

ARGENTINA • BOLIVIA • BRAZIL • CHILE • COLOMBIA  
NOVEMBER • • • • • 1917

# BULLETIN OF THE PAN AMERICAN UNION

JOHN BARRETT, DIRECTOR GENERAL.  
FRANCISCO J. YÁNES, ASSISTANT DIRECTOR.

COSTA RICA • CUBA • DOMINICAN REPUBLIC • ECUADOR • GUATEMALA • HAITI



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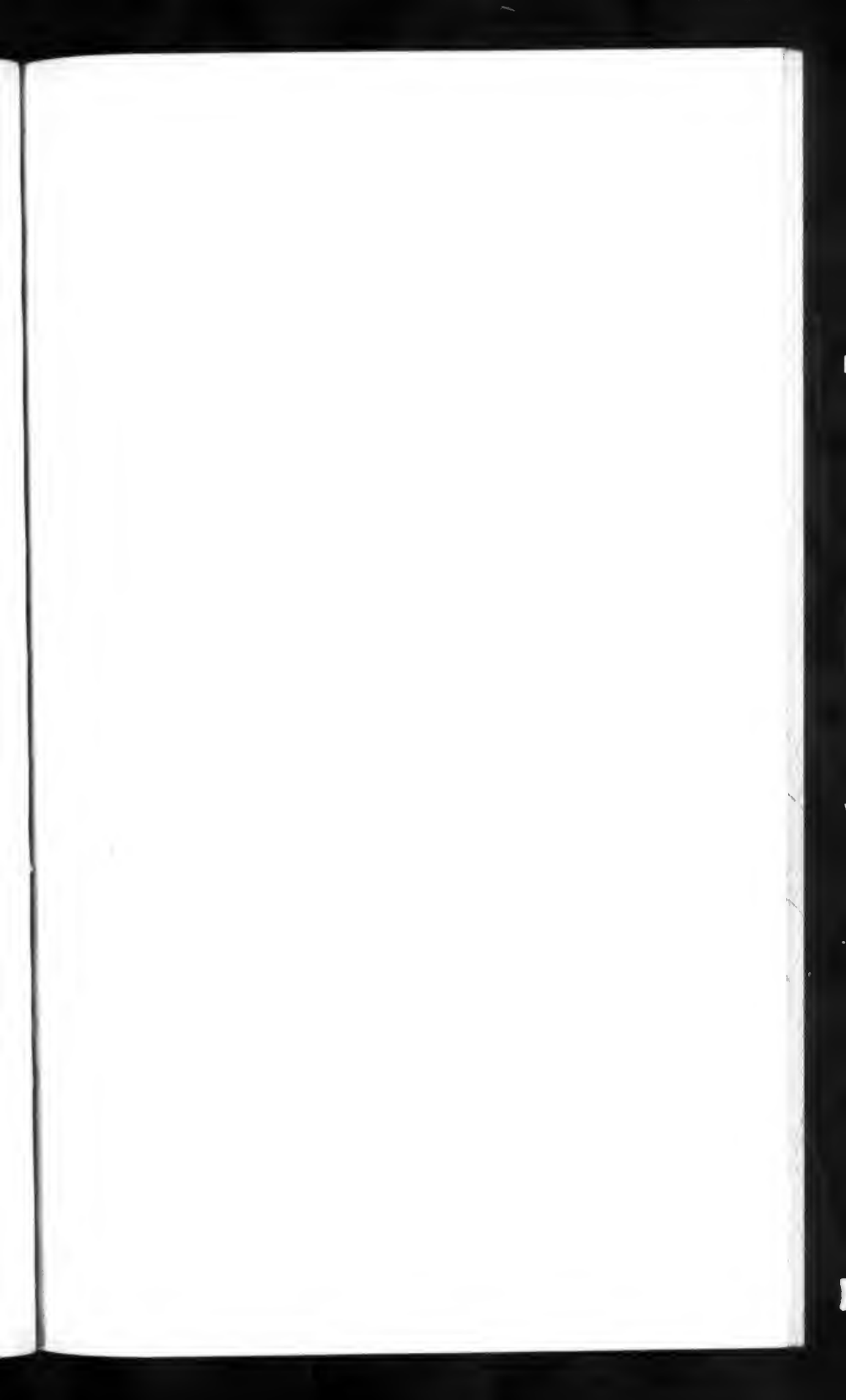


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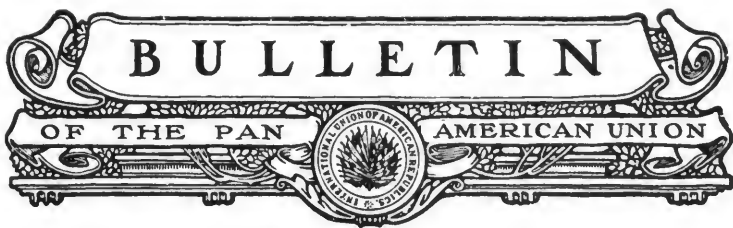




Photograph by Harris & Ewing.

