children of scholastic age in Honduras in 1908. During the year referred to there were 105 graduates of higher institutions of learning employed in the Republic. Of the 739 buildings in use in 1908 for primary schools, 555 belonged to the municipality and 184 were leased.

In 1907, on the recommendation of the President of the Republic, a mixed school for small children was established in the capital. The matriculation in this school in 1908 was 212 pupils, of which 122 were in the infant grades. The state supports this school at a cost of Ps. 530 (\$199) per month.

The two normal schools—one for males and one for females—are well patronized. The monthly cost of maintenance of the normal school for males in 1908 was Ps. 4,500 (\$1,687). This school, which was founded in 1907, had, on July 31, 1908, graduated 36 teachers, who are now teaching in the Republic. The normal school for females has graduated 39 teachers, all of whom are rendering excellent service in the cause of public instruction. The monthly cost of this insti-

tution to the state is Ps. 2,014 (\$755). The normal schools provide 102 scholarships for males and 54 for females.

The National Institute is an important school supported by the Government at a monthly cost of Ps. 2,330 (\$874).

During the period covered by the minister's report public instruction in the professions was only given in the university in the branches of jurisprudence and political science.

The cost of public instruction to the state in the year 1906-7 was Ps. 66,109.50 (\$24,791), and in 1907-8, Ps. 214,754 (\$80,533).

The number of classified works in the National Library in Tegucigalpa is 3,754 in 6,295 volumes, and the unclassified books, pamphlets, and reviews in the same institution numbered 6,961.

#### MODIFICATIONS IN THE CUSTOMS TARIFF.

The Congress of Honduras, under date of February 12, 1909, reduced the rates of the present customs tariff 20 per cent on imports of cotton goods known as drill, domestic, calico, and lawns or madapollam. This reduction will remain in force one year from April 5, 1909, and may be extended for a longer period at the option of the President of the Republic.

#### WATER AND ELECTRIC LIGHT AND POWER CONTRACT.

"*La Gaceta*" of March 24, 1909, publishes a contract which JULIO VILLARS proposes to make with the Federal Government for uniting the water in the La Tigra and Jutiapa canyons, near Tegucigalpa, for the purpose of bringing it to the latter city for public consumption and in order to generate electricity to be used as motive power and for electric lights in the capital of the Republic. The plan embraces the delivery of potable water to all the buildings in Tegucigalpa whose owners may desire the water service. The proposed contract requires the sanction of the Congress.

#### RATIFICATION OF TREATY OF COMMERCE AND AMITY WITH MEXICO.

The Department of Foreign Relations of Mexico has notified the Minister Resident of that Republic in Honduras that the treaty of amity and commerce made between Mexico and Honduras at the beginning of 1908 was ratified by the Mexican Congress in May of the same year.



#### RATES FOR COAL TRANSPORT.

In accordance with the terms of a circular issued by the Mexican Minister of Communications and Public Works, the rate charged for the transport of imported coal and coke over the National Railways is to be \$1 silver per ton in excess of that charged by the great merger system for the native product.

The ports of entry specified in the circular are Veracruz, Tampico, and Laredo, whence the coal and coke is transported to Mexico City and all intermediate points over the Mexican Central, the Mexican National, the Mexican International, and the Interoceanic.

The regulation does not include the importations of fuel via El Paso.

#### DISCOVERY OF HIGH-GRADE OIL.

What is said to be the highest gravity oil product in the Republic, and possibly the finest in America, is reported by the "Mexican Herald" to have been struck in the State of Tabasco in a PEARSON oil field at Sarlat, about 160 miles from Frontera.

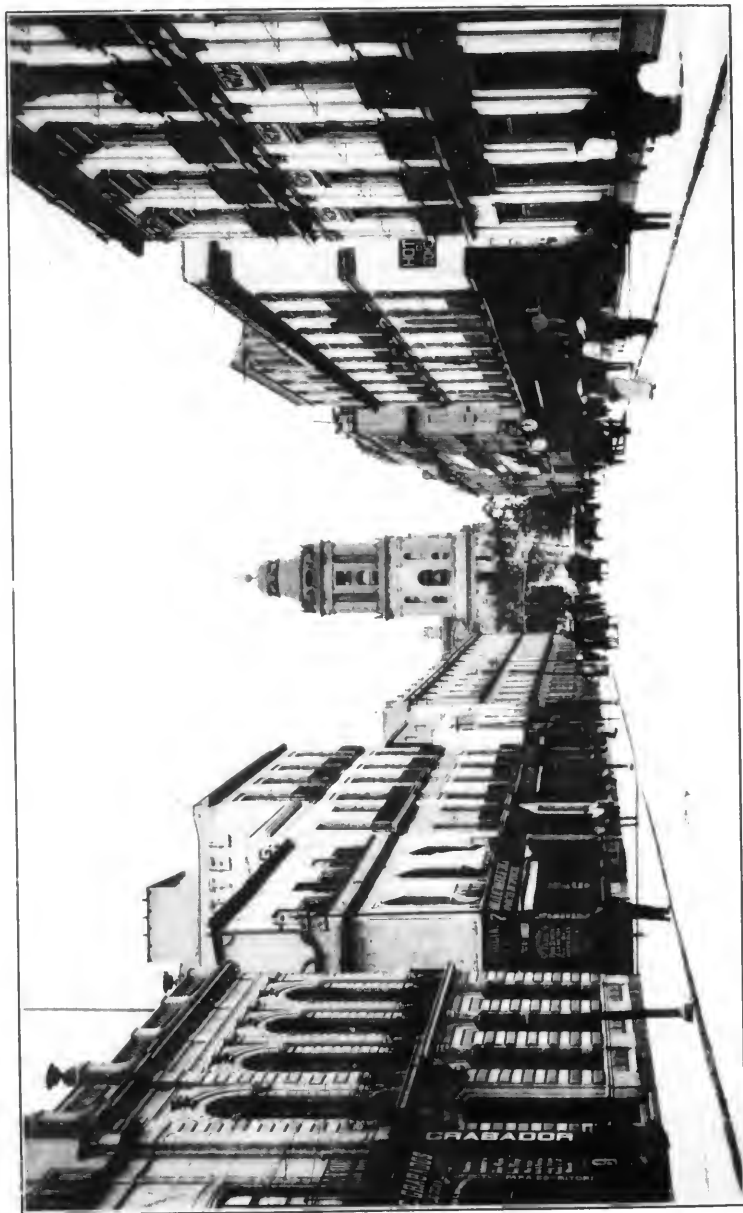
The oil shows a gravity test of 43, the highest in Mexico, the next highest test of an American product being that of a Texas field showing 42.

The capacity of the well is conservatively estimated at 500 barrels a day, but the quality rather than the quantity is the striking feature of the discovery. Should the flow continue satisfactory and should the new well being sunk near by yield good returns, it is proposed to greatly enlarge the operations of the field, locate a refinery, and build a railway from Sarlat to the landing on the Grijalva River, 35 miles distant. The construction of a pipe line to the same point is also in prospect.

#### NEW RAILWAY PROSPECTUS.

The prospectus of the Mexico Transportation Company, whose board of directors comprises such well-known names as F. S. PEARSON, E. D. KENNA, ENRIQUE C. CREEL, SIR WILLIAM VAN HORNE, and JULIO LIMANTOUR, has been issued in London, according to the "Wall Street Summary." The lines which the company has acquired and purposes to build will traverse one of the most populous and progressive regions in the Republic and will open up the whole north-western section; in fact, the name is to be changed to the "Mexico Northwestern Railway Company."





AVENIDA 5 DE MAYO, MEXICO CITY.

This avenue is named to commemorate the repulse of the French at Puebla on May 5, 1862, by a Mexican force under General Zaragoza.



PUBLIC WORKS IN GUADALAJARA, MEXICO.

Excavation work preparatory to conducting the San Juan de Dios River through an underground passage in connection with public works under construction in the Guadalajara district.

The company offers £2,400,000 5 per cent first-mortgage fifty-year gold bonds of £100 each at £90. Interest will be paid half-yearly by means of coupons attached to the bonds, and provision is made for redemption on March 1, 1959, or earlier, by annual drawings at par. The share capital of the company is \$40,000,000, and the mortgage bonds offered constitute a specific charge on the immovable property of the company and a general floating charge upon the enterprise.

The timber lands acquired cover 2,500,000 acres and are valued at \$20,000,000, while mineral and agricultural sections of immense possibilities will be opened to exploitation.

#### THE NORTHWESTERN RAILWAY COMPANY OF MEXICO.

The "*Economista Mexicano*" states that the Mexican Transportation Company of Canada, of which Dr. F. S. PEARSON is the head, has bought the Chihuahua to the Pacific and the Sierra Madre and Pacific railways, as well as the rights of the Sierra Madre Land and Lumber Company. In future the aforesaid lines will be known as The Northwestern Railway Company of Mexico (*La Compañía Ferrocarrilera del Noroeste de México*). The price paid for the properties is said to have been about \$13,500,000.

#### RAILWAY AND STEAMSHIP CONNECTIONS.

The advantages offered by steamer connections with the Tehuantepec Railway ports are shown by the following facts, recorded by consular officers of the United States at various points.

Several trial shipments of coffee for San Francisco, California, have recently been made over an entirely new route. The coffee came from the Cordoba district, in the State of Veracruz, and was then carried by the Veracruz and Pacific Railway, which is now in excellent condition and makes schedule time, to Santa Lucrecia, on the Isthmus, and thence by a short haul over the Tehuantepec Railway to Salina Cruz, the Pacific terminal of that road. At Salina Cruz the coffee was sent by vessel to San Francisco.

There is no doubt that this route was selected by reason of lower freight rates secured as compared with those obtainable over the all-rail route direct. American exporters on the Pacific coast, therefore, have a new route to Mexican markets for their products which ought to be taken advantage of, for with a lower cost of transportation than formerly a fresh impulse to trade ought to result, more especially in the importation of wines.

Mexico is a heavy consumer of wines and liquors, now mainly imported from Spain and France. The custom of taking wine with meals is general, among the poor as well as the well to do. Spanish table wine may be purchased at Veracruz for about 25 cents United

States currency per bottle. If California can get this trade an immense business would result to the American exporter.

*La Compañía Transatlántica de Barcelona*, which operates between Genoa, Barcelona, Cadiz, New York, Havana, and Veracruz, with connections for Puerto Limon, Colon, Cartagena, Sabanilla, Curaçao, Puerto Cabello, and La Guaira, has now added Coatzacoalcos, the gulf terminus of the Tehuantepec Railway, to its itinerary. The steamer *Antonio Lopez*, of this line, which sailed from Veracruz on her return trip on March 23, was the first vessel to call at Coatzacoalcos.

The new Mexican line between Puget Sound and Mexican ports, via Victoria and San Francisco, is now in successful operation, with the result that there is now semi-monthly service between British Columbia and Central American ports. Large shipments are being made of grain from Alberta and Manitoba, as well as of lumber and general merchandise. These steamers connect with the Tehuantepec Railroad at Salina Cruz.

The Mexican project for the construction of a railroad between Monclova, Coahuila, and Chihuahua, in Chihuahua, is progressing, as the following: Arrangements have been made with French banking interests for the sale of the bonds necessary to complete the road. It will be about 300 miles in length and will be an independent concern, though ultimately the line may be acquired by the national system according to the terms of the federal concession which has been obtained.

#### PROPOSED NEW CENSUS.

According to "*Economista Mexicano*," the House of Deputies of Mexico has appropriated ₡75,000 (\$37,500) for preliminary expenses connected with the next census, which is to be taken on October 27, 1910.

#### NEW STEAMSHIP LINE BETWEEN PROGRESO AND NEW ORLEANS.

On March 21, 1909, the Government of Mexico made a contract with AVELINO MONTES, of Merida, Yucatan, for the establishment on April 1, 1909, of a trimonthly steamship service, under the name of the "Montes Line," between Progreso, Mexico, and New Orleans. The new line will transport passengers, freight, and the mails, and may, if desirable, make more than three trips monthly. The company agrees to transport on each trip government freight, not in excess of 10 tons, free of charge. The contract is binding for one year and may be renewed for additional periods of twelve months if mutually agreeable to the parties in interest.

## IRRIGATION IN THE CHAPALA DISTRICT.

Arrangements have been made by MANUEL CUESTA GALLARDO, of Guadalajara, and FERNANDO PIMENTEL Y FAGOAGA, of Mexico City, for the organization of a company capitalized at \$5,000,000 gold to take over and work the Cuesta concessions for the use of the waters of Lake Chapala for irrigation purposes and for the development of power on the Santiago River.

It is believed that more than 200,000 hectares can be irrigated from Lake Chapala (which is 1300 square miles in extent). The company will receive \$10 gold per hectare (2.47 acres) from the Government for irrigation. They will also be allowed to claim all land reclaimed by the lowering of the level of Lake Chapala.

The power developed on the Santiago River will be used principally for pumping purposes. Last year Mr. CUESTA made a contract with a German house, SIEMENS-SCHUCKERTWERKE, for power and pumping machinery amounting to several million dollars, and the consignment of goods is now en route to Mexico.

It is stated that the new company will receive money from the *Caja de Prestamos*. Mr. CUESTA will be general manager of the organization.

The contract signed with the Secretary of Fomento grants a concession of 100,000 hectares, all of which tract it is proposed to put into immediate cultivation and subsequently an adjoining area of 250,000 hectares owned by the company will be worked. Each hectare under cultivation is to receive 4,000 cubic meters of water annually, and cotton, corn, beans, etc., are to be grown. Another condition of the contract embraces the establishment of at least 5,000 families on the land.



## BANANA EXPLOITATION ON THE WEST COAST.

A concession granted by the Nicaraguan Government to Messrs. GUICHARD and SALAZAR provides for the extensive cultivation and export of bananas and other products in western Nicaragua and for the establishment of a line of steamers on the Pacific coast for the transfer of the products.

As reported by the United States consul at Managua, JOSÉ DE OLIVARES, the firm is granted the right of cultivation of 50,000 hectares (about 125,000 acres), of which one-half must be under cultivation during the first ten years of the concession, which is to run

for thirty years. Failure to meet this condition is attended with a fine of \$50,000 gold.

The exclusive right of exporting bananas from the district bordering on the Pacific is granted to the firm, which agrees to pay 30 cents gold for every full bunch of bananas delivered alongside its vessels.

The privilege of constructing the necessary railroads and docks for the proper handling of the fruit is accorded, as also the free importation of all machinery, construction materials, and supplies that may be required in establishing and conducting the enterprise.

#### **IMPROVEMENT CONTRACT WITH THE CUKRA RIVER PLANTING COMPANY.**

An important contract signed by the Government of Nicaragua and the representatives of the Cukra River Planting Company on March 6, 1909, contains the following provisions:

For five years from the date of the contract import duties on certain specified articles of food and general utility for the use of the company on the Atlantic coast shall be exempt from increase.

The company is to establish a line of tugs and barges for the transport of passengers and cargo from the Cukra River, its tributaries, and the shores of Bluefields lagoon to the steamers at Bluff and return.

Authority is granted to establish telegraph and telephone lines connecting the plantations with the city of Bluefields.

The Government guarantees to the company for twenty-five years the right of free navigation of the Tnswanie and Cukra rivers and their tributaries; free export for their banana products, and the right to introduce free of duty all machinery and materials necessary for the construction of steamers, launches, houses, etc.; also such railway materials as may be required for the exclusive use of the company.

#### **NEW RAILWAY CONTRACT.**

A contract entered into and approved by the Nicaraguan National Assembly in January, 1908, but not published in the "*Gaceta Oficial*" until February 20, 1909, provides for the construction of a railroad between the Pacific port of San Juan del Sur and the port of San Jorge or other ports on Lake Nicaragua, which would open up rich agricultural country and greatly facilitate transportation in southeastern Nicaragua. The parties holding the contract have up to the present time been unsuccessful in securing the capital necessary to the consummation of the project.

# PANAMA

## SCHOOL PHYSICIANS IN PANAMA.

An Executive decree of January 18, 1909, relating to the duties of the school physician in the city of Panama, prescribes that the public educational institutions of the capital of the Republic shall be visited by said officer twice a week for the purpose of ascertaining if the rules and regulations concerning hygiene in the public schools are being observed, and in case of a violation of the same to report the infraction to the office of the superintendent of public instruction, in order that the latter may investigate and apply the remedy. It is also the duty of the school physician to give medical attention to any poor pupil who may be in need of the same.

## CHINESE BUSINESS EMPLOYEES IN PANAMA.

On February 6, 1909, the National Assembly of Panama enacted a law modifying the Chinese immigration law of 1904, so as to permit the entrance of Asiatics who come into the country for the purpose of becoming employees of commercial concerns established in the Republic doing business as branches of Chinese firms. A register must be kept of the number of firms affected by this law and of the personnel of which they are composed. Asiatics residing in the country in conformity with the law of 1904 may, on securing the proper passport, absent themselves from the country without prejudicing their right to return thereto within a period of two years.

## TAX ON PETROLEUM LANDS AND MINES.

The Congress of Panama passed a law, promulgated on February 10, 1909, allowing entry in accordance with the provisions of the mining code, on petroleum lands 2 kilometers wide by 5 kilometers long, or 3 kilometers square, subject to the payment of an annual tax of \$10 per square kilometer or fraction thereof.

The annual tax on alluvion mines and mines of precious stones is \$5 per square kilometer or fraction thereof, while that on manganese mines is \$2.50 per square kilometer or fraction thereof.

## MINING OPPORTUNITIES.

The mining laws of Panama are among the most liberal in the world. From Santiago, United States Consular Agent NATHANIEL I. HILL reports as follows concerning the mineral resources of certain provinces of Panama:

Perfect titles to mining properties can be secured, and sufficient labor in the province of Veraguas, where some good mining property is located, can be obtained at reasonable wages. The gold mining possibilities in the districts of Canazas, San Francisco, and Santafe are encouraging. The richness of many of the quartz and placer mines is a matter of history. The Spaniards in the early days worked them to such extent as their primitive mining machinery would admit.

The climate in the mining region is all that can be desired, and cart roads exist from the ports of Aguadulce and Puerto Mutis to many of the mines. Veraguas Province has no copper mines worthy of mention, but there can be no doubt that the gold mining industry will figure as an important and interesting feature in its development.

El Remance mine (quartz), belonging to an English syndicate, the Veraguas Mining Company (Limited), is situated in the district of San Francisco, about 20 miles from the town of Santiago de Veraguas. A cart road leads to the property, which has a healthy location on the foothills of the Cordillera range.

There are some 7 miles of reef upon the property. Development work, which has been conducted by tunnels, has been confined to the main lode which runs at a width of from 4 to 5 feet and has been proved, by actual treatment of more than 16,000 tons, to assay over 6 pennyweights. About 45,000 tons of ore are in sight. The plant installed is a dry crushing one and the treatment is by direct cyaniding, which has attained an extraction averaging about 75 per cent of gold contents. The consumption of cyanide has been in the proportion of 1 pound to a ton of 2,240 pounds of ore.

Including about \$50,000 worth of gold obtained from the operations, there has been spent upon the property by the company some \$400,000. The plant has failed to give the output of 100 tons a day, which was expected of it, and the expenditure has so discouraged the present holders of the property that they are disinclined to put up more capital to supply necessary crushing machinery.

The fuel used is wood, and until this is superseded by water power the Remance mine will not be brought to the paying stage. The installation of a water-power plant on the Santa Maria River at a place known as Las Filipinas, 2 miles distant from the mine, where there is an ample supply of water, is feasible. The best time to inspect mining properties of this province is during the dry season which begins about January 1 and lasts to about May 15.



# PARAGUAY

## LAW FOR THE GOVERNMENT OF MUNICIPALITIES.

The Congress of Paraguay enacted on January 28, 1909, an important law for the government of the municipalities of the Republic. This law, which consists of 8 sections and 55 articles, was promulgated by President GONZALEZ NAVERO on February 2, 1909. It treats of the power of municipalities, their organization, functions, and duties, finances, public works, personal safety, hygiene, charity and morality, and everything relating to the efficient government of a well-ordered municipality.

## STATUS OF PUBLIC AND PRIVATE INSTRUCTION.

There are in Paraguay at the present time 400 public and private schools for both sexes, attended by 40,000 pupils and employing a faculty of 850 teachers. The course of primary instruction covers a period of six years. There are two normal schools—one for males and one for females.

The "*Rundschau*" of Asuncion states that since November 1, 1881, the attendance in the primary grades of instruction in the public schools has been obligatory on both sexes. The different grades of public instruction, which is free to all persons of scholastic age, are primary, secondary, and higher instruction.

The public schools are supported out of the funds appropriated for that purpose in the budget and from the proceeds of local taxation. Secondary and higher instruction are under the supervision of a board composed of the rector of the National University, two of the deans of its faculty, and three members appointed by the president. In Asuncion secondary instruction is given by the national colleges, a six years' course being prescribed in science and letters in the metropolis, and a three years' course in the other principal towns of the Republic. A proposition has been made to turn the national colleges into industrial and professional schools.

Higher education is provided for in the University of Asuncion, which has a six years' course in the departments of law, social sciences, and medicine, and three years in pharmacy and obstetrics. The matriculants now number over 200. Medical students who graduate in Asuncion are given an allowance of 120 pesos monthly for two years, for the purpose of completing their studies in Europe. The Government also maintains a number of scholarships in North America and Europe in some of the principal institutions of those

countries that teach engineering, agriculture, mechanics, chemistry, and belle letters.

Near the capital of the district of Trinidad there is an agricultural school conducted by the State. Asuncion has a church seminary and a school of arts and trades, as well as a number of private colleges and ecclesiastical institutions. It also has a library containing 10,000 volumes and a large number of pamphlets and magazines, and a museum is now being organized in the capital of the Republic.



#### DRY DOCK AT CALLAO.

The large dock constructed in Europe for the Peruvian Steamship and Dock Company arrived at Callao on April 2, 1909. This new dock will be used for the first time by Peruvian war ships, which will enter it for repairs. The maritime authorities have selected the location that the dock will occupy in the bay.

#### INTERNAL REVENUE, 1908.

The revenues of the Republic of Peru, collected by the National Collection Company, during the first half of 1908 aggregated £407,875, and consisted principally of receipts from the tax on liquors, tobacco, sugar, etc.

#### IMPORTS OF WHEAT AND RICE FIRST HALF OF 1908.

From January to June, inclusive, 1908, Peru imported wheat and rice to the amount of 20,494,760 kilos (45,088,472 pounds) and 5,507,179 kilos (12,115,793 pounds), respectively.

#### SUBSIDY FOR STEAMSHIP LINE.

The Peruvian Congress has granted a subsidy of £30,000 per annum for twenty-one years for a fast steamship service between Callao and Panama.

The law in the case provides:

ARTICLE 1. The term for the annual subsidy of £30,000 is hereby prorogued to twenty-one years, as well as that of the guaranty of the revenue of matches, granted to the Peruvian Steamship and Dock Company, of Callao.

ART. 2. During the aforesaid term all the obligations contracted by the company in its contract with the Government shall remain in force.

## BANK OF PERU AND LONDON.

The Bank of Peru and London was founded in Lima, Peru, June 1, 1897, with a capital of £200,000, by the fusion of the Bank of Callao and the branch of the Bank of London, Mexico, and South America. A few years later the capital of this institution was increased to £500,000, with a reserve fund of £275,000. Since 1907 the shares of the Bank of Peru and London have been quoted on the Paris Stock Exchange. The bank has extended its operations, and in 1908 founded the Bank of Bolivia and London, in La Paz, Bolivia, with a capital of £1,000,000. The building occupied by the Bank of Peru and London in Lima is one of the finest of its kind in South America. The bank does a daily business of about £100,000.

## PRIMARY INSTRUCTION IN THE NATIONAL COLLEGES.

An executive decree of January 30, 1909, provides that in future primary instruction shall be given in the national colleges of Peru.



## FOREIGN COMMERCE IN 1908.

Figures of the foreign trade of Salvador as published in the "Diario Oficial" of the Republic give import values for 1908 as \$4,240,560.21 gold, and exports are valued at ₡15,433,806.26 (\$5,787,677.34), the total trade value being thus shown as \$10,028,237.46.

This shows an increase of over \$500,000 as compared with 1907, when in a reported total of \$9,506,005.11 imports figured for \$3,440,721.23 and exports for \$6,065,383.88, but does not quite equal the commercial operations of 1906, when \$10,696,000 represented the entire trade of the Republic.

The leading articles of export, the quantities shipped, and their value in the currency of the country is reported as follows:

Articles.	Quantities shipped.	Value.
	<i>Pounds.</i>	<i>Pesos. a</i>
Coffee.....	55,215,110	10,398,480.03
Minerals.....	66,068	3,295,560.21
Sugar.....	7,042,178	669,538.80
Indigo.....	421,350	525,427.77
Balsam.....	143,678	206,597.50
Hides.....	261,895	84,708.12
Tobacco.....	151,175	81,021.44
Rubber.....	54,737	53,164.61
Rice.....	888,843	32,374.03
Miscellaneous.....	2,571,058	66,933.75

a Peso = \$0.375

United States Consul-General ARTHUR HUGH FRAZIER at Salvador, in a report on the subject of the country's trade, states that \$1,984,641 represent shipments to the United States during the year, a slight decrease being noted as compared with the preceding year when \$2,018,459 covered export valuations thither. In both instances the figures are somewhat greater than those given by the Bureau of Statistics of the United States, as the value of merchandise received from Salvador during the two years in reference.

The principal items shipped thither were: Gold bullion, \$822,181; sugar, \$26,680; coffee, \$719,455; gold and silver, \$387,902; rubber, \$10,595; indigo and hides, about \$10,000 each, and other articles in lesser valuations.

In gold and silver bullion, rubber, sugar, and indigo, substantial gains are noted, balsam, copper, and miscellaneous items remaining practically stationary, while in hides and lead there was a considerable decline.

As the mining resources of the country are developed increasing quantities of gold and silver bullion will undoubtedly be shipped to the United States, but in regard to coffee it is stated that the product of the country has always found its best market in Europe. Other commodities will advance their shipments with improved communication facilities between Salvador and the northern Republic.

#### FINANCIAL CONDITIONS IN 1908.

The net revenues of the Republic of Salvador in 1908 amounted to ₡10,676,338.92 (\$4,003,626), as compared with ₡8,669,189.12 (\$3,250,945) in 1907, or an excess of receipts in 1908 over those of 1907 of ₡2,007,149.80 (\$752,681). The gross revenues in 1908 were ₡12,768,276.59 (\$4,788,103), and the expenditures ₡12,210,993.41 (\$4,579,122), or a credit balance at the beginning of 1909 of ₡557,283.18 (\$208,981). The debt of the Republic at the close of 1908 was ₡30,088,494.23 (\$11,283,185).

#### DUTIES ON WINES AND CANNED GOODS.

The President of Salvador has signed a decree, to take effect April 10, taxing imported liquors 50 cents; heavy wines and white wines, 25 cents; and red table wines, 5 cents per quart bottle; canned goods, 10 cents per kilo. This is in addition to customs duties.



THE NATIONAL PALACE OF SALVADOR, UNDER CONSTRUCTION.  
This building, which is considered one of the handsomest of its kind in Central America, will cost, when finished, over \$5,000,000. The site occupied by the structure measures 325 by 362 feet.



THE TREASURY BUILDING, CARACAS, VENEZUELA.

Until 1874 this building was used as a convent by the Order of Carmelites and later occupied by the Government as a treasury. It has recently been remodeled, and is now one of the handsomest structures in the city.

# UNITED STATES

## FOREIGN COMMERCE, NINE MONTHS, 1908-9.

The last monthly statement of the foreign commerce of the United States issued by the Bureau of Statistics of the Department of Commerce and Labor shows the imports and exports by principal articles and countries during the month of March and the accumulated months of the fiscal year 1909. The following table presents an outline of the statement for the nine-month period:

### IMPORTS.

	Nine months ending with March—	
	1908.	1909.
Foodstuffs in crude condition and food animals.....	\$110,048,881	\$123,410,650
Foodstuffs partly or wholly manufactured.....	98,296,009	108,544,239
Crude materials for use in manufacturing.....	283,273,918	325,306,947
Manufactures for further use in manufacturing.....	157,614,319	163,019,345
Manufactures ready for consumption.....	272,483,705	221,113,376
Miscellaneous.....	9,027,577	7,633,882
<b>Total imports.....</b>	<b>930,754,409</b>	<b>949,030,439</b>

### EXPORTS.

Foodstuffs in crude condition and food animals.....	\$163,211,480	\$118,264,489
Foodstuffs partly or wholly manufactured.....	261,617,923	238,233,959
Crude materials for use in manufacturing.....	478,394,234	432,587,869
Manufactures for further use in manufacturing.....	199,681,048	162,248,151
Manufactures ready for consumption.....	371,028,682	322,418,958
Miscellaneous.....	5,038,308	5,804,233
<b>Total domestic exports.....</b>	<b>1,478,971,675</b>	<b>1,279,557,659</b>
Foreign merchandise exported.....	19,464,057	17,536,934
<b>Total exports.....</b>	<b>1,498,435,732</b>	<b>1,297,094,593</b>

# URUGUAY

## ECONOMIC CONDITIONS IN 1908.

The annual report furnished by United States consul at Montevideo, FREDERIC W. GODING, covering 1908, states that the year was a memorable one for the Republic, every branch of commerce and industry showing unequaled prosperity. Enormous profits are reported for banking institutions, municipal traffic increased 100 per cent over 1907, and customs receipts established a record. Crops and prices

therefor were greater than ever before, and on cattle and sheep splendid profits were realized.

While Uruguay produces foodstuffs and raw materials (mostly animal products) in great abundance, the establishment of manufacturing on a large scale is hindered by insufficient supplies of fuels and minerals, not so much by reason of the lack of these articles as on account of their inadequate exploitation. The country is rich in minerals, and commercial coal has been discovered in various localities, but dependence is placed on foreign fuel, machinery, and a large number of primary and secondary materials needed for manufacturing industries.

The Bank of the Republic, which since its inauguration in 1897 has realized profits amounting to \$5,183,916.52, reports for 1908 the largest sum on record, \$1,054,899.21, representing the year's surplus. Of this amount 10 per cent has been added to the reserve fund, 10 per cent used in paying off bonus shares, \$485,980 applied to the 1896 loan, \$51,700 set apart for the legislative palace, and the remaining portion added to the paid-up capital of the bank.

With the completion of the free zone a large transit trade will be opened up with neighboring countries, as the relations existing between many of the business houses of Montevideo and those of Paraguay, the Argentine Republic, Chile, and Brazil are such the beneficial results for all are assured.

In addition to continuation of the work of harbor improvements at Montevideo, the Government has decided to develop the port of La Palma, about 150 miles to the east, and about \$1,000,000 are to be expended on improvements at Colonia, provided the proposed Pan-American extension from Pernambuco is completed.

There still remain unexpended over \$3,500,000 for transit works, to which the chambers have been asked to add \$5,170,000, so that not only the original plans may be carried out, but also valuable additions made. Several new bridges are to be built and the canalization of the Rio Negro effected. For sanitary works in the interior \$517,000 have been appropriated and other improvements provided for, including \$20,680 as a bonus for the establishment of a sugar refinery at La Sierra.

During the year experimental work was carried on for the purpose of developing the fishing industry in Uruguayan waters. At present the leading products of the country are agricultural and pastoral, including live stock, wheat, flour, corn, linseed, barley, hay, tobacco, feathers, soap, cheese, butter, vegetables, fish, preserved and natural fruits, sealskins, fox skins, hard woods, and several minerals.

For the farmer and pastoralist the year was a satisfactory one, the wool clip establishing a record, good prices were received, and in the



northern parts of the country the live-stock trade was greatly stimulated by the cancellation of the duties on cattle, mules, horses, sheep, and goats on the part of the Brazilian Government.

Wine production amounted to 4,904,231 gallons, and shipments of fruits to Buenos Aires and Brazilian ports, as well as elsewhere, reached thousands of tons. While detailed statistics of exports are not available, the port of Montevideo shipped abroad during the year 6,928 tons of flour, 34,662 tons of wheat, 692 tons of corn, 7,799 tons of bran, and 143 tons of barley. A few years ago Uruguay imported cereals and flour. The Government has undertaken a systematic topographic survey of the Republic, it being designed to investigate soils and vegetation for the purpose of advancing agricultural conditions and values.

From 1901 to 1906 the average area cultivated for corn in the Republic was 1,689,089 acres. During the preceding five years 118,997 tons, with a value of \$1,968,736, were exported to the neighboring Republics. Experiments in corn planting are being carried on at the agricultural experiment station in connection with the University of Montevideo, new methods being utilized and modern machinery applied.

#### RAILWAYS AND SHIPPING.

Transit conditions throughout the Uruguayan Republic during 1908 reflect the generally prosperous status of the country.

The Midland Railway reports total receipts of \$347,215.60, of which \$46,606.51 represent profits, the total length of line in operation being 196.56 miles, with an extension from Alcorta to Fray Bentos, a distance of 78 miles, under construction. The Northwestern Railway, with an extent of 112.82 miles, reports total receipts of \$254,942.72 and profits amounting to \$52,198.79. The company is now in negotiation with Brazil for the construction of an international bridge to extend across the Cuareim River, which is to cost \$329,000. The Northern Railway has a total extent of 72.78 miles and of the total receipts of \$103,782.93 profits were \$14,148.71. The East Coast Railway is in operation from Omos Junction to La Sierra, a distance of 31 miles, and with the completion of the contemplated extension of 38 miles to Maldonado that important port will be placed in direct connection with Montevideo. The year's receipts were \$65,108.52, of which \$18,367.04 represent profits. The Northeastern Railway, operated by the Midland, shows a balance from the year's operations of \$129,270.68.

The tram line between the salderos in Santa Lucia and Montevideo, mainly for the conveyance of meat products, has a total extent of 21.75 miles, part of which is steam and part animal traction. Profits are reported of \$28,912.09, with total expenses of \$197,583.69.

Montevideo tramways have installed powerful electric plants, the northern tramway being the only road using traction by horsepower.

Of the steamship lines calling at Montevideo, 18 are under British register, 7 German, 3 French, 4 Italian, 2 Spanish, 1 Swedish, 1 Dutch, 1 Austrian, and 1 Brazilian. Of these, 7 freight and 2 passenger and freight lines run to United States ports.

The total number of steamers entering the port of Montevideo during the year was 3,064, with a tonnage of 6,783,788, and of sailers 259, and 148,925 tons burden; clearances reported being 3,014, with 6,642,128 tons, and 295, with 160,157 tons, for the two classes of vessels, respectively. In the former class, British ships predominated, while in the latter Argentine vessels outranked other nationalities, followed by Italian and native registers.

At interior ports 380 steamers arrived with 243,871 tons burden clearing to the number of 394 with 260,864 tons; while sailing vessels to the number of 1,076 with 39,227 tons entered and 1,078 with 48,541 tons cleared.

The Uruguayan Government is desirous of encouraging the repairing and building of vessels in the Republic, and in accordance with a recently enacted law free entry through the customs is allowed for such materials as are required for the construction, installation, working, and preserving of the dockyards, shipyards, and dry docks existing or to be established during the ensuing twenty-five years.

In the shipping lists Uruguayan vessels figure largely, 102 steamers and 50 sailing vessels having entered Montevideo during 1908 and at interior ports; 194 steamers and 973 sailers were of native register.

#### EXPORT ITEMS IN 1908.

In the total valuation for Uruguayan exports during 1908, given as \$38,548,060.78, the leading items were: Sheep, 23,317; cattle, 288; mules, 304; beef, 94,028 quarters, beef, in bales, 510,760; bones, 2,723 tons; hair, 77,725 bales; hides, cattle and horse, 1,653,245; wool, 94,028 bales; sheepskins, 24,197 bales; tallow, in hogsheads, 15,224; in pipes and bags, 15,939; mutton carcasses, 122,132, and mutton quarters, 1,408.

Shipments to the United States and Porto Rico as recorded in the consular files comprised hides to the value of \$2,674,172.34; hair, \$553,398.51; dried beef, \$137,776.74; bones, \$62,751.27; feathers, \$24,031.73; glue stock, \$6,599.97; leather cuttings, \$723.80; quebracho extract, \$13,990.02; onions and garlic, \$4,289.28; rubber, \$3,592.71; and wool, \$553,398.51.

**MINING AND MINERALS IN THE REPUBLIC.**

An important section of the valuable report forwarded by United States Consul FREDERIC W. GODING from Montevideo deals with the mineral possibilities of Uruguay.

In regard to gold, it is stated that alluvial deposits and quartz have been found in the Departments of Minas, Treinta y Tres, Montevideo, and Rivera, though but two mines are effectively operated. From these, during 1908, there were mined 20,514 tons of mineral yielding 2,708.88 ounces, valued at \$46,585.63.

The Uruguay Mining Syndicate, an English company, has secured four gold-bearing concessions called collectively the Zapuca mines and four others called Grupo Independencia in the Department of Cerro Largo. They are to be worked by four distinct companies, each being capitalized at \$2,433,250.

Coal, whose existence in commercial quantities has frequently been reported, is mined in the Departments of Montevideo, Santa Lucia, and Cerro Largo. In the latter instance a company has been formed for the adequate exploitation of the beds. The Cerro Largo coal as well as that of Santa Lucia is of good quality. Peat coal is found in Maldonado and Montevideo and peat alone also exists near the Bay of Maldonado.