#### THE GOVERNING BOARD OF THE PAN AMERICAN UNION.

The first autumn session, November 7, of the Governing Board of the Pan American Union, composed of the Secretary of State of the United States and the diplomatic representatives of the Latin American countries. On this occasion there were present the representatives of 15 of the 21 countries of the Union. This photograph is especially interesting and notable, because it shows on the left of Secretary Lansing Ambassador Boullas, of Mexico, who thus gives Mexico representation at this table for the first time after the lapse of five years. He was extended a special welcome by Secretary Lansing, speaking on behalf of the Governing Board. Those around the table are as follows: beginning with Secretary Lansing and proceeding to the right: Ambassador da Gama, of Brazil; Ambassador Aldunate, of Chile; Minister Calderón, of Bolivia; Minister Méndez, of Guatemala; Minister Zaldívar, of Salvador; Minister Elizalde, of Ecuador; Minister Freyre y Santander, of Peru; Chargé d'Affaires Díaz, of Honduras; Chargé d'Affaires Galván, of the Dominican Republic; Minister Urueta, of Colombia; Minister Bonifacci, of Venezuela; Minister Menos, of Haiti; Minister de Pena, of Uruguay; and Ambassador Boullas, of Mexico. Standing, left to right, Director General Barrett and Assistant Director Yates.



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## THE CALL FOR FOODS: SOUTH AMERICA'S ANSWER<sup>1</sup>

**M**ANY an acre of fruitless land in South America has become productive within the last few years. The effect of war, devastation and hunger in Europe was brought vividly and piteously home to the South Americans at a much earlier date than has been the case in the United States. Why? Because at the outbreak of European hostilities every South American country began to give its young men to the god of battle. England, France, Italy, and the central powers all called their reservists and patriots to the homeland. It was the writer's privilege to see thousands of men reembarc from Brazil, Uruguay, and Argentina—lands of their adoption—for European trenches, and six months later to hear in Chile, Peru, and Bolivia the harrowing stories of the loss of sons, brothers, and fathers on the field of battle.

Coincident with the stories of sorrow arose the question of goods and foods. Many manufactured products that had long been imported into South America were curtailed by the lack of shipping facilities, and the importer sought in vain to replenish his stock. Officials and citizens feared a shortage of food products and encouraged the planting of larger acreage. In some cases an official appeal stimulated production. For instance, President-elect Gomez, of Venezuela, called upon his countrymen publicly and through the several State Governments for a more extensive cultivation of the soil. The latter officials echoed the appeal and some of the governors went so far as to offer prizes to the farmer who produced the largest quantities of corn, beans, or rice. What is the result? Venezuela has already shipped to New York 80 tons of corn as her first consign-

<sup>1</sup> By William A. Reid, Pan American Union Staff.



A BATTERY OF BINDERS IN AN ARGENTINE WHEAT FIELD.

About the time these lines are read the planters of Argentina will be busily engaged in reaping their harvest, which embraces this year more than 17,400,000 acres in wheat alone. As usual, Argentina also has vast areas planted to oats, corn, linseed, and other crops.





A PHASE OF URUGUAY'S EFFORTS TO EXTERMINATE THE LOCUSTS.

These insects, long a destroyer of crops in Uruguay and other countries, are now being systematically caught in vast quantities. If plans are carried out, the locusts will be made into fertilizer, soap, and other useful products; hence a pest will be turned to profit.

ment of that product ever sent to the United States or to any country. In addition to corn, many tons of Venezuelan beans have arrived in New York and no doubt will soon be placed upon the market. The growing of these two products in larger quantities, coupled with the universal demand, appears to be having a stimulating influence on Venezuelan agriculture in general, and ere long additional supplies will probably be available. In sugar alone the exports to the United States for the first half of the present year increased in value \$434,000 over the corresponding period of 1916. But grain and sugar are not all this Caribbean country is producing more abundantly. The meat-packing plant at Puerto Cabello which resumed operations a short time ago is to be enlarged to meet the growing needs. Construction work is progressing and soon it is expected to have a capacity for slaughtering 500 cattle per day.