Petroleum, while of known existence, has not been found, as yet, in paying quantities.

Asbestos, antimony, graphite, copper-silver, and copper-iron, as well as iron, are found in various sections.

The Government is liberal in the privileges it offers for the adequate development of its mineral resources, allowing the free importation of requisite machinery and implements and granting ample protection to investing companies.

Gems and various semiprecious stones are also known to abound in the Republic.

**CHARACTERISTICS OF TRADE AND INDUSTRY.**

Of Uruguay's total area only 2.4 per cent, or 1,182,699 acres, are under cultivation, according to information furnished in a valuable article prepared by C. L. CHANDLER. Wheat culture occupies about 713,804 acres with an annual yield of 4,606,392 bushels; corn, 410,068 acres with 3,011,726 bushels; flax, 45,658 acres; and oats, 37,000 acres, the two crops yielding 11,882 and 37,000 bushels, respectively. The only other considerable harvest is of barley, which is grown on 2,899 acres, yielding about 36,000 bushels annually.

The raising of various kinds of live stock engages 97 per cent of the Republic's area, the number of all kinds at the last census in 1900 being reported as 26,134,896, composed of 6,827,428 cattle,

18,608,717 sheep, 561,408 horses, 22,992 mules, 93,923 pigs, and 20,428 goats. No cattle is as yet bred for export, with the exception of certain shipments to Brazil, though 94 per cent of the country's exports consist of live-stock products, comprising hides, jerked beef, frozen meat, meat extract, tallow, etc. Dairy products are also taking an important place on the export list, European cities and Buenos Aires being the leading purchasers.

Vegetables and medicinal plants are grown profitably, while from the native grape a red wine is produced. A small quantity of tobacco is grown, and the rapid and satisfactory growth of the mulberry indicates that silk culture might be actively undertaken with good results.



## VENEZUELA

### COMMISSION OF PUBLIC HYGIENE.

An executive decree of March 17, 1909, establishes in Caracas, Venezuela, a commission of public hygiene composed of five physicians, an engineer, and a lawyer. Four of these physicians shall be, respectively, professors of hygiene, biological physics and chemistry, physiology and bacteriology, and the secretary of the academy of medicine in the Central University. The Commission will consider questions concerning the prophylaxis of contagious and infectious diseases, quarantine, vaccination, naval hygiene, potable water, food-stuffs, medicine, climatology, atmospheric purification, hygienic construction of dwellings, shops, and buildings, etc.

The personnel of the Commission is as follows:

Consultor and presiding officer, Dr. P. ACOSTA ORTIZ; lawyer, Dr. CARLOS LEON; engineer, TOMAS C. LLAMOZAS; physician, Dr. CARLOS DE LA CABADA.

### IMPORTATION OF MERCHANDISE BY PARCELS POST.

The President of Venezuela promulgated, on March 30, 1909, a decree permitting the importation by parcels post in any one vessel of any kind of merchandise up to 20 kilos, the same being subject to the regular tariff duties. If more than 20 kilos of merchandise is imported at one time in any one vessel the merchandise is subject to the regular duties plus a surtax of 10 per cent. Executive decree of April 23, 1907, limiting the importation of merchandise by parcels post, or any other decree contrary to the present one, is repealed.

**ESTABLISHMENT OF FACTORIES FOR MEAT EXTRACTS.**

On March 29, 1909, the Government of Venezuela granted a concession to VICENTE NOGUERA ORTIZ for the establishment, within a period of two years, at some convenient place or places in the Republic, of one or more factories for the preparation of meat extracts. The enterprise is free from federal taxation, and the concession is valid for a period of fifteen years from the time the factory begins to operate, at the expiration of which time the concession may be extended for another term of fifteen years at the option of the contracting parties. The concessionaire has the privilege of importing, free of duty, the machinery, materials, etc., necessary for the construction and operation of the plant.

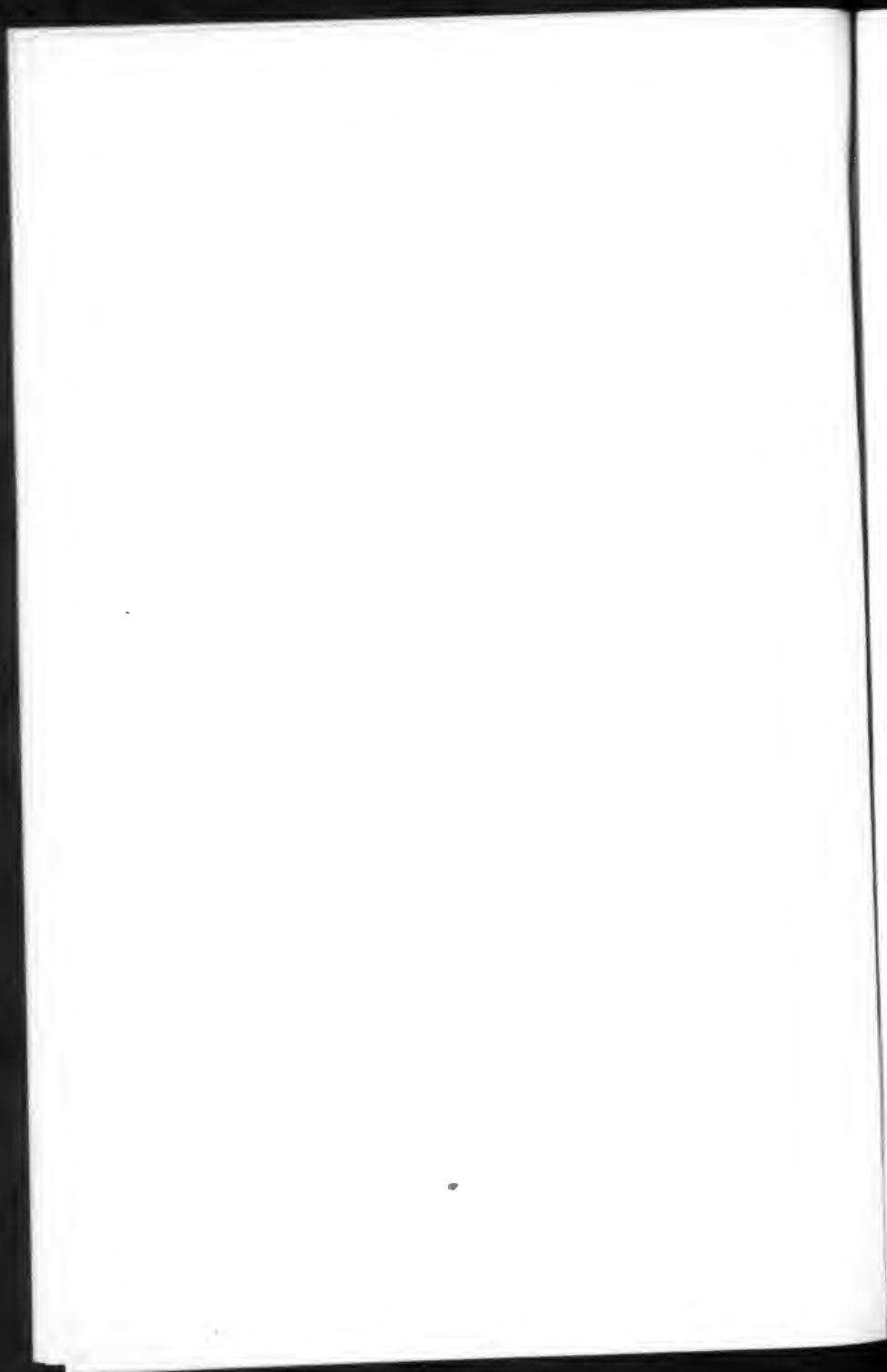
**POPULATION, JANUARY 1, 1909.**

The bureau of statistics of Venezuela publishes data showing that the births and deaths in the Republic in 1908 were 71,059 and 57,059, respectively, or an excess of births over deaths of 14,000. During the same period 4,280 persons entered and 3,979 left the Republic, thus showing a gain of 301 in the population of the country from that source, so that the total increase in the population in 1908 was 14,301. This increase, added to the population of 2,649,925 at the close of 1907, makes the total population of Venezuela 2,664,296 on January 1, 1909.

**CLOSING OF TUCACAS CUSTOM-HOUSE.**

The President of Venezuela, under date of March 15, 1909, abolished the custom-house of Tucacas, and ordered the transfer of the records and furniture of said custom-house to the custom-house at Puerto Cabello.





INDEX TO THE  
BULLETIN OF THE INTERNATIONAL UNION OF  
*The* AMERICAN REPUBLICS

Vol. XXVIII

Nos. 184-189

[The Index to Illustrations will be found on page xxxii.]

	Page.
ALVAREZ, ALEJANDRO, CHILEAN JURIST, ON INTERNATIONAL LAW.....	1019
AMERICAN REPUBLICS, INAUGURATION DAY IN.....	397
AMERICAN REPUBLICS, INTERNATIONAL BUREAU OF THE. ( <i>See</i> BUREAU OF THE AMERICAN REPUBLICS.)	
AMERICAN WHEAT PRODUCTION IN 1908.....	1075
ARGENTINE REPUBLIC:	
Agricultural implements, imports of.....	914
Americanists, Congress of.....	111
Arbitration treaty with Brazil.....	309, 498
Area and population.....	1081
Bank statement, January 31, 1908.....	917
Beef salting industry, 1907-8.....	107
Bolivia, transit trade with.....	109
Boundary with Paraguay, report on.....	1080
Brazil, arbitration treaty with.....	309, 498
British capital in.....	690
Budget for 1909.....	107, 696
Buenos Aires—	
Botanical garden in.....	1055
Congress of Americanists in 1910.....	111
Harbor improvements.....	109
Industrial census.....	109
Movement in 1908.....	915
Municipal statistics.....	699
Port extension contract, conditions.....	916
Real estate transfers and mortgages.....	110
Traffic during 1908.....	697
Carnegie Institution Observatory at.....	415
Cereal production, estimate for 1908.....	699
Cereal season, 1908-9.....	106
Centennial celebration in 1910.....	1082
Commerce, foreign—	
Nine months, 1908.....	104
1908.....	910

ARGENTINE REPUBLIC—Continued.	Page.
Commerce with Great Britain, nine months of 1908.....	110
Conversion office, by-laws.....	918
Corn, exports in 1908.....	1002
Customs revenues, 1908.....	915
Exports, 1908.....	697
Famatima mines, working of.....	310
Financial statistics, 1907-8.....	696
First United States minister to, tribute of the nation to.....	878
Frozen-meat industry, nine months, 1908.....	109
German colonization.....	108
Gift of the, for new building of the International Bureau.....	102
Government students in the United States.....	72
Great Britain—	
Commerce with, nine months of 1908.....	110
Exports to, first half of 1908.....	311
Meat and cattle trade with.....	1080
Hides, shipments of, 1908.....	700
Immigration, 1908.....	698, 917
Inauguration day in the Republic.....	406
Live stock—	
American, importation of, prohibited.....	310
Convention with Paraguay.....	353
Shipments in 1908.....	915
Statistics, 1908.....	309
Meat and cattle trade with Great Britain.....	1080
Meat exports, 1908.....	915
Mining industry.....	501
North American Society of the River Plate.....	679
Paraguay—	
Live-stock convention with.....	353
Report on the boundary with.....	1080
Parana River, basin of.....	280
Population and area.....	96, 1081
Postal service, 1908.....	696
Public works authorized.....	107
Railway concessions.....	106
Railway Exhibition in 1910.....	698, 882
Railways in 1907.....	700
Receipts and expenditures, 1908.....	914
Refrigeration Congress, participation in.....	310
Telegraph service, 1908.....	696
Textile plants, cultivation of.....	110
Tobacco industry.....	311
Transandine Railway, history of.....	463
United States live stock, importation prohibited.....	310
Wheat production in 1908.....	1075
Wireless telegraphy.....	639
AROSEMENA, SEÑOR CARLOS CONSTANTINO, MINISTER OF PANAMA, RECEPTION OF.....	271
AUTOMOBILES IN LATIN AMERICA.....	687
BARRA, SEÑOR DON FRANCISCO LEON DE LA, MEXICAN AMBASSADOR, RECEPTION OF.....	663



<b>BARRETT, JOHN, DIRECTOR OF INTERNATIONAL BUREAU:</b>		Page.
	Dinner given by, in honor of Chairman and Members of Governing Board...	787
	Speeches by.....	788, 901, 1017
<b>BASIN OF THE PARANA.....</b>		280
<b>BOLIVIA:</b>		
	Argentina, commerce via.....	109, 919
	Automobile service in the Republic.....	1087
	Bank notes, redemption of mutilated.....	503
	Bank profits in 1908.....	919
	Belgium, extradition treaty with.....	313
	Bismuth, export duty on.....	502, 1087
	British investments in.....	690
	Cattle, import duty on, repealed.....	312
	Coca, status of taxes on.....	1087
	Coffee, export tax on.....	900
	Commerce, foreign, 1908.....	1084
	Commerce via Argentina.....	109, 919
	Commercial treaty with Germany.....	312
	Copper, export duty on.....	502, 1087
	Cotton.....	113
	Customs duties, repeal of surtax on.....	919
	Export duties on copper and bismuth.....	502, 1087
	Extradition treaty with Belgium.....	313
	Germany, commercial treaty with.....	312
	Gold coins, exportation of.....	919
	Gold standard, adoption of the.....	502, 1085
	Government students in the United States.....	73
	Guachalla, name of Puerto Sucre changed to.....	313
	Horses, import duty on, repealed.....	312
	Imports, origin of, 1907.....	502
	Inauguration day in.....	407
	La Paz, permanent exhibition at.....	313
	Mining in the Republic.....	1086
	Penitentiary, proposed.....	313
	Population.....	96
	Puerto Sucre, name changed to Guachalla.....	313
	Railway system.....	111
	Railway from Tupiza to Uyuni.....	312
	Rice.....	113
	Stamp law, new.....	701
	Surtax on customs duties, repealed.....	919
	Telegraph service.....	312
	Tin production, 1908.....	918
	Trade-marks, registration of.....	701
	Tupiza-Uyuni Railway.....	312
	University and newspaper congresses.....	1087
	Wireless telegraphy.....	639
<b>BONE, MR. SCOTT C., VICE-PRESIDENT OF THE GRIDIRON CLUB, SPEECH BY..</b>		1041
<b>BOOK NOTES:</b>		
	American cities, government of.....	771
	Andes, travel notes on.....	379
	Argentine Republic, constitution of.....	381
	Asphalts, their sources and utilization.....	768
	Batten's agricultural directory.....	186
	Bolivia, traveler's guide to.....	185

BOOK NOTES—Continued.	Page.
Brazil—	
Amazon River Valley.....	379
Constitution of.....	381
National Exposition of 1908.....	767
Para, history, resources, and industries.....	382
Periodical literature in the Republic.....	185
Chile—	
Constitution of.....	381
Harbor works of San Antonio.....	771
Religious problems.....	770
Colombia, expedition across.....	975
Cuba—	
Census for 1907.....	183
Isle of Pines.....	769
Population, history, and resources.....	768
Guatemala—	
Explorations in the Department of Peten.....	383
Maya Indians.....	383
Hague conferences, texts of The.....	183
Honduras, monetary system.....	975
Las Casas, Fray Bartholomew, biography of.....	378
Latin American woods.....	770
Mexico—	
Antiquities of eastern Mexico.....	767
Aztec and kindred tribes, origin of.....	380
Constitution of.....	381
Map of the Republic.....	769
Mexican Year Book.....	380
Picturesque, political, and progressive.....	770
President Diaz.....	768
Root, Hon. Elihu, visit of.....	185
Panama Canal, description of, by an English author.....	974
Peru—	
Historical review of railways.....	382
History, people, and religion.....	382
Old and new.....	383
Religious problems.....	770
South America—	
Historical and literary essays.....	770
Juvenile literature on.....	381
Present day conditions in.....	383
United States—	
Domestic engineering.....	771
Exporters' Encyclopedia.....	385
Hazell's Annual.....	385
Isthmian Canal Commission, report of the, for 1908.....	182
Porto Rico, literature on.....	769
Red Cross first aid and relief text-book.....	186
With the battle fleet.....	181
Uruguay, First International Congress of American Students at Montevideo.....	184
Venezuela, expedition across.....	975
BOTANICAL GARDEN IN BUENOS AIRES.....	1055
BRAZIL THE HOST OF PAN-AMERICA.....	1040

BRAZIL:	Page.
Agricultural and industrial bureau at Rio de Janeiro.....	323
Agriculture in.....	1064
Agronomical Institute.....	712
Amazonas, State of, cacao exports.....	118
Amazon Steam Navigation Company.....	513
Argentina, arbitration treaty with.....	309, 498
Auriferous alluvials.....	510
Bahia, port improvements, modification of plans.....	922
Bank of Brazil, report for 1908.....	1092
Bankruptcy law, new.....	1090
Bond issue for Pernambuco port works.....	317
Bounties for wheat cultivation.....	706
British investments in.....	690
Budget, customs provisions in.....	701
Budget law for 1909.....	504
Cable communication, German concession for.....	319
Cacao exports.....	118
Cacao production.....	1071
Cattle industry.....	119
Cement trade.....	317
Coastwise navigation service, new.....	923
Coffee—	
Export tax on.....	900
Market in 1908.....	316
Movement in 1908.....	921
Sales, committee charged with.....	315
Valorization loan.....	314
Commerce, foreign—	
First quarter, 1908.....	314
Means of developing.....	321
Ten months of 1908.....	313, 713
1908.....	706
Cuba, greeting to new Government of.....	419
Customs provisions of the budget.....	701
Diamonds and their bearing upon the future of.....	229
Dry farming in the Republic.....	1064
Exports of precious stones and minerals.....	707
Flour—	
Imports, 1908.....	921
Market, status of.....	1090
German concession for cable communication.....	319
Government students in the United States.....	73
Health congresses, participation in.....	1093
Hides, exports of.....	921
Inauguration day in.....	407
Industrial—	
Companies, new.....	923
Development.....	507
Notes.....	509
Irrigation commission and works.....	505
Live stock, improvement in.....	316
Madeira-Mamore Railway, lease of.....	1094
Mandioca flour trade.....	508