As cattle producing nations of the future as well as at present, authorities are linking Venezuela, Colombia, Bolivia and Paraguay with Argentina, Brazil, and Uruguay. And as evidences of these facts it may be stated that six or more great meat-packing corporations of the United States have transported at least a portion of their activities to the southern continent. During the first five months of 1917 Brazil exported 29,600,000 kilos of frozen beef, compared with only 10,900,000 kilos for the whole of 1916. Two Armour establishments at São Paulo and Santa Anna do Livramento, respectively, have already had a stimulating effect on cattle raising in southern Brazil. Both of these plants are really in the building stage and have not, therefore, reached a normal working capacity. More than \$5,000,000 is already invested in these enterprises and the São Paulo plant, it is stated, will have a capacity for slaughtering 7,000 animals a day, necessitating 3,000 employees.

The stranger may ask where is such a large number of stock to be obtained? All who are acquainted with southern Brazil are aware that for some years stock breeding has been gradually advancing, the ranches following the railroads and other means of communication that have entered virgin territory. One of the greatest stimuli to the stock industry will doubtless be the propaganda to be carried on by the Armour subsidiary companies. Larger numbers of improved breeds of stock will be taken to Brazil, ranchmen will be instructed in animal husbandry, pure-bred animals are to be loaned to breeders, and the industry encouraged in various other ways, privately as well as officially.

In ante bellum days Brazil shipped few if any potatoes to other lands. But the unusual demand appears to have caused a surplus to be grown, as more than 1,000 tons were exported during the first six months of the present year. Mandioca flour was exported from Brazil in normal times at the rate of about 4,000 tons a year; but by



Courtesy of Sr. Alfonso Guerite.

SCENE IN THE YERBA MATE FORESTS OF PARAGUAY.

The leaves of this plant have long been used throughout southern South America in making tea. During recent years increasing quantities of yerba mate have been imported into the United States, where the beverage is gaining popularity.



THE SUGAR INDUSTRY IN BRAZIL.

Since the sixteenth century Brazil has been growing sugar cane and exporting sugar in larger or smaller quantities. The high prices realized for this crop is proving a strong incentive for increasing the acreage. The picture shows a phase of the industry in the State of São Paulo.

reason of the call for food, Brazilian producers quadrupled the country's output of this product for the first half of the present year. Again, Brazil has never been an exporter of corn, but she sold in a recent six months period more than 10,000 tons for foreign consumption; a fair indication that demand creates at least an added interest in a crop destined to be far greater in future years.

To-day Brazil has rice for sale instead of importing it. At a rice fazenda in the State of São Paulo I found a highly trained young Brazilian clad in khaki with sleeves rolled high, superintending the construction of dams to irrigate hundreds of acres of rice fields. The young man had been educated in agricultural colleges in the United States and was not above laboring under the burning Brazilian sun. This case is typical of many other planters who are branching out into lines other than coffee and rubber, so long Brazil's greatest revenue producers. This season Brazil raised in the above-mentioned State alone 2,628,000 bags of rice. Never before has São Paulo produced this large quantity; more than a million bags being available for exportation. From all parts of the country there were exported in the first half of 1917 more than 20,000 tons of rice.

Uruguay is very optimistic over the prospects of her approaching wheat harvest in December and January. The farmers of the country sowed more acres in wheat this year than ever before, and one of the leading journals of Montevideo, *El Diario del Plata*, estimates that Uruguay will have a surplus of more than 7,000,000 bushels of wheat to ship to other lands. The number of acres in wheat is given at 779,736.

Some months ago there was considerable agitation in Uruguay relative to raising larger crops, and an active propaganda greatly aided the movement. Banks and the Liga de Defensa Comercial provided thousands of dollars with which selected seeds were purchased and allotted to farmers who were unable to obtain them in other ways. New stocks, public lectures, and free literature to agriculturists are among the leading factors which have contributed to the favorable food balance foreign countries may expect from Uruguay in wheat as well as in various other foodstuffs.

Furthermore, Uruguay proposes to turn a crop pest into a profit. The ravages of locusts have often caused serious injury or loss of growing grain. This insect has been found to possess nitrogen and phosphoric acid properties in considerable degrees, according to the experiments of Señor Alexandro Otaegui; and plans are being considered for transforming the locust into soap, fertilizer, and lubricating oils. If it is possible to consummate these plans, various crops will be conserved if not entirely saved, aided in growth, and the farmer relieved to some extent at least from the ravages of the insect.