BRAZIL—Continued.	Page.
Manganese mine in Minas Geraes.....	320
Milling industry.....	507
Minerals and precious stones, exports.....	107
Miscellaneous notes.....	713, 1094
Monetary circulation.....	118
Morro manganese mines.....	320
Nuts, production and exports of, 1908.....	319, 1093
Para—	
Agricultural machinery exhibit.....	115
Cacao exports.....	118
Description of the city and state of.....	643
Floating docks.....	117
Rubber output, 1908.....	1088
Rubber shipments from.....	712
Parana River, basin of.....	280
Pastoral industry.....	119
Perini fiber cultivation, results of.....	1091
Pernambuco, bond issue for port works.....	316
Piassava fiber, the.....	674
Piauhy, the state of.....	510
Population.....	96
Precious stones, exports of.....	707
President Penna, death of.....	961
Public contracts, placing of.....	513
Public debt statement.....	320
Public works authorized.....	707
Railways—	
Coal for.....	505
Mileage.....	506
Notes on.....	323, 923
Rice culture.....	709
Rio Janeiro—	
Dock system of.....	1088
Exhibition of sanitary appliances at.....	115
Floating dock.....	1089
Municipal organization.....	30
Milling industry.....	507
Rivers and ports of.....	74
Rubber—	
Manufacturing.....	114
Output of Para.....	1088
Shipments from Para.....	712
Santos Dock Company, report of.....	922
Santos, port of—	
Foreign trade.....	114
Trade movement, November, 1908.....	318
Silk culture, promotion of.....	509
Steamship service and contract.....	712
Steamship service, new.....	922
Sugar of the Republic and the Brussels Convention.....	921
Sugar production, 1908.....	705
Tariff concessions to United States products, status of.....	1088
Tariff revision, projected.....	920

BRAZIL—Continued.	Page.
Textiles, manufacture of.....	1093
Tobacco production.....	318
Trade-marks, international.....	114
United States products, status of tariff concessions to.....	1088
Whaling in.....	1048
Wheat cultivation, bounties for.....	706
Wireless telegraphy.....	639
Zootechnical and Agronomical Institute.....	712
BRITISH CAPITAL IN SOUTH AMERICAN MINES.....	500
BRITISH INVESTMENTS IN LATIN AMERICA.....	690
BUREAU OF THE AMERICAN REPUBLICS:	
Indorsement of the work of.....	898, 1068
Director of—	
Pan-American dinner given by.....	787
Speeches by.....	788, 901, 1017
New building, Argentina's gift for.....	102
CABLE COMMUNICATION WITH LATIN AMERICA.....	493
CACAO TRADE AND CONSUMPTION.....	1071
CALVO, SEÑOR DON JOAQUIN, MINISTER OF COSTA RICA, SPEECH BY, AT PAN-AMERICAN DINNER.....	796
CANNON, HON. JOSEPH G., SPEAKER OF THE HOUSE OF REPRESENTATIVES, SPEECH BY, AT THE PAN-AMERICAN DINNER.....	798
CARNEGIE INSTITUTION, ARGENTINE OBSERVATORY OF.....	415
CENTRAL AMERICAN CONFERENCE, FIRST.....	275, 727
CENTRAL AMERICAN COURT OF JUSTICE, FIRST DECISION OF.....	276
CHILE:	
Agricultural machinery, imports of.....	328
Agricultural outlook, 1909.....	717
Alvarez, Señor Alejandro, jurist.....	1019
American goods, exhibit of, in Santiago.....	714
Antofagasta, customs revenues.....	929
Arica-La Paz Railway, award of contract for.....	925
Banks, government deposits in.....	717
British capital in mines.....	500
British investments in.....	690
Budget for 1909.....	926
Cement industry.....	514
Centennial celebration of National Independence.....	514
Chañarillo, mining activity at.....	715
Commerce, foreign, 1908.....	924
Commercial institute at Valparaiso.....	1096
Commercial treaty with Ecuador.....	334
Crops, status of.....	928
Customs revenues—	
Antofagasta.....	929
1908.....	326, 716
January, 1909.....	929
Dairy and farm machinery, imports of.....	328
Ecuador, commercial treaty with.....	334
Exports, September, 1908.....	326
Flag and coat of arms of.....	91
Government deposits in banks.....	717
Government students in the United States.....	73

	Page.
CHILE—Continued.	
Inauguration in.....	407
Industrial companies, new.....	1096
Industries and manufactures.....	714
International Seismological Convention.....	714
Longitudinal Railway, bids for.....	926
Manufacturers.....	714
Mining activity at Chañarcillo.....	715
Mining industry.....	927
National holidays of.....	93
Nitrate—	
Industry, status of.....	1095
Propaganda.....	121
Report and propaganda.....	926
Nitrate Propaganda Association, discontinued.....	1095
Population.....	96
Punta Arenas, development of.....	326
Railways—	
Construction of, 1908.....	716, 929
Finances of.....	121
Statistics.....	716
Supplies, bids for.....	515
Receipts and expenditures.....	121
Santiago—	
Exhibit of American goods in.....	714
Municipal organization.....	430
Pan-American Scientific Congress—	
Closing session.....	278
Opening of.....	123
Seismological Convention, International.....	714
Steamship company, new.....	122
Steamship line between Valparaiso and Panama, fast.....	1095
Tacna district, sulphur in.....	327
Tariff law of the Republic.....	514
Transandine Railway, history of.....	463
Valparaiso—	
Abrogation of harbor contract.....	1096
Commercial institute.....	1096
Fast steamship line to Panama.....	1095
Movement in 1908.....	515
Wheat production in 1908.....	1075
Wireless telegraphy.....	639
CHRONOLOGICAL TABLE OF PAN-AMERICAN HISTORY.....	27, 197, 395, 577, 783, 987
CHURCH, COL. GEORGE EARL, BIOGRAPHY OF.....	478
CLARK, HON. CHAMP, REPRESENTATIVE FROM MISSOURI, SPEECH BY, AT THE PAN-AMERICAN DINNER.....	805
COATS OF ARMS OF THE AMERICAN REPUBLICS. (See FLAGS AND COATS OF ARMS.)	
COFFEE, EXPORT TAX ON.....	900
COLOMBIA:	
Alcohol concession.....	329
Americans interested in gold mining.....	933
Barranquilla, street railway to Sledad, extension.....	934

COLOMBIA—Continued.	Page.
Bogota—	
Municipal improvements.....	1100
Railway connections with the coast.....	932
Bridle path from Manizales to San Juan River.....	934
British investments in.....	690
Budget for 1909.....	515
Bureau of information in New York.....	328
Cartagena—	
Exports to the United States.....	516
Port charges at.....	126
Choco mining district, quartz discoveries.....	126
Commerce, foreign, 1908.....	931
Emerald mines of.....	721, 1027
Financial administration.....	1097
Financial conditions, improved.....	721
Flag and coat of arms of.....	262
Flour industry.....	933
Gold dredging in the Patia and Telembi rivers.....	934
Gold mining, American interests in.....	933
Gold output, future.....	123
Highways, construction and conservation of.....	932
Immigration law.....	329
Inauguration day in.....	407
Magdalena River, new navigation service on.....	1099
Manizales to San Juan River, bridle path.....	934
Match industry.....	126
Message of President Reyes.....	718, 930
Milling industry, the.....	933
Mineral resources.....	123
National holidays.....	264
Population.....	96
Postal service.....	932
President Reyes, message of.....	718, 931
Presidential work in.....	422
Public lands and forests.....	329
Quartz discoveries.....	126
Railway connections between Bogota and the coast.....	932
Revenues—	
1907.....	1097
Second half of 1908.....	1099
Salt—	
Exploitation.....	517
Import duty on.....	126, 932
Supia and Marmato mines, extension of lease of.....	517
Tariff modifications.....	720
Telegraph service.....	932
Textile plant, new.....	329
Wireless telegraphy.....	639
Zapaguira salt mines, revenues, 1908.....	721
Zulia River (Venezuela) opened to commerce of.....	541
COLUMBUS STATUE AT WASHINGTON, THE.....	413
COMMERCIAL TRAVELERS IN LATIN AMERICA.....	99
CONFERENCE OF AMERICAN REPUBLICS. (See PAN-AMERICAN CONFERENCE.)	

	Page.
CONGRESS, PAN-AMERICAN SCIENTIFIC. ( <i>See</i> PAN-AMERICAN SCIENTIFIC CONGRESS.)	
COREA, SENOR LUIS F., NICARAGUAN MINISTER, RETIREMENT OF.....	272
CORN. ( <i>See</i> MAIZE.)	
CORSOS, PASEOS AND PROMENADES IN THE AMERICAN REPUBLICS.....	852
COSTA RICA:	
Agriculture, National Society of.....	935
Black beans, free of duty.....	1101
British capital in mines.....	500
British investments in.....	690
Conventions, approval of.....	127
Corn, free of duty.....	1101
Customs modifications.....	1160
Customs revenues.....	127, 330
Explosives for industrial purposes, contract for.....	1101
Exports to the United States.....	722
Flag and coat of arms.....	489
Government students in the United States.....	73
Inauguration day in.....	408
Limon, parcels-post service at.....	127
Municipal sanitation bonds, issue of.....	518
National holidays.....	491
Population.....	96
United States, exports to.....	722
Wireless telegraphy.....	639
COTTON, THE MOST WIDELY USED STAPLE IN THE WORLD.....	599
CUBA:	
Brazil's greeting to new Government.....	419
British investments in.....	690
Cabinet of President Gomez.....	518
Cacao—	
Industry, 1907-8.....	519
Production.....	1071
Capital, foreign, invested in the Republic.....	1103
Commerce, foreign.....	129, 722
Communication facilities in the Republic.....	1102
Consular tariff law.....	330
Customs revenues, 1908.....	723
Export duty on sugar, tobacco, and liquors, suspended.....	723
Flag and coat of arms of.....	665
Foreign capital invested in the Republic.....	1103
Government students in the United States.....	73
Havana—	
Municipal organization.....	614
New wharf at.....	128
Proposed improvements at.....	1103
Sanitary conditions.....	938
Inauguration day in.....	408
Message of the President.....	1102
National holidays.....	671
Pineapples, exports of.....	939
Population.....	96



	Page.
CUBA—Continued.	
President Gomez—	
Inauguration of.....	266
Message of.....	1102
Sagua Inlet, dredging of.....	519
Shoe trade of the Republic.....	330
Status of the Republic, Señor Quesada's speech concerning.....	427
Sugar—	
Export duty on, suspended.....	722
Production and export.....	936
Tobacco—	
Crop.....	937
Plantations, cost of.....	519
Tariff modifications.....	128
Wireless telegraphy.....	640
DIAMONDS AND THEIR BEARING UPON THE FUTURE OF BRAZIL.....	229
DINNER IN HONOR OF THE CHAIRMAN AND MEMBERS OF THE GOVERNING BOARD OF THE INTERNATIONAL BUREAU.....	787
DIRECTOR OF THE INTERNATIONAL BUREAU OF THE AMERICAN REPUBLICS. (See BUREAU OF AMERICAN REPUBLICS.)	
DOMINICAN REPUBLIC:	
Academy of Fine Arts.....	130
Agricultural inspectors.....	521
Cacao production.....	1071
Coffee, export tax on.....	900
Commerce, foreign, in 1908.....	657
Flag and coat of arms.....	904
Foreign Relations, report of the Secretary.....	1104
Forests, exploitation of.....	131
Inauguration day.....	403
Message of President Caceres.....	939
National holidays.....	907
Population.....	96
President Caceres, message of.....	939
Railway lines.....	130
Sanitary law, new.....	331
DRIVEWAYS IN THE AMERICAN REPUBLICS.....	22, 852
DRY FARMING IN BRAZIL.....	1064
ECUADOR:	
British investments in.....	690
Cacao production.....	522, 940, 1071
Chile, commercial treaty with.....	334
Coal trade of the Republic.....	335
Coffee, export tax on.....	900
Coin shipments and receipts.....	334
Commercial treaty with Chile.....	334
Crops, gathering and status of.....	723
Debt, public, consolidation of.....	132
Gathering of crops.....	723
Government students in the United States.....	73
Guayaquil—	
Exports from.....	524
Financial status of.....	334
Municipal improvements.....	941

## ECUADOR—Continued.

	Page.
Guayaquil and Quito Railway—	
Approval of contract.....	132
Water concession to.....	521
Huigra-Cuenca Railway.....	1105
Inauguration day.....	408
Liquor tax.....	133
National Exposition—	
Description, etc.....	200
Participation of the United States.....	894
Peru at.....	133
Population.....	96
Quito, electric tramway proposed.....	133
Sanitary law, new.....	332
Telegraph charges, schedule of.....	1105
Trade-mark law.....	133
United States, participation of, in National Exposition.....	894
Wireless telegraphy.....	640

## EDITORIAL SECTION:

Alaska-Yukon-Pacific Exposition, Bureau's exhibit.....	546
Anderson, Hon. G. E., United States Consul to Rio Janeiro.....	377
Argentine Republic—	
Exports, character of.....	372
Exposition at Buenos Aires in 1910.....	755
Internal development.....	552
Live stock.....	172
Trade and industries.....	8
United States Minister to.....	172
Arosemena, Señor C. C., new Minister of Panama.....	176
Bacon, Hon. Robert, Assistant Secretary of State of the United States.....	7
Barra, Señor Don Francisco León de la, Mexican Ambassador.....	551
Baxter, Mr. E. M., lectures on Latin America.....	760
Bolivia—	
Communication facilities.....	8
Commerce with the United States.....	372
Loan, placing of.....	172
Tin in 1908.....	763
Trade in 1908.....	969
Brazil—	
Ambassador from, in the United States, dinner given by.....	966
Appreciation of courtesies in the United States.....	16
Budget provisions.....	552
Commerce of.....	552
Development of country.....	174
Finances and industries.....	372
Industrial development.....	11
Lecture on, by member of Bureau staff.....	16
Participation in international conferences.....	764
President Penna, death of.....	961
Rio Janeiro.....	8
United States Consul at Rio Janeiro.....	377
United States products, preferential rates to.....	968
Brown, Hon. Philip M., Minister of the United States to Honduras.....	178
Buchanan, Hon. William I.....	9

## EDITORIAL SECTION—Continued.

Bulletin of the International Bureau—	Page.
Annual review number . . . . .	968
Attention of, to different countries . . . . .	4
Congratulatory for improvement of . . . . .	543
Growing popularity of . . . . .	748
Bureau of American Republics—	
Correspondence . . . . .	363
Director of, honored at St. Louis . . . . .	5
Exhibit of, at the Alaska-Yukon-Pacific Exposition . . . . .	546
International work of . . . . .	370
Newspaper appreciation of . . . . .	371
New building of . . . . .	546, 757
Popularity of . . . . .	363
Resolution of Scientific Congress concerning . . . . .	370
Unjust criticisms . . . . .	169
Usefulness of . . . . .	363
Central America, material possibilities . . . . .	544
Central American Conference in Honduras . . . . .	176
Central American Court of Justice—	
Building for . . . . .	12
First decision of . . . . .	175
Columbus Memorial Library . . . . .	169
Conference of American Republics, Fourth . . . . .	166
Conservation Congress, North American . . . . .	365
Chile—	
Centenary of Independence . . . . .	374
Consul-General of, in New York . . . . .	967
Handbook on, new . . . . .	750
Industries . . . . .	553
Nitrate Propaganda Association, discontinuance of . . . . .	969
Pan-American Scientific Congress at Santiago . . . . .	167
Punta Arenas . . . . .	174
Railways and commercial development . . . . .	764
Satisfactory status of revenues . . . . .	9
Colombia—	
Commercial relations with the United States . . . . .	174
Emerald mines . . . . .	969
Explorations in . . . . .	374
Internal conditions . . . . .	553
Students' Congress at Bogota . . . . .	763
Trade and progress . . . . .	764
United States Minister to, new . . . . .	750
Corea, Señor Luis F., Minister of Nicaragua, departure of . . . . .	377
Costa Rica—	
Economic conditions . . . . .	970
Ulloa, Dr. Juan J., Consul-General at New York . . . . .	757
Cuba—	
Crops in 1908 . . . . .	766
Economic measures . . . . .	553
Minister of to the United States, new . . . . .	752
President of, inauguration . . . . .	162
President of, messages from . . . . .	374
United States Minister to . . . . .	369
Demers, Hon. Pierre Paul, United States Consul at Bahia . . . . .	760
Dinner, Pan-American, given by Director of Bureau . . . . .	747

## EDITORIAL SECTION—Continued.

	Page.
Dominican Republic—	
Development of country.....	11
Message of President Cáceres.....	766
Trade returns.....	555
Ecuador—	
Chinese in.....	555
Effect of Panama Canal on.....	12
National Exposition at Quito.....	166, 755
Sanitary Code.....	174
United States Minister to.....	367
Espinoza, Dr. Rodolfo, new Minister of Nicaragua.....	167
European-South American syndicate.....	171
Flags, coats of arms, and holidays.....	7
Fourth Pan-American Congress.....	166
Fox, Williams C., visit of, to the United States.....	367
García, Velez, Señor Don Francisco, new Cuban Minister.....	752
González, Dr. Pedro, Special Envoy from Nicaragua.....	964
Grahame, Mr. Leopoldo, editor of the "Buenos Aires Herald".....	753
Guatemala—	
Economic conditions in.....	556
Promotion of hygienic conditions.....	175
Haiti—	
Industrial development in.....	970
New President.....	175
Helper, Hon. Hinton Rowan, death of.....	551
Hicks, Hon. John, retiring United States Minister to Chile.....	754
Honduras—	
Agricultural development.....	970
Central American Conference.....	176
United States Minister to.....	178
Knowles, Hon. Horace G., United States Minister to Nicaragua.....	555
Knox, Hon. Philander C., selection of, as Secretary of State.....	3
Lampport & Holt Line, new steamer.....	963
Landis, Representative Charles B., Pan-American address of.....	757
Latin America—	
Addresses on.....	367
Books on, increase of.....	967
Flags, coats of arms, and holidays.....	7, 549
Growth of interest in.....	164
Improvement of mail facilities between, and the United States.....	165, 757
Increase of travel to.....	5
Lectures on.....	760, 963
Mis-leading reports on revolutions.....	544
Municipalities of.....	8
Official opera houses and theaters in.....	753
Participation of, in western gatherings.....	548
President Taft's views on.....	1
Quotation from President's message concerning.....	1
Students from, in the United States.....	7
Tariff of the United States, and trade with.....	964
United States consuls in, reports from.....	370
United States-Latin American banking institution, establishments of.....	968
United States National Association of Manufacturers and.....	549
Meiggs, Henry, work of, in South America.....	12

EDITORIAL SECTION—Continued.

Mexico—	Page.
Commerce and development.....	14
Conditions in 1908.....	556
Economic advance.....	176
Message of President Diaz.....	766
New Ambassador from.....	551
North American Conservation Congress.....	365
Railways of the Republic.....	970
United States Consul-General in Mexico City.....	556
Morgan, Hon. E. M., United States Minister to Cuba.....	369
Nabuco, Senhor Joaquim, Brazilian Ambassador, dinner given by.....	966
Nicaragua—	
Health Bureau.....	176
New Minister to the United States.....	167
Special Envoy from.....	964
Northcott, Hon. Elliot, new United States Minister to Colombia.....	750
Panama—	
Industrial development.....	766
New Minister to the United States.....	176
Treaties with United States and Colombia.....	558
United States Consul-General at, new.....	972
United States Minister to.....	371
World's fair at, preliminary plans for.....	972
Panama Canal, lecture on.....	762
Pan-American Conference, Fourth.....	166, 964
Pan-American dinner given in Washington by the Director of the Bureau..	747
Pan-American Scientific Congress, First—	
Adjournment of.....	167
Resolution of, concerning International Bureau.....	370
Return of United States delegates to.....	369
Pan-American Scientific Congresses, past and future.....	548
Paraguay, pastoral and agricultural industries.....	178
Penna, President A. A. M., of Brazil, death of.....	961
Peru—	
Petroleum in.....	12
Railway enterprises in.....	972
Steamship enterprises in.....	972
Quesada, Señor Don Gonzalo de, departure of.....	549
Rodgers, Hon. James Linn, United States Consul-General at Havana.....	760
Rodrigues, Dr. José Carlos, editor of the "Jornal do Commercio".....	752
Rojas, Dr. Ezequiel, Minister of Venezuela.....	750
Roosevelt, President, views of, on Latin America.....	1
Root, Hon. Elihu—	
Acknowledgment of books contributed by.....	546
Dinner in honor of.....	365
Resolutions of Governing Board concerning retirement of.....	161
Special meeting of Governing Board for purpose of taking leave of, as its Chairman.....	161
Wellman's opinion of.....	170
Salvador—	
Commerce of.....	973
Commercial statistics.....	178
Sanchez Cruz, Señor Don Ricardo, Consul-General of Chile at New York...	967

	Page.
EDITORIAL SECTION—Continued.	
Shanklin, Hon. Arnold, United States Consul-General at Mexico City . . . .	556
Sherrill, Hon. Charles H., United States Minister to Argentina . . . . .	556
Snyder, Hon. Alban Goshorn, Consul-General of the United States at Panama . . . . .	972
South America—	
European syndicate . . . . .	171
Great tour through . . . . .	180
Improvement of waterways in . . . . .	11
Meiggs's work on . . . . .	12
Methods in trade of . . . . .	171
New steamship of Lampport & Holt Liue . . . . .	963
Winter excursion to . . . . .	966
Squiers, Hon. Herbert G., United States Minister to Panama . . . . .	371
Taft, President, views of, on Latin America . . . . .	1
Tobacco, interesting story of . . . . .	14
Ulloa, Dr. Juan J., Consul-General of Costa Rica at New York . . . . .	757
United States—	
Banking institution of the, and Latin America . . . . .	968
Bolivia, trade with . . . . .	372
Brazil, preferential rates for American products . . . . .	968
Commercial relations with Colombia . . . . .	174
Consul-General at Panama, new . . . . .	972
Consuls of, in Latin America, reports from . . . . .	370
Delegates from, to the Pan-American Scientific Congress, return of . .	369
Improved mail facilities between Latin America and the . . . . .	165
International Club of San Antonio, Texas . . . . .	966
Lake Mohonk Peace Conference . . . . .	762
Latin-American students in . . . . .	7
Merchant marine, campaign for upbuilding . . . . .	962
National Association of Manufacturers and Latin America . . . . .	549
North-American Conservation Congress . . . . .	365
Pan-American Committee, work of . . . . .	748
President Taft, inauguration of . . . . .	365
Tariff bill, interest of International Bureau in . . . . .	763
Tariff and trade with Latin America . . . . .	964
Uruguay, consular reports on . . . . .	973
Venezuela—	
Governmental decrees . . . . .	558
New Minister of . . . . .	750
Patriotic society in . . . . .	973
Wilson, Hon. Huntington, United States Minister to the Argentina . . . .	172
EMERALD MINES OF COLOMBIA . . . . .	1027
ENGLISH, STUDY OF, IN THE GUATEMALAN SCHOOLS . . . . .	692
ESPINOZA, DR. RODOLFO, MINISTER OF NICARAGUA, RECEPTION OF . . . . .	272
FIRST PAN-AMERICAN SCIENTIFIC CONGRESS. (See PAN-AMERICAN SCIENTIFIC CONGRESS.)	
FLAGS AND COATS OF ARMS OF THE AMERICAN REPUBLICS:	
Chile . . . . .	91
Colombia . . . . .	262
Costa Rica . . . . .	489
Cuba . . . . .	665
Dominican Republic . . . . .	904

	Page.
FLAGS OF THE WESTERN WORLD.....	786
GARCIA VELEZ, SEÑOR DON JUSTO, MINISTER FROM CUBA, RECEPTION OF...	850
GOMEZ, GEN. JOSÉ MIGUEL, PRESIDENT OF CUBA, INAUGURATION OF.....	266
GONZALEZ, DR. PEDRO, SPECIAL ENVOY FROM NICARAGUA, RECEPTION OF...	1025
GRACE, W. R., BIOGRAPHY OF.....	256
GRIDIRON CLUB, BANQUET IN HONOR OF.....	1040
GUATEMALA:	
British investments in.....	690
Coffee—	
Estimated output.....	134
Export tax.....	900
Commercial travelers in.....	99
Condemnation of property.....	725
Conventions of the Third Pan-American Conference, ratification of.....	1105
English, study of, in the schools of the Republic.....	692
Export tax on coffee.....	900
Expropriation of property.....	725
Inauguration day.....	408
Message of President Estrada Cabrera.....	941
Pasteur Institute, establishment of a.....	336
Population.....	96
President Estrada Cabrera, message of.....	941
Property, expropriation.....	725
Railway, Los Altos.....	336
Tariff modifications.....	725
United States fleet, visit of, to.....	869
Vaccination, compulsory.....	335
HAITI:	
Agricultural development.....	943
Cacao production.....	1071
Coffee, export tax on.....	900
Exports, 1906-7.....	943
Inauguration day in.....	409
License taxes.....	524
Population.....	96
President of the Republic, new.....	337
Railway and industrial concessions.....	1106
Smuggling, measures to prevent.....	725
Wireless telegraphy.....	640
HENEQUEN PLANT, THE.....	430
HISTORICAL NOTES, PAN-AMERICAN.....	27, 197, 395, 783, 987
HOLIDAYS, NATIONAL. (See NATIONAL HOLIDAYS.)	
HONDURAS:	
Agriculture, encouragement of.....	1109
Balsam, concession for the exploitation of.....	135
British investments in.....	690
Cabinet woods on public lands.....	1108
Cattle concession.....	728
Central-American Convention of Tegucigalpa.....	727
Commercial treaty with—	
Mexico, ratified.....	1111
Nicaragua.....	529

HONDURAS—Continued.	Page.
Dye woods on public lands.....	1108
Economic conditions in 1908.....	525
Electric and power contract.....	1111
Government students in the United States.....	73
Inauguration day in.....	409
Interior and Justice, report of the Secretary of.....	529
Juticalpa, railway to.....	135
Manacca palm, the.....	338
Message of President Dávila.....	524
Mexico, treaty of commerce with, ratification.....	1111
Monetary commission.....	135
Nicaragua, treaty of commerce with.....	529
Population.....	96
President Dávila, message of.....	524
Public instruction.....	1110
Railways—	
Line to Juticalpa.....	135
Line from Trujillo to Juticalpa, concession.....	1108
Statistics, 1906-7 and 1907-8.....	944
Tariff modifications.....	1111
Wireless telegraphy.....	727
INAUGURATION DAY IN THE AMERICAN REPUBLICS.....	397
INAUGURATION OF THE NEW PRESIDENT OF CUBA.....	266
INDIAN CORN. ( <i>See</i> MAIZE.)	
INDORSEMENT OF THE WORK OF THE INTERNATIONAL BUREAU.....	898, 1068
INTERNATIONAL AMERICAN CONFERENCE. ( <i>See</i> PAN-AMERICAN CONFERENCE, FOURTH.)	
INTERNATIONAL BUREAU OF THE AMERICAN REPUBLICS. ( <i>See</i> BUREAU OF THE AMERICAN REPUBLICS.)	
KNOX, HON. PHILANDER C., SPEECH BY, AT PAN-AMERICAN DINNER.....	788
LANDIS, HON. CHARLES B., REPRESENTATIVE FROM INDIANA, SPEECH BY, ON BETTERMENT OF MAIL FACILITIES WITH LATIN AMERICA.....	837
LATIN AMERICA:	
Automobiles in.....	687
Betterment of mail facilities.....	837
British investments in.....	690
Cable lines to.....	493
Commerce with the United States ( <i>see</i> United States).	
Commercial travelers in.....	99
Miscellaneous notes.....	24, 195, 392, 573, 779, 984
North American captains of industry—	
Church, Col. G. E.....	478
Grace, W. R.....	258
Meiggs, Henry.....	77
Public-debt service.....	899
Students from, in the United States.....	71, 301
Textile industries in.....	97
Theaters and opera houses in.....	811
Wireless telegraphy.....	529
Yale University's interest in.....	901
MAGAZINE ARTICLES:	
American concert of powers.....	564
American history, first letter written in America.....	773



## MAGAZINE ARTICLES—Continued.

Page.

## Argentine Republic—

Antarctic meteorological station.....	777
Argentine music, origin of.....	566
Book trade.....	23
Buenos Aires, the municipality of.....	571
Climatic changes in northwestern section.....	773
Entre Rios Province, progress of.....	192
Fishes of.....	778
Mining in.....	391
Normal instruction.....	22
Productive capacity of the.....	188
Tierra del Fuego, description.....	387
Treaty with Chile.....	979

## Bolivia—

Gold fields of.....	187
Mining in.....	391
Population, distribution of.....	978
Present-day conditions.....	562
Resources.....	565
Survey work on the frontier.....	390

## Brazil—

Amazon River, description.....	387
Book trade.....	23
Cacao output.....	24
Cotton and herva matte growing.....	777
Economic climatology of.....	978
Exposition of National Products at Rio de Janeiro.....	20
German colonies and enterprises.....	190
Mining in.....	391
Pastoral industry, future of the.....	193
Pernambuco, the port of.....	389
Source of world's food supply.....	18
Southern fields of, trip over.....	16
Survey work on the frontier.....	390
Treaty with Colombia.....	979
The new.....	980

Bureau of the American Republics, appreciation of work of..... 24

Carib settlements..... 390

Central America, British capital in mines..... 19

Central American Bureau, official organ of..... 568

## Chile—

Arid coast of.....	773
Book trade.....	23
Climatic changes.....	772
Easter Island.....	774
Excursions of the Swedish Magellanic Expedition.....	777
Iron deposits.....	982
Mining in.....	391
Nitrate industry.....	19
Normal instruction.....	22
Resources.....	565
Sociedad de Fomento Fabril, history of the.....	19
Tierra del Fuego, description.....	387
Trade reports for 1908.....	777
Treaty with the Argentine.....	976

## MAGAZINE ARTICLES—Continued.

	Page.
Coffee—	
Arabian and Abyssinian.....	191
Culture and preparation.....	21
Industry.....	778
Colombia—	
Book trade.....	22
“ <i>Heraldo Bogotano</i> ,” new publication.....	193
Mining in.....	391
Mining industry of Antioquia.....	775
Opportunities offered by.....	976
Spanish-American University at Bogota.....	778
Treaty with Brazil.....	979
Copyright Convention, Pan-American.....	21
Costa Rica—	
Coffee plantations.....	193
Sketch of.....	566
Cuba—	
Coffee plantations, old.....	191
Conditions in.....	777
Governor Magoon’s report.....	391
Inauguration of President Gomez.....	570
Model prison of.....	778
Personal aspect of American intervention.....	569
Population of.....	389
President Gomez, histrionic latinity of.....	571
Restoration of self-government.....	570, 979
Director Barrett, comments on report of.....	23
Dominican Republic—	
Monthly review, new.....	571
Progress of.....	20
Ecuador—	
Book trade.....	23
“ <i>Iris</i> ,” new publication.....	194
Mining in.....	391
Opportunities offered by.....	976
Guatemala—	
Economic progress.....	188
Livingston, settlement of.....	390
Minerva festivals in.....	21, 24
President Estrada Cabrera.....	776
Sketch of.....	777
Haiti—	
General conditions in the Republic.....	193
Normal instruction.....	22
Topography, geology, and inhabitants.....	776
Honduras, University of Tegucigalpa, first number of Review of the.....	982
International Arbitration, list of references on.....	562
Latin America—	
Educational conditions throughout.....	192
France in the emancipation of the Spanish colonies.....	775
International law in.....	979
Political development of United States compared with that of.....	773
Series of articles on, by Director Barrett.....	17

## MAGAZINE ARTICLES—Continued.

	Page.
Mexico—	
American capital in.....	391
Arising of a greater Mexico.....	774
Banking law.....	189
Banking system of.....	17
British capital in mines.....	19
Cacao industry.....	777
Commercial paper in banks of.....	21
Credit institutions of.....	389, 569, 778
Cruise after sea elephants near Guadalupe Island.....	778
Cuernavaca, article on.....	22
Experiences beyond the Sierras.....	981
Folklore.....	22, 391
Guanajuato, article on.....	22
Guerrero, forests of.....	22
"Industrias Mexicanas," new publication.....	571
Manuscripts of, in the study of the development of writing.....	778
Mine labor and supplies.....	194
Mineral resources of Chihuahua.....	194
Mining camps near Topia.....	571
Mining industry at.....	777
Oil well of Vera Cruz, ignition of the.....	192
Old station at Cuautla.....	777
Opportunities for the investor.....	777
Porfirio Diaz, critical analysis of.....	23
Railroads of northern part.....	776
Salina Cruz, the harbor of.....	981
Tehuantepec Railroad, future of.....	22
Tehuantepec, the town of.....	192
Trip beyond the Sierras.....	778
Yaqui land, description of.....	567
Mineral wealth of America.....	772
Monroe doctrine, origin and application of.....	775
Nicaragua, coffee output.....	193
Panama—	
Chagres River, picturesque aspect of the.....	192
Colonization and development.....	191
Keystone of the American continent.....	777
Narration of home-seeking in.....	565
Panama Railroad, part played by, in building of canal.....	567
Taboga, the island of.....	192
Panama Canal—	
Answer to critics of, by President Taft.....	976
Best type of.....	388, 778, 982
Conditions in the zone.....	391, 571, 774
Criticism of.....	388, 569
Investigations in.....	977
Neutralization of.....	979
Workers on the.....	190
Pan-Americanism, services of Elihu Root to.....	979
Pan-American Scientific Congress, First—	
Account of.....	565, 980
International law at the.....	979

## MAGAZINE ARTICLES—Continued.

	Page.
Paraguay—	
Normal instruction.....	22
Pastoral and agricultural wealth of.....	189
Productive capacity of.....	188
Peru—	
Arid coast of.....	773
Book trade.....	23
Conservation of guano.....	19
Gold fields of.....	187
Indians of, report on.....	391
Lake Huasco region, climatic changes.....	772
Mining in.....	391
Mount Huascarán, ascent of.....	187
Old and new.....	560
"Peru To-Day," new magazine.....	565
Resources.....	565
Trip over the river courses of.....	20
University of San Marcos.....	23
Vanadium deposits of.....	982
River Plate region, its possibilities.....	978
Salvador—	
Coffee industry.....	22
Normal instruction.....	22
Publication of the Department of Foreign Relation.....	570
Sorolla y Bastida, Señor Don Joaquín, appreciation of his works.....	977
South America—	
Article on, by the Director of the Bureau.....	978
Cable routes to.....	983
Mines and minerals of.....	777
Mining in.....	391
Opportunities for the United States.....	21
Value of commerce of, to the United States.....	776
United States—	
Analogies between political development of, and that of Latin America.....	773
Isthmian Canal Commission, report of.....	980
Educational tour of inspection.....	775
Election methods.....	568
Merchant marine of, lack of development.....	389
Orange culture in California.....	18
Pharmacopœia of, Spanish edition.....	23, 981
Politics of the, discussed in Latin American periodicals.....	193
President McKinley, recollections of.....	570
<i>Revista Ilustrada</i> , first number of.....	22
War with Spain.....	561
Uruguay—	
French literary influence.....	191
Liebig's meat extract factories.....	386
Productive capacity of.....	188
Venezuela—	
Animal and plant life in.....	978
Civil and mercantile societies.....	983
Labor conditions on coffee plantations.....	778
Mining in.....	391

## MAGAZINE ARTICLES—Continued.

	Page.
Venezuela—Continued.	
Opportunities offered by.....	976
Orinoco Delta region.....	569
Yerba maté, trade in.....	191
Zuloaga, Señor Don Ignacio, appreciation of his works.....	977
MAGUEY PLANT, THE.....	445
MAIL FACILITIES WITH LATIN AMERICA, BETTERMENT OF.....	837
MAIZE, OR INDIAN CORN, THE GREAT NATIVE FOOD SUPPLY OF AMERICA.....	989
MEXICO:	
Agricultural products.....	340
Ambassador from, reception of.....	663
Archæologic monuments, preservation of.....	533
Archæology and History Museum.....	731
Banks in 1906.....	732
British investments in.....	690
Budget expenditures and estimates.....	530
Capital invested in the Republic.....	343
Census, new, proposed.....	1114
Chapala district, irrigation in.....	1115
Coal and coke in the Republic.....	347
Coal transportation, rates for.....	1112
Coffee crop.....	141
Commerce, foreign—	
First quarter 1908-9.....	136
Five months, 1908-9.....	530
First half of 1908-9.....	728
1908-9.....	343
Commercial travelers in.....	101
Commercial treaty with Honduras.....	1111
Cotton tree, exploitation of.....	145
Customs revenues—	
First four months, 1908-9.....	138
First five months, 1908-9.....	349
Discovery of high-grade oil.....	1112
Exports, mineral, 1907-8.....	343
Financial and economic conditions, 1908-9.....	339
Gold and silver, production of, 1877-1908.....	345
Government lands, price of, 1909.....	731
Government students in the United States.....	74
Grain elevators, concession for the erection of.....	732
Immigration law, new.....	345, 731
Inauguration day in.....	409
Industries, new, privileges granted to.....	348
International Oil and Gas Company.....	140
Irrigation in Chapala District.....	1115
Honduras, commercial treaty with.....	1111
Machinery in installments, importation of.....	349
Maguey plant, the.....	445
Manzanillo-Guadalajara Railway.....	531
Marine concession, modification of a.....	350
Matamoros district in 1908.....	733
Message of President Diaz.....	945
Mexico City, municipal organization of.....	208