Uruguay's immense herds of cattle, sheep, swine, etc., are too well known to need mention here, further than to remark that it is esti-



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SCENE ON A SHEEP RANCH IN SOUTHERN CHILE.

The unprecedented demand for food products is causing the Chilean ranchman to pay more attention to increasing the herds. Recently a new packing plant was established at Ultima Esperanza for the slaughter of sheep raised in the region of the Strait of Magellan. It is estimated that there are nearly 2,000,000 sheep in that far southern part of the continent.



Photograph by Underwood & Underwood.

#### CACAO WORKERS IN ECUADOR.

The scene represents the close of a busy day and the workers are homeward bound. This branch of agriculture gives employment to both men and women, and the increasing demand for chocolate is having a stimulating effect on the industry in general.



Photo by H. Pittier. Courtesy of the Bureau of Plant Industry, U. S. Dept. of Agriculture.

DRYING TONQUA BEANS AT BORBURATA, VENEZUELA.

Generally the pods are dried, cracked open, and the beans removed in the forests where they are gathered; but sometimes they are transported to the towns just as they are gathered and there prepared for the market. The picture shows the pods spread out for drying preparatory to being shelled.



mated there are in the country something like 35,000,000 live stock. And the annual increase of the herds no doubt will be especially favored by the ranchman on account of the rising value of all kinds of stock. The latest annual report (South American Journal, Aug. 25) of one of Uruguay's most important packing companies, states that "the herds are being graded up continuously, and the company now has such a large supply of pure-bred animals that they produce fine cattle in excess of their own requirements, and are consequently able to sell the overplus locally at lucrative prices. \* \* \* Much good work has been done on the company's ranches."

When the farmer in the United States sits before his open fire and to some extent rests from his labors afield, the planter on the pampas of Argentina is as active as the busy bee. He is reaping his harvests. The greatest yield of wheat the far-southern planter ever enjoyed was about  $13\frac{1}{2}$  bushels per acre, which was the average return from the crop of 1907-8. This yield, of course, falls short of that of lands intensively cultivated, but it forms the basis for estimating the crop of 1917-18. According to statistics compiled by the Argentine minister of agriculture, there are now sowed to wheat something more than 17,400,000 acres; over 3,300,000 acres are in linseed, and 2,827,000 acres in oats. The estimated production, provided no unforeseen agency alters the outlook, is 6,475,000 metric tons of wheat, 1,059,000 tons of linseed, and 1,467,000 tons of oats.

We hear much of Argentina's embargo on grain, but we also learn from recent reports that a commission representing the national grain interests estimates that Argentina will have at least 300,000 tons of wheat for exportation next year without endangering the supply needed for home consumption. During the first seven months of 1917 Argentina exported, according to mail advices from Buenos Aires, 756,364 tons of wheat. This amount is considerably less than for the corresponding period of 1916, the curtailed shipments being probably due to the wheat embargo.

Various countries naturally look to Argentina for meat supplies. Statistics show that country to have about 40,000,000 head of cattle and 85,000,000 sheep, but an unfortunate note is added that the export of meats has more or less strained the resources and in six years there has been a decrease in the number of cattle. The latter fact and the world-wide demand for food will probably act as an incentive to renewed activities in all kinds of stock breeding.

As a cattle country Paraguay is emerging into the limelight of food supply by the introduction of additional foreign capital. One of the unpleasant sights which greets the traveler in Paraguay, especially during the wet season, is the number of cattle to be seen struggling or fast in the mud of swamp lands, the rising waters

linaly overwhelming them, yet in most cases there are rolling hills near by, offering safety for man and beast. Greater attention to herds, with more cowboys in the field, is gradually lessening this annual loss of stock.

A bill now before the Paraguayan Congress carries a number of provisions for improving the country's stock and otherwise fostering the industry. North American financiers are responsible for several millions of dollars which have been invested recently in vast cattle areas and in building a modern meat-packing plant near Asuncion. This company, with abundant capital, is one of the most promising enterprises that has entered the bounds of Paraguay, and at least one of the important features of the work will be the operation of its own cattle steamers on the Paraguay and other watercourses of the region. Paraguay has about 4,000,000 cattle—only an insignificant number compared to possibilities.

We must not underestimate the food value of fruits. In Paraguay I bought oranges for \$1 per thousand—not indifferent ones, but excellent juicy oranges. Paraguay is a land where the orange and other fruits grow wild; with cultivation, excellent results are obtained. In many parts of the Orient English enterprise has made "orange marmalade" a feature in the problem of feeding the people—in feeding the European, and to a lesser extent in feeding the high-class native. More capital devoted to the orange lands of Paraguay might utilize the oranges of that country as the English have done the fruits in Ceylon. This industry, however, is one of future rather than present-day food supply, although Paraguay is sending oranges in carload lots to Buenos Aires markets.

Chile, Peru, and Bolivia can not at present make liberal contributions of foodstuffs to other countries. These nations are, however, conserving and increasing their supplies for home consumption, thereby creating a tendency to smaller importations. Normally they have been buying large quantities of flour from the United States and elsewhere, but the effects of war have caused them to take inventory of domestic resources. Chile recently placed one of the largest and most modern flour mills at San Antonio. In visiting this establishment, I said to the manager: "Where will you obtain the grain? You require vast quantities." His answer was reassuring—Chile is to export more food products next year, and still larger quantities in the future. The Province of Linares in central Chile illustrates the point. The board of public works of the nation recently approved plans for a million dollar irrigation canal, and in place of 21,000 hectares (hectare = about  $2\frac{1}{2}$  acres) sown to wheat in this one province, as at present, the area will be largely increased.

Again, consider the frigid region of Magellan Territory. Meat-freezing plants there have been returning 100 per cent dividends to



AGRICULTURAL SCENES IN BOLIVIA.

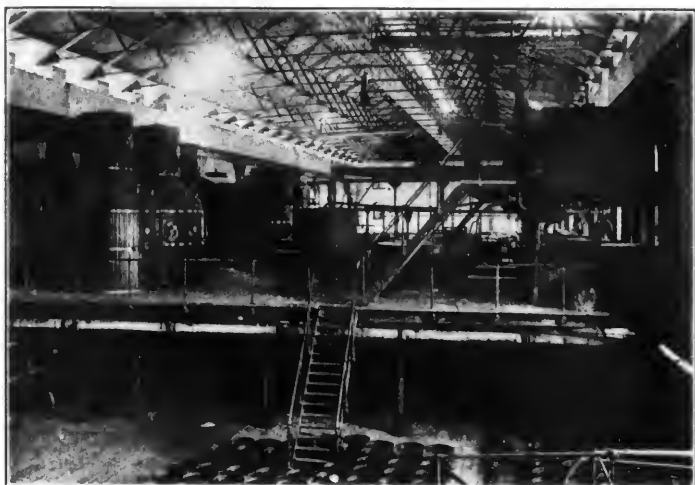
Upper: A glimpse of sugar-cane production in the Cochabamba region, now made accessible by completion of the railroad to that part of Bolivia. Lower: A portion of a coca plantation and a few of the workers gathering the leaves.

stockholders for several years. A new company is preparing to start operations at Ultima Esperanza (Last Hope) with a capital of \$500,000 and with a sheep slaughtering capacity of 500,000 per year. Naturally this enterprise bespeaks still greater attention to the sheep-raising industry which has long flourished in that far-away region of cold and snow. Meat and wheat, then, are two foods that Chile is preparing to produce in larger quantities, for domestic if not for foreign consumption. This year Chile limited her export of wheat to 700,000 metric tons and beans to 150,000 tons, as a matter of food conservation.

Bolivia's railway construction work reached in July last to the Cochabamba region, thereby tapping a rich agricultural area that formerly had no modern communication with the populous part of the country. Agricultural products to-day are shipped by rail directly to the capital city and other centers of trade. Scarcity of ships on the Pacific, high freight rates, and restricted exports of the usual flour from the United States have induced Bolivian planters to put forth greater efforts—they have been shown that home markets exist for all kinds of substitutes for wheat flour. The extension of the railroad above mentioned and also the Yungas road, now being pushed northward from La Paz into the productive valleys of that almost virgin region, makes additional rice and sugar-cane lands accessible as well as available for agricultural exploitation. Bolivia has long imported sugar; about \$1,000,000 worth in a recent average year. But by reason of the railroad, new life is given to sugar-cane planting, especially in the Cochabamba region extending eastward toward Santa Cruz, and we find to-day 15 steam-power mills, in addition to various others operated by animal power, grinding cane and producing sugar in larger and larger quantities. Rice, molasses, alcohol, etc., are a few of the other crops and products of eastern Bolivia now receiving more attention by reason of the increasing demand and higher prices.