MEXICO—Continued.	Page.
Mexico Transportation Company, prospectus of.....	1112
Mineral products.....	340
Mineral exports in 1907-8.....	343
Mining companies, foreign registration.....	139
Munson steamship-line contract.....	532
Museums.....	731
Northwestern Railway Company of Mexico.....	1113
Natural History Museum.....	731
National Railroad, report of, for 1907-8.....	350
Oil, high-grade, discovery of.....	1112
Packing houses, concession for.....	350
Population.....	96
Postal Code, modification of.....	141
President Diaz, message of.....	945
Progreso, steamship line to New Orleans.....	1114
Public debt, status of.....	531
Quintana Roo, exploitation of forests of.....	141
Railroad, National, report of, for 1907-8.....	350
Railway and steamship connections.....	1113
Railway company, new, prospectus.....	1112
Railway merger, operation of the.....	138
Railways—	
Hacienda de San Antonio-Huipico.....	141
Manzanillo-Guadalajara.....	531
Traffic of, 1907-8.....	531
Receipts and expenditures, fiscal year 1907-8.....	349
Rubber industry, encouragement of.....	732
Shipping facilities on the Pacific coast.....	140
Silver, production of.....	345
Steamship line between Progreso and New Orleans.....	1114
Sugar of the Republic and the Brussels Convention.....	732
Sugar production, 1907-8.....	947
Tariff modifications.....	140, 350
Tehuantepec Railway—	
Traffic in 1908.....	1074
Terminals, ports of call.....	532
Trade relations with the Orient, extension of.....	345
Tree cotton, exploitation of.....	145
Water concession, modification of a.....	350
Wheat—	
Production in 1908.....	1075
Reduction of duty on.....	138, 949
Wireless convention, ratification of.....	730
Wireless telegraphy.....	642
Zinc mining.....	143
MISCELLANEOUS NOTES ON LATIN AMERICA.....	24, 195, 392, 573, 779, 984
MUNICIPAL ORGANIZATION IN LATIN-AMERICAN CAPITALS:	
Havana.....	614
Lima.....	856
Mexico.....	209
Montevideo.....	1003
Rio Janeiro.....	30
Santiago de Chile.....	430

NABUCO, SENHOR JOAQUIM, BRAZILIAN AMBASSADOR:	Page.
Banquet given by, in honor of Senhor Rodrigues and the Gridiron Club..	1040
Speeches by.....	75, 792, 1040
NATIONAL EXPOSITION AT QUITO, ECUADOR.....	200, 894
NATIONAL HOLIDAYS OF THE AMERICAN REPUBLICS:	
Chile.....	93
Colombia.....	264
Costa Rica.....	491
Cuba.....	671
Dominican Republic.....	906
NICARAGUA:	
Banana exploitation on the west coast.....	1115
Belgium, parcels-post convention with.....	735
British investments in.....	690
Bureau of chemical analysis at Managua.....	351
Cape Gracias á Dios, trade and industries.....	949
Coffee—	
Crop.....	146
Export duty on.....	533, 900
Commercial index of.....	352
Commercial travelers in.....	102
Commercial treaty with Honduras.....	529
Corea, Señor Luis F., Minister of, retirement.....	272
Customs law, new.....	735
Espinoza, Dr. Rodolfo, Minister of, reception.....	272
Exports to the United States, 1908.....	734
Gold production, 1908.....	351
González, Dr. Pedro, Special Envoy to the United States, reception of....	1025
Government students in the United States.....	74
Honduras, commercial treaty with.....	529
Inauguration day in.....	409
Improvement contract with Cukra River Planting Company.....	1116
Mining outlook.....	146
Parcels-post convention with Belgium.....	735
Population.....	96
Railway contract, new.....	1116
Rubber exploitation, regulations for.....	352
Steamship line to Seattle.....	533
Tariff reduction on merchandise imported, Atlantic coast.....	949
United States, exports to.....	734
NORTH AMERICAN CAPTAINS OF INDUSTRY IN LATIN AMERICA:	
Church, Col. George Earl.....	478
Grace, W. R.....	256
Meiggs, Henry.....	77
NORTH AMERICAN SOCIETY OF THE RIVER PLATE.....	679
OBSERVATORY OF THE CARNEGIE INSTITUTION IN THE ARGENTINE REPUBLIC.....	415
OIL PIPE LINE FROM THE PACIFIC TO THE ATLANTIC.....	828
PANAMA:	
Agricultural colonies for immigrants.....	353
Arosemena, Señor C. C., Minister of, reception.....	271
Articles placed on free list.....	534
Brewery, establishment of a.....	951
Budget for 1909-10.....	950
Cable from Colon to Panama, overland.....	736

PANAMA—Continued.	Page.
Cattle, import duty on.....	535
Census of the Republic.....	534
Chinese employees, admission of.....	1117
Electric light in Panama city.....	530
Fiscal conditions.....	148
Free-duty articles.....	534
Government students in the United States.....	74
Historic buildings, care of.....	536
History of the Republic, proposed.....	353
Import duties refunded on reexported merchandise.....	951
Inauguration day in.....	410
Italy, postal convention with.....	951
Mines, tax on.....	1117
Mining industry.....	147
Mining opportunities.....	1117
Mortgage and loan bank.....	536
National Navigation Company, subsidy to.....	536
Native tribes, civilization of.....	537
Oil pipe line from Pacific to Atlantic.....	828
Panama city—	
Electric light.....	536
School of Medicine.....	1117
Panama-David railroad, proposed.....	147
Patent and trade-mark law.....	353
Petroleum lands, tax on.....	1117
Population.....	96
Postal convention with Italy.....	951
Property exempted from taxation.....	951
Public improvements.....	950
Railroad from Panama to David, proposed.....	147
Sugar factories, establishment of.....	735, 951
Telegraph and telephone lines.....	535
Trans-Isthmian traffic in 1908.....	1074
Wireless telegraphy.....	640
PAN-AMERICAN CONFERENCE, FOURTH:	
Committees for.....	279
Programme.....	685
PAN-AMERICAN DINNER GIVEN BY THE DIRECTOR OF THE INTERNATIONAL BUREAU OF THE AMERICAN REPUBLICS.....	787
PAN-AMERICAN SCIENTIFIC CONGRESS:	
Account of.....	580
Opening of.....	123
PAN-AMERICAN SCIENTIFIC CONGRESS, SECOND, TO MEET AT WASHINGTON, D. C.	278
PAN-AMERICAN HISTORY, NOTES ON.....	27, 197, 395, 577, 783, 987
PARAGUAY:	
Agricultural exports, 1907-8.....	354
Argentine Republic—	
Boundary with, report on.....	1080
Live-stock convention with.....	353
Asuncion—	
Municipal improvements in, transfer of contract for.....	149
Revenues of.....	952



PARAGUAY—Continued.	Page.
British investments in.....	690
Central Railway report.....	149
Contract for improvements in Asuncion, transfer of.....	149
Curapay, wood, industrial value of.....	537
Electric trainway contract, transfer of, to an American company.....	149
Exports, agricultural, 1907-8.....	354
Export tariff, new.....	736
Foreign companies in the Republic.....	737
Government students in the United States.....	74
Inauguration day in.....	410
Live-stock convention with the Argentine Republic.....	353
Municipalities, law for the government of.....	1119
Population.....	96
Public and private instruction, status of.....	1119
Tobacco culture.....	737
PARANA RIVER, BASIN OF THE.....	280
PARA, THE STATE AND CITY OF.....	643
PENNA, DR. AFFONSO AUGUSTO MOREIRA, PRESIDENT OF BRAZIL, DEATH OF.....	961
PERU:	
Bank of Peru and London.....	1121
British capital in mines.....	500
British investments in.....	690
Callao, dry dock at.....	1120
Consular convention with Holland.....	539
Dry dock at Callao.....	1120
Fertilizers in.....	952
Government students—	
Abroad.....	539
In the United States.....	74
Holland, consular convention with.....	539
Inauguration day in.....	410
Internal revenue, 1908.....	1120
Lima, municipal organization.....	856
Loans, proposed.....	740
Mining—	
Companies, fusion of.....	153
Statistics.....	739
Paita-Marañon Railway.....	353
Pearl fishing concession.....	153
Petroleum belt.....	149
Population.....	96
Primary instruction in national colleges.....	1121
Railway from Paita to the Marañon River.....	355
Railways, projected and in operation.....	538
Rice imports.....	1120
Steamship line, subsidy for.....	1120
Subsidy for steamship line.....	1120
Sugar production and exports.....	741
Wheat imports.....	1120
Wireless telegraphy.....	642
PIASSAVA FIBER OF BRAZIL, THE.....	674
POPULATION OF THE AMERICAN REPUBLICS.....	96

	Page.
PORTELA, SEÑOR DON EPIFANIO, MINISTER OF THE ARGENTINE REPUBLIC, SPEECH BY, AT THE PAN-AMERICAN DINNER.....	800
PRESIDENTIAL WORK IN COLOMBIA.....	422
PROMENADES IN THE AMERICAN REPUBLICS.....	852
PUBLIC-DEBT SERVICE IN LATIN AMERICA.....	899
QUESADA, SEÑOR DON GONZALO DE, SPEECH BY.....	427
QUITO EXPOSITION, PARTICIPATION IN.....	894
RAILWAY EXHIBITION IN 1910, ARGENTINE.....	882
RECEPTIONS OF LATIN-AMERICAN DIPLOMATIC REPRESENTATIVES:	
Arosemena, Señor C. C., Minister of Panama.....	270
Barra, Señor Don Francisco Leon de la, Mexican Ambassador.....	663
Espinoza, Dr. Rodolfo, Minister of Nicaragua.....	274
García, Señor Don Justo, Minister of Cuba.....	850
Gonzalez, Dr. Pedro, Nicaraguan Special Envoy.....	1025
Rojas, Dr. Pedro, Venezuelan Minister.....	1024
RIVER PLATE, THE NORTH AMERICAN SOCIETY OF THE.....	679
RODNEY, HON. C. A., FIRST UNITED STATES MINISTER TO THE ARGENTINE REPUBLIC, TRIBUTE TO.....	878
RODRIGUES, SENHOR J. C., EDITOR OF THE "JORNAL DO COMMERCIO":	
Banquet given in honor of.....	1041
Speech by.....	1044
ROJAS, SEÑOR DR. PEDRO, VENEZUELAN MINISTER, RECEPTION OF.....	1024
ROOT, HON. ELIHU, SPEECHES BY.....	803, 1042
ROWE, PROF. L. S., OF THE UNIVERSITY OF PENNSYLVANIA, ADDRESS OF, ON TRADE CONDITIONS IN SOUTH AMERICA.....	1077
SALVADOR:	
British investments in.....	690
Canned goods, duty on.....	1122
Coffee, export tax on.....	900
Commerce, foreign, 1907 and 1908.....	356, 1121
Commerce with the United States.....	742
Commercial travelers in.....	102
Consular invoices not required with parcels-post.....	540
Financial conditions in 1908.....	1122
Imports, first quarter of 1908.....	153
Inauguration day in.....	410
Map, official.....	742
Maritime traffic, nine months of 1908.....	357
Message of President Figueroa.....	953
Parcels-post, consular invoices not required with.....	540
Population.....	96
Postal parcels, consular invoices for.....	154
Postal regulations.....	540
President Figueroa, message of.....	953
Salvador Railway Company.....	741
Stamp revenues, 1908.....	954
Tariff modifications.....	1122
United States—	
Fleet, visit to.....	877
Trade relations with.....	742
Wine, duty on.....	1122
SANNON, M. H. PAULEES, MINISTER OF HAITI, RECEPTION OF.....	664
SCIENTIFIC CONGRESS, PAN-AMERICAN. (See PAN-AMERICAN SCIENTIFIC CONGRESS.)	

	Page.
SHERMAN, HON. JAMES S., VICE-PRESIDENT OF THE UNITED STATES, SPEECH BY, AT PAN-AMERICAN DINNER.....	794
SHIPPING FACILITIES BETWEEN EUROPE AND SOUTH AMERICA.....	1075
SOUTH AMERICA:	
British capital in mines of.....	500
Lampport and Holt Line, new steamer of.....	1015
Shipping facilities between Europe and.....	1075
Trade and credit conditions in.....	1077
TEXTILE INDUSTRIES IN LATIN AMERICA.....	97
THEATERS AND OPERA HOUSES IN LATIN AMERICA.....	811
TOBACCO, THE AMERICAN INDIAN'S GIFT TO CIVILIZATION.....	52
TRADE AND CREDIT CONDITIONS IN SOUTH AMERICA.....	1077
TRANSANDINE RAILWAY, HISTORY OF THE.....	463
TRANS-ISTHMIAN TRAFFIC IN 1908.....	1074
UNITED STATES:	
American goods—	
Brazilian tariff concessions to.....	1088
Exhibit of, at Santiago.....	714
Annapolis, Latin-American students at.....	301
Argentina, tribute of, to first United States Minister.....	878
Brazil, tariff concessions to American products.....	1088
Colombia—	
Americans interested in gold mining in.....	933
Exports from.....	516
Colombian bureau of information at New York.....	328
Columbus statue at Washington, D. C.....	413
Commerce with Latin-America.....	155, 357, 540
Commerce, foreign.....	1123
Consular reports, subject-matter of.....	95, 306, 499, 695, 908, 1069
Cornell University, Latin-American students at.....	304
Corn, exports of.....	1002
Costa Rica, imports from.....	722
Ecuador, National Exposition, participation in.....	895
Farm products in 1908.....	359
Guatemala, Fleet of the United States, visit to.....	869
Inauguration day in.....	397, 410
Latin America, trade with.....	155, 357, 541
Latin-American students in the.....	71, 301
Mexico, steamship line from Progreso to New Orleans.....	1114
Mineral production.....	156
Nicaragua —	
Exports from.....	734
Steamship line from, to Seattle.....	533
Panama Canal, nationality of employees.....	541
Pan-American Scientific Congress, Second, to meet in Washington, D. C.....	278
Pennsylvania University, Latin-American students at.....	301
Population.....	96
Salvador—	
Trade relations with.....	742
United States fleet's visit to.....	877
Trans-Isthmian traffic, 1908.....	1074
Wheat production in 1908.....	1075

URUGUAY:	Page.
Agricultural industry.....	360
Argentina, consular correspondence with.....	361
Bank of the Republic in 1908.....	958
British investments in.....	690
Business methods, successful.....	359
Central Uruguay Railway in 1908.....	158
Coal mines, exploitation of.....	361
Colonia to Brazil, railroad from.....	360
Consular correspondence with the Argentine Republic.....	361
Customs revenues.....	157, 158, 743
Docks and yards projected.....	744
Economic conditions, 1908.....	1123
Exports in 1908.....	1126
Food products, regulations for importation of.....	743
Hides and skins, exports of.....	156
Inauguration day in.....	410
Live stock and agricultural industry, 1907-8.....	360
Message of President Williman.....	954
Midland Railway, 1908.....	957
Mining and minerals.....	1127
Montevideo—	
Administration of port of.....	361
Municipal organization.....	1003
Tramways in 1908.....	958
National College, reorganization of the.....	157
Population of the Republic.....	96, 360
President Williman, message of.....	954
Railway from Colonia to Brazil, proposed.....	360
Railways and shipping.....	1125
Salesman, experience of a.....	359
School of commerce, establishment of a.....	743
Shipping.....	1125
Surplus for fiscal year 1907-8.....	157
Trade and industry, characteristics of.....	1127
Wheat production in 1908.....	1075
Wireless telegraphy.....	642
Wool shipments in 1908.....	156
 VENEZUELA:	
Asphalt concession, forfeiture of.....	362
British capital in mines.....	500
British investments in.....	690
Census returns.....	744
Cacao production.....	1071
Coffee, export tax on.....	900
Colombian commerce, Zulia River opened to.....	541
Commerce—	
Foreign, first half of 1908.....	958
Ports opened to.....	542
Escalante River, opened to traffic.....	744
Fibers, exploitation of.....	159
Foreign debt, payments on account.....	746
Laws, revision of.....	746
Immigration, first six months of 1908.....	745

VENEZUELA—Continued.	Page.
Inauguration day in.....	411
Meat extracts, establishment of factories for.....	1129
Oil-factory concession.....	159
Parcels post, importation of merchandise by.....	1128
Population of the Republic.....	96, 1129
Ports, opening of.....	746
Public hygiene commission.....	1128
Railway—	
Statistics.....	745
Traffic, first quarter of 1908.....	362
Revenues, federal, allotted to the States.....	746
Rojas, Dr. Pedro, Minister to the United States, reception of.....	1024
Salt—	
Exploitation of.....	746
Transportation of, in national vessels.....	542
Stamp and postal card concession.....	745
Tariff modifications.....	159, 542
Tobacco industry, decrees concerning.....	746
Tucacas custom-house, closing of.....	1129
Wagon road between Puerto Cabello and San Felipe.....	159
Zulia River, opened for Colombian commerce.....	541
WANDS, MR. ERNEST H., UNITED STATES COMMISSIONER TO THE NATIONAL EXPOSITION OF ECUADOR.....	201
WHALE IN BRAZIL.....	1048
WHEAT PRODUCTION OF AMERICA IN 1908.....	1075
WIRELESS TELEGRAPHY IN THE AMERICAN REPUBLICS.....	629
YALE UNIVERSITY'S INTEREST IN LATIN-AMERICAN COUNTRIES.....	901

## INDEX TO ILLUSTRATIONS.

	Page.
Alaska-Yukon-Pacific Exposition:	
Government building.....	984
International Bureau's exhibit.....	985
Alcorta, Señor José Figueroa, President of the Argentine Republic.....	406
Alfaro, Gen. Eloy, President of Ecuador.....	408, 895
Álvarez, Dr. Alejandro, Chilean jurist.....	1020
Amador-Guerrero, Dr. Manuel, President of Panama.....	782
Anderson, Hon. George Everett, United States Consul-General at Río de Janeiro.....	376
Arango, Señor Don José Agustín, First Vice-President and Secretary of State of Panama.....	Facing 752
Argentine Republic:	
Buenos Aires—	
Avenue of palms.....	108
Boathouse at El Tigre.....	Facing 914
Botanical Garden, photographs of.....	1055-1062
Brewery in suburbs of Quilmos.....	Facing 311
Central Produce Market, hide and wool section.....	104
Colon Theater.....	812
Inaugural review of troops.....	401
Palermo Driveway.....	Facing 854
Recoleta Cemetery.....	Facing 110
San Martín Square.....	Facing 310
St. John's Anglican Church.....	879
United States Minister Rodney, monument to the memory of, in St. John's Anglican Church.....	881
Valentin Alsina, statue of.....	696
Cordoba, river and tunnel near.....	697
Christ of the Andes, statue marking the boundary line with Chile.....	468
Iguazu Falls.....	281, 297
La Guayra Falls.....	297
North American Society of the River Plate, executive committee.....	681
Trans-Andine Railway—	
Avalanche shed.....	467
Mountain scene.....	468
Sleeping car.....	463
Stone refuge.....	470
Uspallata Station.....	464
Villa-Jardin, view of.....	465
Arosemena, Señor Don C. C., Panaman Minister.....	177
Bacon, Hon. Robert, Assistant Secretary of State.....	6
Barra, Señor Don Francisco L. de la, Mexican Ambassador.....	Facing 369
Beata-Neves, Mr. L., Brazilian Delegate to Third Trans-Missouri Dry Farming Congress.....	1064
Black diamond, largest ever found.....	238