Peruvian planters have been so pleased with the high prices received for their cotton that some of them were turning from food crops to the more profitable cotton growing. Officials of the Government, however, saw in the move a grave condition, and farmers were urged to grow greater quantities of foodstuffs—to plant more acres than in past years. Naturally, we look upon Peru as a vast storehouse of minerals: but in addition to supplying such products, the Republic exported last year more than \$27,500,000 worth of sugar, or double the value of that sold in previous years. This amount reflects a larger acreage as well as higher prices received for the crop.

If Peru and Chile can not supply the world with food products in enormous quantities they do, nevertheless, provide the soil ingredients that make larger crops in other lands. Guano and nitrate from the



INTERIOR VIEW OF A SUGAR REFINERY IN NORTHERN PERU.

This establishment is on the Cartavio estate, the latter furnishing employment for at least 2,000 people.



THE CHICAMITA CANAL, NORTHERN PERU.

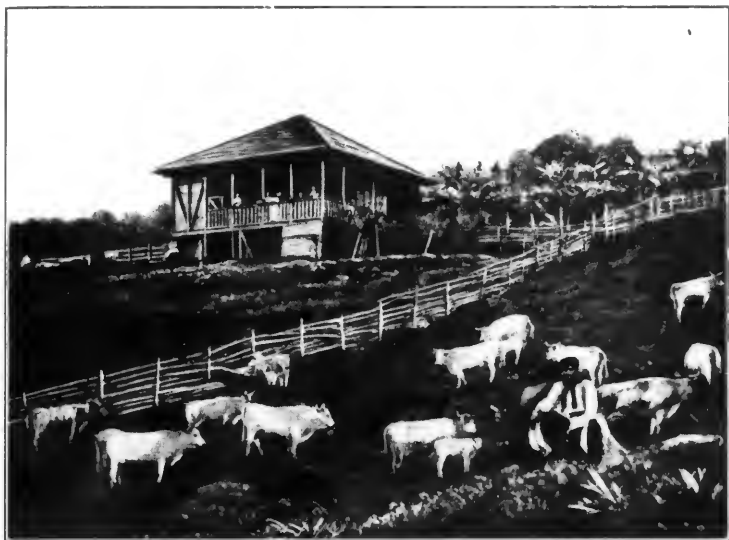
This canal illustrates the method employed for conducting water from mountain streams to the arid coast lands. Within the last few years the sugar-cane industry in Peru has made important strides.

coast line of these two nations, as everyone knows, is aiding and multiplying the yield of food crops in widely diversified regions of the world. The greatest difficulty at present, however, is the dearth of ships to transport such materials, and perhaps no better illustration of this deplorable fact can be found than that of a Chilean man-of-war laden with nitrate steaming for North America—a recent occurrence.

The cacao (chocolate) bean is Ecuador's principal food export, and advices from Guayaquil say these beans have been "coming in abundantly." Warehouses are reported to have enormous quantities in store, especially those at Colon, Panama. In September, last, a more or less average month, 6,954,256 pounds were exported from Ecuador, nearly 6,000,000 pounds coming to the United States. The high cost of ocean freight space, however, appears to be growing prohibitive. The rate per ton from Guayaquil to New York has been \$45, a figure possibly higher to-day. To European ports transportation presents still a greater problem. The vessels recently placed in service between Guayaquil and San Francisco under the Norwegian flag may possibly cause some reduction in freight rates on the Pacific and otherwise aid Ecuador's cacao market. The *Gov. Forbes*, of this line, recently delivered 18,000 bags of cacao in San Francisco, while Ecuadorian exporters in contracting to supply 50 tons of potatoes a week to Panama stimulated the growing of potatoes to a considerable degree.

Looking at the food question in Colombia we find that the high prices of wheat flour, much of which has long been imported, is causing many people to consume larger quantities of other foods. A number of Colombian millers import wheat from the United States which now costs delivered in Carribbean ports about \$4 per bushel; this brings the price of flour to \$30 per barrel—prohibitive rates for the poorer inhabitants. The latter have been growing larger quantities of various species of potato, one of which is locally called *ñame*. Bananas also are more largely consumed locally and many of these come from supplies which are not suited to foreign shipment. In 1916 Colombia exported to the United States \$1,667,213 worth of bananas, a considerable increase from the \$863,483 value of the previous year. Sugar exportation from Colombia also nearly doubled in the same period.

At present about 25,000 head of beef cattle are needed annually in the Panama Canal Zone. Colombia is a weekly contributor to this army of livestock, and the Republic's bounty paid to stockmen for each importation of a thoroughbred animal no doubt will be far-reaching in improving herds of cattle, sheep, and swine, all over the livestock regions of that country. A recent stock census shows the Republic to have 3,034,504 cattle, 711,482 hogs, 163,830 goats besides horses, mules, etc.



THE CATTLE INDUSTRY IN COLOMBIA.

Upper: A near view of the quarters of a ranch superintendent in the Cauca Valley. Lower: Another scene in the Cauca Valley, where cattle raising is becoming more and more important. Colombia is now a weekly contributor to cattle for consumption in the Panama Canal Zone.

We feel keenly the rising values of fats and greases, which are soaring to prohibitive prices. Colombia furnishes an illustrative case, which may be duplicated in other parts of South America, where the castor-oil plant is coming to the rescue, in a small if not in a large degree. A Colombian chemist found that oil could be produced locally and cheaply from the bean, and thereby serve domestic needs in lieu of the imported article. As a result of this use of a plant growing wild and long considered of little value, there are now large areas under bean cultivation. In the Department of Santander, according to United States Consul Guyant, 1,500 acres are sowed in the castor bean and several hundred acres in the same crop in the region of Barranquilla, etc.

The price of the bean in Colombian seaports is about 4 cents per pound, and this rate returns a handsome profit to the planter, many of whom use children to gather the ripe pods. Shipments of the bean to New York proved very saleable, and it seems certain that ere long much larger supplies will be available. Castor-oil meal is also one of the newer products of this bean. Coconuts in Colombia, as in other tropical lands, are now being gathered much more seriously than in past years, and as a substitute for creamery butter, we have the product—coconut butter—now on the market in our cities and destined to come in larger quantities.

What are we to understand from these glances at food prospects of a vast continent? Briefly, we see that the subject of food conservation is taking deep root; that newer and possibly less relished varieties of edibles are coming upon local markets; that agriculture and stockraising are more active generally, and in some instances encouraged by leading banking houses as well as by the governments. Each country shows a deeper interest in producing larger quantities of products. In numerous cases, as we have seen, these larger productions have already reached foreign shores and aided in feeding the multitudes. It may be true that some of the countries of South America have strained a point and permitted a rather too generous exportation of foodstuffs from supplies needed at home; but if such is the case the same fact seems likely to react and stimulate the farmer to plant larger areas. High prices of food crops may also prove even a stronger stimulus to increased production next year.





# THROUGH COSTA RICA, THE MAGNIFICENT, ON A MOTOR CAR<sup>1</sup>     ‘ ‘ ‘ ‘ ‘ ‘

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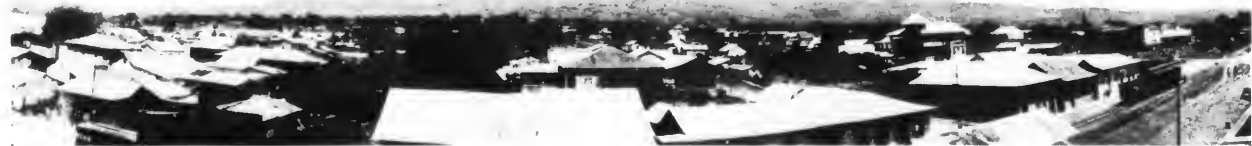
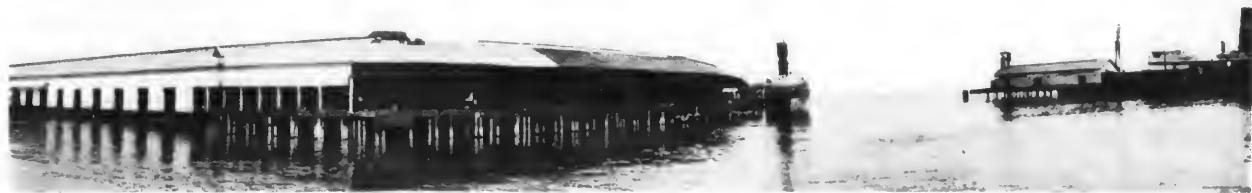
**A** WONDERFUL journey it was. Through jungles, across the slopes of foothills, into forests whose tropical luxuriance suggested the foreworld, over rivers and along palm-bordered beaches almost to the Panama line; into the main foothills, too; across great swamps marked by fern-like growths recalling plants of a prehistoric coal age, with giant fronds 60 to 80 feet long, palms, creepers, orchids, flowering vines, lilies, in gorgeous riotous brilliant colors, and birds as vividly hued as the flowers, huge trees rising on roots that, springing from the water, twisted like the folds of Brobdignagian pythons; into busy villages, and historic cities whose courteous people boast the proudest blood of ancient Spain; past neatly ordered estates; by groves of cacao and rubber; through banana plantations embracing tens of thousands of acres.