	Page.
Bolivia, Congress, opening session of.....	Facing 111
Bone, Mr. Scott C., Vice-President of the Gridiron Club.....	Facing 1045
Borja, Dr. Cesar, Minister of Foreign Relations of Ecuador.....	895
Borts diamond, largest ever found.....	238
Brazil:	
Black diamond, largest ever found.....	238
Convoy of diamonds from the mines.....	232
Coquillo nuts, delivery of, at warehouse.....	675
Diamantina district—	
Diamond cutting establishment.....	254
Diamond dredge.....	251, 253
Diamond mining, photographs.....	230-255
Diamond River.....	230
Iguazu Falls.....	281, 297
Jequitinhonha River—	
Diamond washing.....	250
Manaos, Amazonas Theater.....	819
Minas Geraes, Rio Manso Falls.....	248
Palms.....	116
Para—	
“A Provincia do Para” building.....	646
Da Paz Theater.....	818
Frei Caetano Brandao Square.....	645
General Bittencourt Institute—	
Exterior view.....	653
Group of students.....	Facing 923
Governor’s residence.....	650
Municipal building.....	652
Palm avenue.....	650
Panoramic view of.....	Facing 648
Praça da Republica.....	655
Prudente de Moraes Square.....	1090
Quay in the harbor of.....	647
Water front.....	649
Pernambuco—	
Opera house.....	817
Piassava palm.....	675
Rio de Janeiro—	
Assemblea street.....	39
Avenida Central.....	31, 34, 35, 46, 507
Avenue and park in.....	Facing 706
Beira Mar avenue.....	Facing 855
Botanical gardens.....	36
Canal do Mangue.....	707
Carioca street.....	43
Corcovado Summit, road to.....	Facing 506
Cotton factory in.....	608
Fire department, central station.....	42
General Ossorio, statue of.....	Facing 319
Gloria Garden.....	Facing 114
Gonçalves Dias School.....	44
Harbor of.....	Facing 922
Inspection of firemen.....	40

## Brazil—Continued.

	Page.
Rio de Janeiro—Continued.	
Isabel Asylum.....	Facing 318
Jornal do Commercio building.....	34
Misericordia Hospital.....	48
Municipal Theater.....	816
Palace of the Ministry of Public Works.....	37
President's palace.....	50
Treasury building.....	41
Water front.....	32
São Paulo—	
Pipe line for water supply.....	119
State Theater.....	820
Whaling in, photographs illustrating article on.....	1048
Brown, Hon. Philip M., American Minister to Honduras.....	179
Bryan, Hon. W. J.....	163
Buchanan, Hon. William I., United States special commissioner to Venezuela.....	10
Bureau of the American Republics:	
Decorations of present building of, during inauguration week.....	576
Exhibit of, at the Alaska-Yukon-Pacific Exposition of Seattle.....	985
New building of—	
Design for.....	Facing 363
Views.....	307, 568
Cable tape, diagram of a.....	493
Câceres, Gen. Ramón, President of the Dominican Republic.....	161, 408
Calvo, Señor Don Joaquín Bernardo, Minister from Costa Rica to the United States.....	797
Cannon, Hon. Joseph G., Speaker of the House of Representatives.....	798
Central American Bureau, International, members of.....	15
Central American Court of Justice, plan for palace of.....	13
Central American Peace Conference of Tegucigalpa group of members of.....	764
Chile:	
Aconcagua River.....	476
Administrator of an estate.....	Facing 716
Cavalry soldier.....	440
Christ of the Andes, statue marking the boundary line with the Argentine Republic.....	469
Coat of arms of.....	Facing 92
Corral, port of, view.....	717
Flag and coat of arms of.....	Facing 92
Juncal—	
Hotel and construction buildings.....	474
Road to.....	474
Laja Falls.....	Facing 515
Nitrate, loading of, in the W. R. Grace mines.....	260
Overseer of an estate.....	716
Palm ( <i>jubca spectabilis</i> ).....	122
Puerto Montt, view of.....	Facing 326
Railway bridge on line between Valparaiso and Santiago.....	78
Salto del Soldado Bridge.....	472
Santiago—	
Ahumada street.....	582
Alameda.....	438



## Chile—Continued.

Santiago—Continued.	Page.
Cathedral.....	591
Congress, Palace of.....	442
Estado street.....	597
Government Palace.....	587
Independencia square.....	434
Municipal building.....	583
Municipal Theater.....	822
Museum of Natural History.....	593
National Congress.....	589
National Library.....	439
Plaza de Armas.....	433
Private residence.....	595
Senate chamber.....	436
University of Chile.....	437
View of city.....	430
Talcahuano—	
Bay and town of.....	Facing 514
Dry docks, section.....	Facing 121
Naval academy.....	Facing 926
Transandine railway views.....	468-477
Valdivia, brewery in.....	Facing 115
Viña del Mar, view of.....	Facing 927
Church, Col. George Earl, portraits of.....	479-481
Clark, Hon. Champ, minority leader of the House of Representatives.....	806
Colombia—	
Barranquilla, street scene.....	125
Bogota—	
Bolívar Square, illuminated.....	719
San Carlos Palace.....	425
Street procession.....	Facing 120
Coat of arms of.....	Facing 262
Emerald—	
Débris containing.....	1031
In matrix.....	1034
Mining.....	1038
Strata containing.....	1036
Washing débris for.....	1039
Flag and coat of arms of.....	Facing 262
President Reyes and Diplomatic Corps reviewing troops.....	423
President Reyes and his Cabinet.....	421
Corea, Dr. Luis F., Minister of Nicaragua.....	273
Corn, photographs illustrating article on.....	989-1002
Costa Rica:	
Coat of arms of.....	Facing 490
Coffee drying.....	Facing 935
Flag and coat of arms of.....	Facing 490
Irazú Volcano.....	Facing 518
Military band.....	Facing 519
Monument celebrating triumph over William Walker.....	Facing 331
Northern Railway, scene on the.....	Facing 722
Orosi Valley.....	Facing 330

Costa Rica—Continued.	
Puerto Limon—	Page.
Wharf at.....	Facing 126
Wireless telegraph station at.....	641
Regiment of soldiers.....	Facing 723
San Jose—	
Cathedral.....	Facing 934
National Park.....	1101
National Theater.....	813
Waterfall in.....	Facing 127
Cotton, photographs illustrating article on.....	599-613
Creel, Señor Don Enrique C., Governor of Chihuahua.....	Facing 368
Cuba:	
Automobile in.....	688
Flag and coat of arms of.....	Facing 668
Havana—	
Ballroom in clubhouse of Business Clerks' Association.....	625
Band stand on Malecon.....	1091
Botanical gardens.....	Facing 938
Cabañas Fortress.....	Facing 939
Columbus Cathedral.....	619
El Prado Promenade.....	Facing 852
House of Representatives in session.....	623
Illuminated arch commemorating restoration of the Republic....	Facing 419
Letter carriers.....	620
Malecon drive.....	621
Obispo street.....	626
President's Palace.....	617, 618
Produce Exchange building, new.....	616
Templete, The.....	627
United States battle ships <i>Maine</i> and <i>Mississippi</i> entering the harbor.....	Facing 268
View of the city and the water front from Cabaña Fortress.....	615
Inauguration of President Gomez, scenes of the.....	262-269
President Gomez—	
Arriving at Caballeria Wharf together with Governor Magoon and Vice-President Zayas.....	267
Group of, and other officials after bidding good-by to Governor Magoon.....	Facing 418
Leaving the Palace with Governor Magoon.....	Facing 266
Portrait of.....	266
Taking the oath of office.....	Facing 267
Cullinan, diamond:	
Cleaving the.....	235
Finished.....	237
First cleaving of.....	236
In the rough.....	234
Dávila, Gen. Miguel R., President of Honduras.....	409
Demers, Mr. Pierre Paul, United States consul at Bahia.....	761
Diagrams:	
Argentine Republic—	
Area and population.....	1081
Commerce.....	911
Bolivia, tin production.....	918

## Diagrams—Continued.

	Page.
Brazil—	
Para, population.....	654
Sugar production.....	705
British investments in Latin-America.....	691
Cable tape.....	493
Cacao production of the world.....	1072
Colombia—	
Emerald mines.....	1029
Exports from Cartagena.....	517
Corn exports of the world.....	1002
Corn production of the world.....	999
Cotton production.....	607
Cuba—	
Foreign commerce.....	722
Sugar production.....	936
Dominican Republic—	
Commerce.....	658, 661
Honduras, commerce.....	526
Mexico—	
Agricultural and mineral products.....	340
Capital invested in the Republic.....	344
Commerce.....	137, 729
Henequen exports.....	451
Sugar production.....	948
Nicaragua, exports to United States.....	734
Peru, construction of Oroya Railway.....	84
Population of American Republics.....	97
Tobacco production of the world.....	63, 64
United States, farm products.....	358
Uruguay, wool shipments.....	157
Venezuela, commerce.....	959
Diamond mining, photographs illustrating article on.....	230-255
Diaz, Gen. Porfirio, President of Mexico.....	409
Dominican Republic—	
Banana plantation.....	Facing 133
Flag and coat of arms.....	Facing 904
La Vega, central park.....	660
Puerto Plata, landing wharf.....	662
Santo Domingo, street scene.....	657
Ecuador:	
Guayaquil, loading cacao.....	Facing 332
National Exposition of Quito, views of.....	202-206
Quito—	
National Theater.....	821
Private residence.....	1104
San Francisco Church.....	Facing 132
Street scene.....	Facing 333
United States Minister Fox and Consul-General Dietrich surrounded by representative Chinese.....	522
Egyptian cotton field and boll of cotton.....	601, 605
Emerald, South American, in matrix.....	1034
Espinoza, Dr. Rodolfo, Nicaraguan Minister.....	168
Estrada Cabrera, President Manuel, President of Guatemala.....	408

	Page.
Figueroa Alcorta, Señor Don José, President of the Argentine Republic.....	406
Figueroa, Gen. Fernando, President of Salvador.....	410, 961
García Velez, Señor Don Carlos, Minister of Cuba in the United States.....	548, 850
Godoy, Señor Don José F., Mexican Minister to Cuba.....	Facing 171
Gomes dos Santos, Señor José, Consul-General of Brazil at New York.....	969
Gomez, Gen. José Miguel, President of Cuba.....	266, 408
<i>(See also Cuba.)</i>	
Gomez, Gen. J. Vicente, President of Venezuela.....	411
González, Dr. Pedro, Special Envoy from Nicaragua.....	965
González Víquez, Señor Don Cleto, President of Costa Rica.....	407
Grace, William R.....	256
Guatemala:	
Country road.....	100
Country scene.....	Facing 134
Guatemala city—	
Bull Monument in the Paseo de la Reforma.....	Facing 539
Colon Theater.....	811
La Antigua, ruins of cathedral.....	Facing 337
Mazatenango Railway.....	Facing 336
Mining region in the interior.....	538
Prehistoric relic.....	384
Quezaltenango, municipal theater.....	823
Railway map.....	336
San Jose, Central Railroad Station.....	869
Visit of the United States fleet to, photographs of.....	869-876
Haiti:	
Cape Haitien, union club.....	Facing 724
Port-au-Prince—	
Cathedral.....	Facing 524
Market houses.....	Facing 525
National Bank of.....	134
Statue of General Dessalines.....	Facing 725
Helper, Hon. Hinton Rowan, ex-Consul-General of the United States in Buenos	
Aires.....	550
Henequen industry, photographs illustrating article on.....	444-463
Hicks, Hon. John, former United States Minister to Chile.....	754
Honduras:	
Picturesque scene in the interior.....	Facing 135
Sabana Grande, wagon road construction.....	136
Tegucigalpa-San Lorenzo highway.....	1105
Indian corn. <i>(See Maize.)</i>	
Joubert, Señor Don Emilio C., retiring Minister of the Dominican Republic in	
the United States.....	965
Kimberley, South Africa:	
Sorting rough diamonds from the De Beers mines.....	247
Wesselton mine.....	244, 245
Knowles, Hon. Horace G., United States Minister to Nicaragua.....	554
Knox, Hon. Philander C., Secretary of State of the United States.....	2, 790
Lamport & Holt Line, S. S. Vasari, photographs.....	1016-1018
Landis, Hon. Charles B., Congressman from Indiana.....	837
Latin-American embassies and legations in Washington, D. C.....	Facing 4
Latin-American students:	
Cornell University.....	304
Society of, at Annapolis, officers.....	302
University of Pennsylvania.....	303

	Page.
Léger, M. J. N., Haitian Minister.....	Facing 170
Leguía, Dr. Augusto B., President of Peru.....	410
Lincoln, Abraham, sixteenth President of the United States.....	Facing 164
Lincoln and his Cabinet.....	165
Magoon, Hon. Charles E., Provisional Governor of Cuba.....	268
Maguey industry, photographs illustrating article on the.....	444-463
Maize, photographs illustrating article on.....	989-1002
Maps:	
Argentine Republic, location of Carnegie Observatory.....	417
Bolivia, railway system.....	112
Brazil—	
Area, population, and diamond-producing States.....	233
Railway system.....	325
Cable lines of the American Republics.....	496
Colombia, emerald mines.....	1029
Guatemala, railway system.....	336
Parana River Basin.....	Facing 284, 288
Steamship connections, proposed, between Yokohama and New York.....	346
Western Hemisphere—	
Cable lines of American Republics.....	496
Wireless telegraphy in the American Republics.....	Facing 638
Martinez Aguirre, Dr. Francisco J., Minister of Public Instruction of Ecuador... ..	896
Meiggs, Henry, railway constructor.....	77
Mexico:	
Artesian well in Mexico City.....	Facing 531
Cotton tree.....	607
Cuernavaca Valley.....	Facing 338
Federal District, La Viga Canal.....	224, 225
Guadalajara—	
Degollado Theater.....	825
Public works at.....	1115
Guanajuato—	
Juarez Theater.....	825
Panoramic view of.....	Facing 732
Henequen industry, photographs.....	444-463
Mexico City—	
Artesian well.....	531
Avenida del Dos de Mayo.....	1114
Cathedral.....	Facing 138
Chapultepec.....	222
Colonia Juarez.....	212
Columbus, statue of.....	221
Cuauhtemoc, statue of.....	220, 222
Driveway in.....	Facing 853
Holiday procession.....	209
Home of American Ambassador.....	144
Letter carrier.....	213
Looking south from the cathedral.....	210
Moorish pavilion.....	227
Mounted police.....	226
President's Palace, Chapultepec.....	222
National Palace.....	208
New National Theater.....	826

Mexico—Continued.

	Page.
Mexico City—Continued.	
Parade of carriages.....	Facing 139
Paseo de la Reforma.....	219
Post-office building, new.....	211
Primary school building.....	217
Street construction.....	215
Tomb of Juarez.....	Facing 339
Young Men's Christian Association.....	216
Pulque, cultivation, extraction, etc., photographs.....	453-463
San Luis Potosi, La Paz Theater.....	825
Strawberry gathering.....	148
Tinacal, exterior and interior of a.....	459, 462
Tropic of Cancer, sign indicating.....	Facing 530
Zacatecas, old aqueduct.....	Facing 733
Montes, Señor Don Ismael, President of Bolivia.....	406
Montt, Señor Don Pedro, President of Chile.....	407
Morgan, Hon. Edwin, United States Minister to Cuba.....	368
Nabuco, Senhor Joaquim, Brazilian Ambassador in the United States.....	793
Nabuco, Senhor Joaquim, Brazilian Ambassador, flashlight photo of dinner given by, in honor of Senhor Rodrigues and the Gridiron Club.....	Facing 1040
North American Society of the River Plate, executive committee.....	681
Northcott, Hon. Elliot, United States Minister to Colombia.....	750
Obaldia, Señor Don Domingo de, President of Panama.....	410
Panama:	
La Boca, S. S. Santa Maria discharging oil.....	835
Oil pipe line from Pacific to Atlantic coast, photographs.....	828-836
Panama city—	
Government Palace.....	535
Market square.....	Facing 534
National Theater.....	822
Pan-American Dinner:	
Flashlight photograph of.....	Facing 788
Menu card, reproduction of design on.....	Facing 802
Notices in Washington papers.....	Facing 803
Pan-American Scientific Congress, First, medal commemorating.....	581
Paraguay:	
Asuncion, Government Palace.....	Facing 955
Nacundai Falls.....	291
Upper Parana River.....	291
Penna, Dr. Affonso A. Moreira, President of Brazil.....	1, 407, 961
Peru:	
Cerro de Pasco.....	89
Cotton mill near Peru.....	259
Cotton picking by Chinese.....	600
Cotton-winding machine.....	612
Lima—	
Bank of Deposits and Consignments.....	Facing 863
Cathedral, exterior.....	Facing 862
Cathedral, interior.....	Facing 864
Health Institute.....	858
Inaugural review of troops.....	403
Medical School.....	867
Panoramic view of.....	868

## Peru—Continued.

Lima—Continued.	Page.
Pasco de Colon.....	853
Police, squad of.....	864
Post-office and telegraph building.....	860
Principal square.....	857
San Francisco Church.....	858
Senate Building.....	Facing 865
Statue of Columbus.....	Facing 741
Statue of Colonel Bolognesi.....	Facing 740
Street scene.....	866
Torre-Tagle House.....	861
Mountain road in.....	Facing 327
Oroya Railway—	
Andean station.....	88
Infiernillo bridge.....	85
Scene on.....	86
Section of.....	81, 83
Tunnels.....	84
Sugar refinery of W. R. Grace & Company.....	258
Portela, Señor Don Epifanio, Minister from the Argentine Republic to the United States.....	801
Pulliam, Hon. W. E., Receiver-General of Customs for the Dominican Republic.....	659
Purdie, Mr. F. B., President, North American Society of the River Plate.....	682
Quesada, Señor Don Gonzalo de, ex-Minister of Cuba.....	559
Reyes, General Rafael, President of Colombia.....	407
River Plate, North American Society of the, executive committee, group of...	681
Rodgers, Hon. James Linn, United States Consul-General at Habana.....	758
Rodrigues, Mr. J. C., Director of the <i>Jornal do Commercio</i> of Rio de Janeiro.....	Facing 1044
Rojas, Dr. Don Pedro Ezequiel, Venezuelan Minister to the United States....	748
Root, Hon. Elihu, Senator from New York.....	804
Russell, Hon. William G., United States Minister to Venezuela.....	547
Salvador:	
San Salvador—	
National Theater.....	821
Palace of the President.....	154
Treasury Department Building.....	1120
Sanchez Cruz, Señor Don Ricardo, Consul-General of Chile at New York.....	968
Sannon, M. H. Pauleus, Minister from Haiti.....	Facing 374
Sherill, Hon. Charles Hitchcock, United States Minister to the Argentine Republic.....	545
Sherman, Hon. James S., Vice-President of the United States.....	365, 795
Simon, Gen. Antoine F. C., President of Haiti.....	409
Snyder, Hon. Alban G., United States Consul-General at Panama.....	971
South Africa:	
Coles-burg Kopje, interior of.....	238
Gong and Gong diamond diggings, Vaal River.....	246
Native laborers in compound.....	241
Sorting rough diamonds.....	247
Vaal River diggings.....	242, 246
Wesselton mine, Kimberley.....	244, 245
Squires, Hon. Herbert G., United States Minister to Panama.....	372

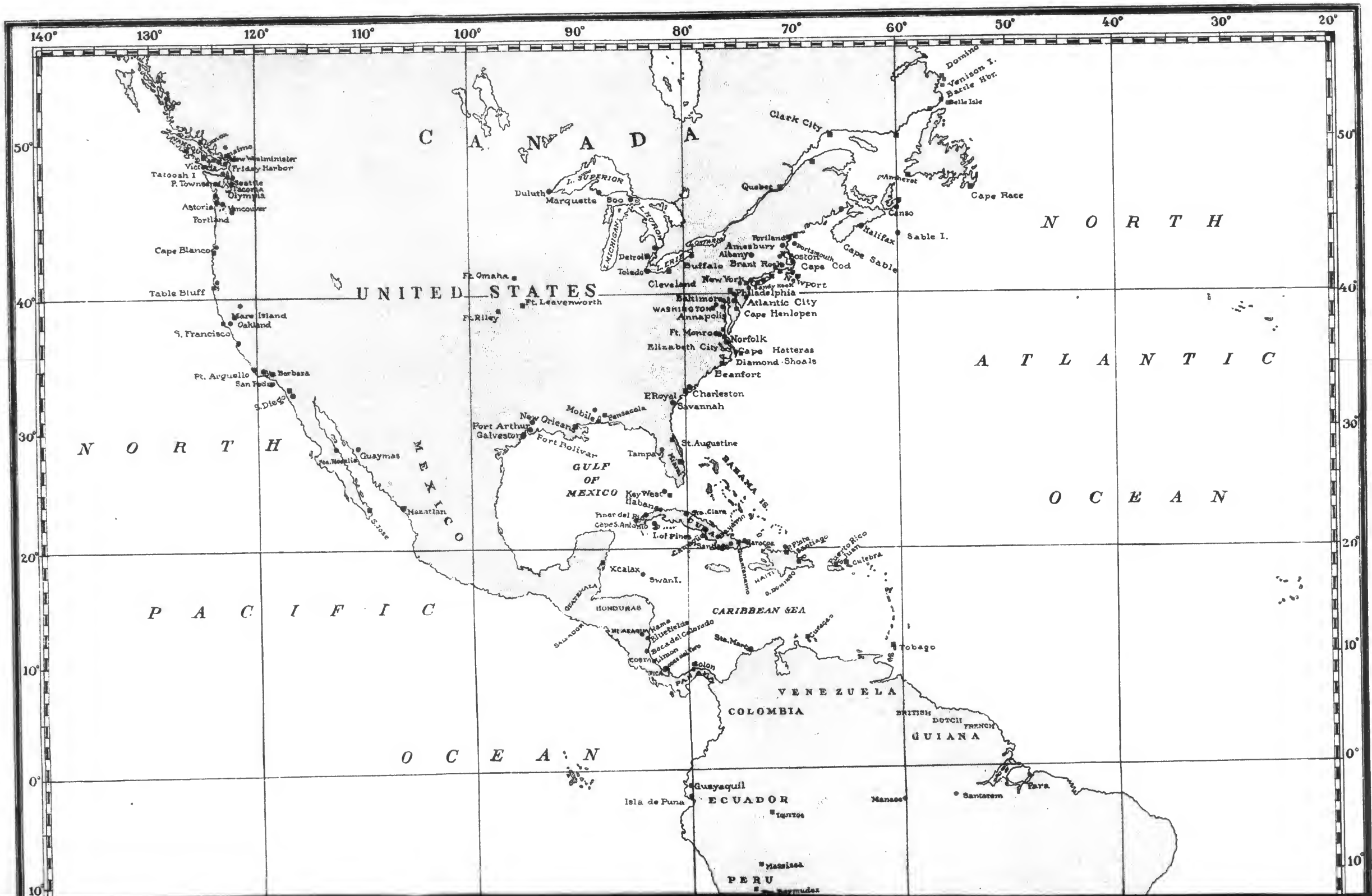
Taft, William H., President of the United States:	Page.
Cabinet.....	579
Group of various photographs of.....	Facing 364
Inauguration of, views.....	563, 572, 576
Portrait of.....	411
Returning with Mrs. Taft after inauguration.....	563
Tobacco, photographs illustrating article on.....	53-70
Transandine Railway. (See Argentine Republic; Chile.)	
Ulloa, Dr. Juan J., Consul-General of Costa Rica at New York.....	756
United States:	
Alaska, wireless telegraph station at Fairbanks.....	631
Alaska-Yukon-Pacific Exposition.....	984, 985
Annapolis, Latin-American students at.....	303
Bales of Texas cotton.....	611
Battle-ship fleet, homecoming of—	
President Roosevelt delivering a speech on board the Connecticut. Facing	371
President Roosevelt, Secretary Bacon, and Admiral Sperry on the	
Mayflower.....	370
Battle-ships Maine and Mississippi entering the harbor of Habana....	Facing 268
Capitol at Washington.....	397
Corn Palace, Mitchell, South Dakota.....	1001
Cotton photographs.....	602-611
Inauguration of President Taft, views of.....	563, 572, 576
Inauguration of President Roosevelt.....	402
Mount Vernon.....	400
New York, statue of Washington.....	399
North American Conservation Commission, President Roosevelt and	
guests of.....	365
President Lincoln—	
Inauguration of.....	398
Portrait of.....	164
President Roosevelt—	
Cabinet.....	Facing 372
Inauguration of.....	404, 405
Group of, Secretary Bacon and Admiral Sperry on board the May-	
flower.....	Facing 370
North American Conservation Commission and.....	365
President Taft and his Cabinet.....	579
President and Mrs. Taft returning from the Capitol after the inauguration.	563
Triumph cotton from Yazoo City.....	603
University of Cornell, Latin-American students at.....	304
University of Pennsylvania, Latin-American students at.....	303
Washington—	
Columbus statue at, models for.....	412-415
Court of Honor on Pennsylvania avenue.....	Facing 400
Inaugural decorations.....	400, 576
Pennsylvania avenue, inaugural decorations.....	400, 402
Potomac Drive.....	855
Washington Monument.....	412
Wireless telegraph station at.....	633
Wireless telegraphy, stations, etc.....	630-638
Uruguay:	
Automobile in.....	687

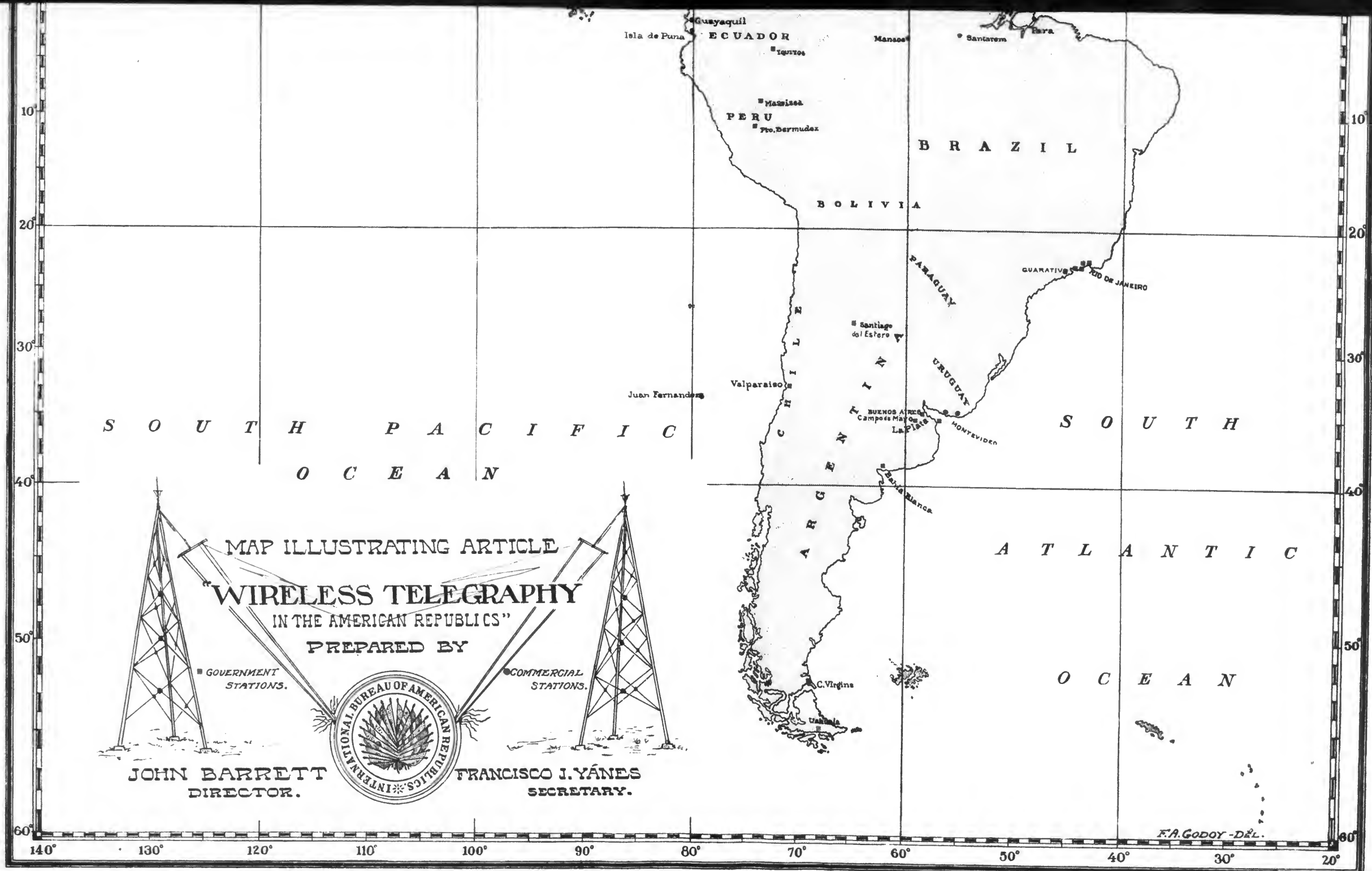


Uruguay—Continued.	Page.
Montevideo—	
Alms-house.....	1005
Argentine legation.....	158, 1012
Atheneum.....	1126
Cathedral.....	1006
Central Railway Station.....	1008
City Hall.....	1010
Custom-house.....	360, 1013
Fountain at Constitution Square.....	1127
Liberty Square.....	1003
President Williman leaving the military hospital.....	Facing 915
Paseo del Prado, bridge in the.....	1011
Solis Theater.....	814
Stock Exchange.....	744
Zabala square.....	361, 1007
Zabala street.....	Facing 954
Pocitos, pier at.....	Facing 542
Vasari S. S., of the Lamport and Holt Line, group of captain, officers, and guests.	1016
Views of.....	1017, 1018
Caracas—	
Municipal Theater.....	815
National Theater.....	815
View of city.....	543, 745
Maracaibo, Columbus statue.....	Facing 158
Valencia, Bolivar Square and statue.....	Facing 159
Villazón, Señor Don Eduardo, President-elect of Bolivia.....	Facing 747
Wands, Hon. Ernest H., United States Commissioner to the National Ecuadorian Exposition.....	201
Williman, Dr. Claudio, President of Uruguay.....	410
Wilson, Hon. Huntington, Assistant Secretary of State.....	172
Wireless telegraphy, photographs illustrating article on.....	630-641
Zayas, Señor Don Alfredo, Vice-President of the Republic of Cuba.....	Facing 543
Zelaya, Gen. José Santos, President of Nicaragua.....	409









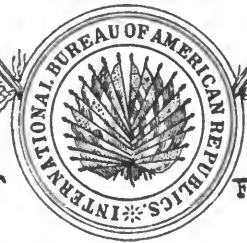
MAP ILLUSTRATING ARTICLE

**"WIRELESS TELEGRAPHY**

IN THE AMERICAN REPUBLICS"

PREPARED BY

JOHN BARRETT  
DIRECTOR.



FRANCISCO J. YÁNES  
SECRETARY.

F.A. Godoy - D.L.





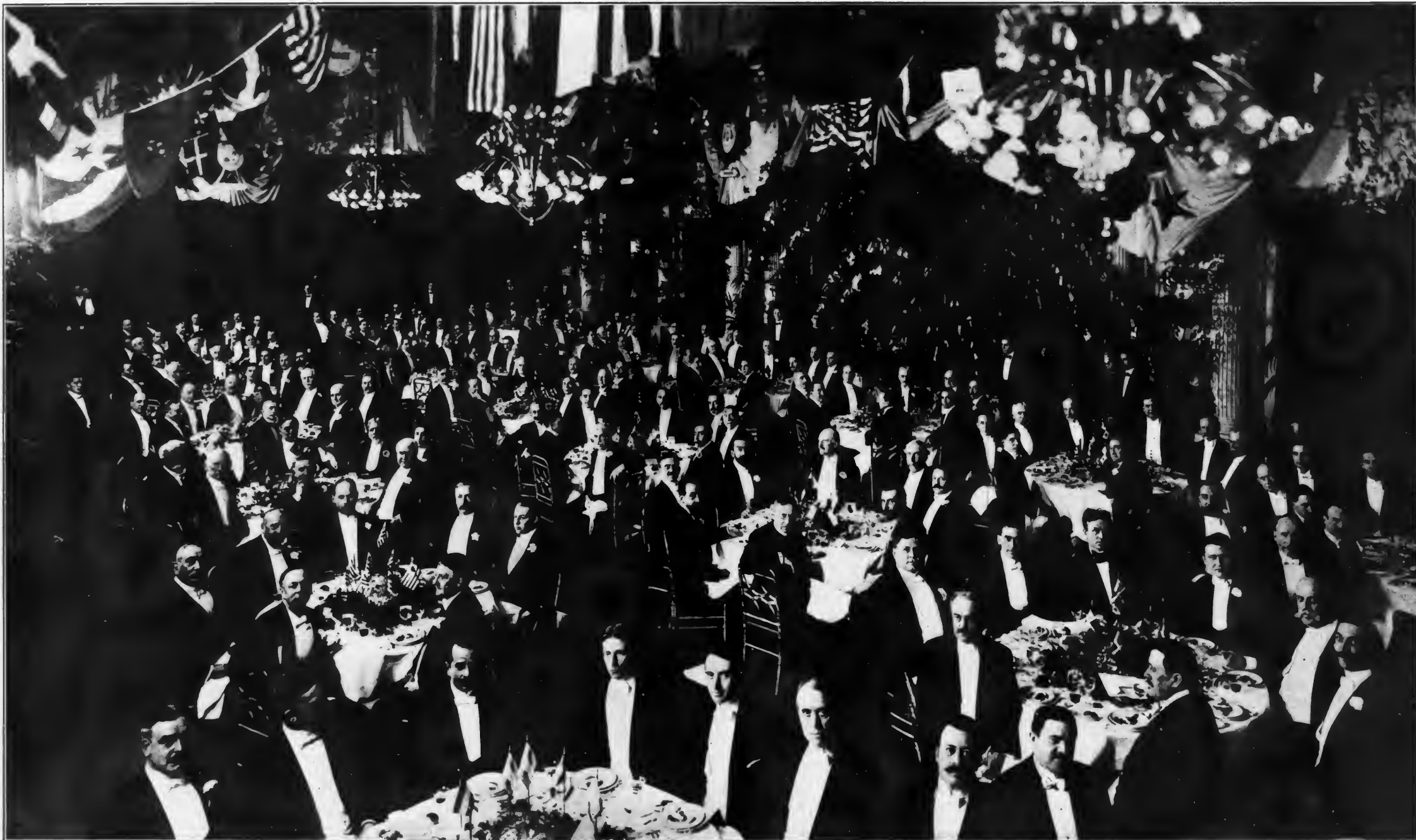
PANORAMIC VIEW OF THE CITY OF PARA, LOOKING TOWARDS THE RIVER FRONT. THE OPPOSITE SHORE IS THE ISLAND OF MARAJÓ, WHICH IS NEARLY AS LARGE AS CONTINENTAL PORTUGAL, AND SEPARATES THE PARA RIVER FROM THE MAIN ESTUARY OF THE AMAZON. THE SUBSTANTIAL CONSTRUCTION OF THE CITY, AND ITS GREAT COMMERCIAL ACTIVITY, ARE CLEARLY DEMONSTRATED IN THE PICTURE. PARA IS THE PORT OF TRANSSHIPMENT FOR PRODUCTS OF THE UPPER AMAZON TO FOREIGN COUNTRIES, AND VICE VERSA. THE MAIN FACTOR IN ITS PHENOMENAL GROWTH, HOWEVER, IS THE RUBBER INDUSTRY, AND PARA IS TODAY ONE OF THE TWO GREATEST RUBBER PORTS IN THE WORLD.



Haiti. Guatemala. Mexico. United States. Brazil. Uruguay. Nicaragua.

Cuba. Salvador. Bolivia. Costa Rica. Argentina. Chile. Dominican Republic.

Paraguay. Honduras. Ecuador. Peru. Colombia. Panama. Venezuela.



FLASHLIGHT PHOTOGRAPH OF THE PAN-AMERICAN DINNER, SHOWING THE TWENTY-ONE TABLES, THE GUESTS, AND THE DECORATIONS.

The diplomatic representatives of the countries presided at their respective tables. At the fourth table in the first row on the left were the Vice President, the Secretary of State, Senator Root, Senator Bacon, Congressman Payne, Congressman Champ Clark, General Bell, and Director Barrett. The list printed on the reverse side of the sheet gives the names of those present as seated. The arrangement of tables, beginning in the background and running in three parallel rows to the foreground, is given above the picture.





FLASHLIGHT OF GUESTS TAKEN AT BANQUET TENDERED TO THE MEMBERS OF THE GRIDIRON CLUB, WASHINGTON, D. C., BY MR. JOAQUIM NABUCO, AMBASSADOR OF BRAZIL, TO MEET MR. J. C. RODRIGUEZ, EDITOR OF THE JORNAL DO COMMERCIO OF RIO DE JANEIRO.