And up the roaring Reventazon River we went, following the picturesque railway line on one of the strangest rides in the world from modern Port Limon on the Carribbean coast to San Jose, the beautiful capital of Costa Rica on the high interior plateau. A prodigious stream is the Reventazon in high water. It has been known to roll an 80-ton locomotive as lightly as a pebble for 10 miles down its course. One follows it from the low plains adjoining the eastern coast up one of the most appalling gorges in the world, the right of way gradually climbing until the river appears as a silver ribbon far beneath. Approaching Cartago near the summit of the divide the railroad line finally leaves the valley and soon thereafter slips into San Jose.

All told, including main lines, spur lines, and tramways, there must be something like six hundred miles of railroad in Costa Rica. Over all of these we went upon our bounding motor, except on the Government line between San Jose and Puntarenas, the Pacific coast port, over which I took the regular passenger train for the 75-mile run. Also, since not all of Costa Rica may be seen from the railroad, I journeyed by gasoline launch, mule back, and diligencia.

It was not yet light when we first set out from the railroad yards at Port Limon. But the switchmen and track tenders were already

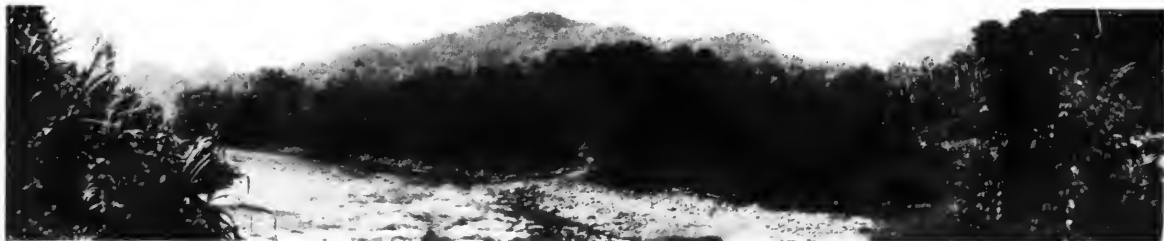
<sup>1</sup> By Hamilton M. Wright.



Photographs by Hamilton M. Wright.

SCENES AT LIMON AND CARTAGO.

Upper: Piers upon which the fruit trains are run and from which the fruit is delivered to mechanical loaders and carried aboard ship. Center: Railway yards and warehouses of the Northern Railway. Lower: General view of Cartago, one of Costa Rica's oldest and most attractive cities.



Photographs by Hamilton M. Wright.

ALONG THE LINE OF THE NORTHERN RAILWAY.

Upper: Zent, a pleasant and picturesque little railway station in the banana region between Limon and San Jose. Note the attractive residences of officials of the fruit company operating the Zent district. Center: A tropical forest scene on the Raventazon River, which stream is followed by the railway for many miles. Lower: Railway passenger train at Sequirres, a station about 30 miles inland from Limon. The depot stands on the right of the track and only the top is visible.



Photographs by Hamilton M. Wright

VIEWS OF SAN JOSE, COSTA RICA.

Upper: General view of the city. The large edifice in the background is the municipal theater. Center: Crowd on the steps of the cathedral awaiting the coming of a procession. Lower: General view of the city.

at their posts and halloo'ed a cheery well-wishing as our slight car gathered momentum and passed from the sleeping town, turned south and west across the river where lay the largest sea turtle farm in Central America, and with clear tracks for the first 40 miles started in the direction of the Panama border.

The air was chill and the speed of the railway motor gave penetration to the cold. Even at sea level it is cold at night and one is uncomfortable without a blanket. Always nature has her compensations. There are, in reality, four distinct climates and four distinct zones of largely differing appearance and production in the little Republic of Costa Rica which, by the way, is considerably more than twice the size of Switzerland and could comfortably support a population of 20,000,000.

There is the moist semitropical climate of the Carribean coast region down which we were proceeding that morning. It is a region of sudden showers, great rainfall, and hot, moist climate broken by the trade winds, and cool breezes that come from the mountains or are tempered by the sea. For tropical glory and luxuriance, for amazing diversity in plant, insect, and bird life, this region is probably not surpassed in the world.

There is the cool and pleasant, altogether charming climate of the uplands, the Tierra Templada, the great plateau region of the Cordilleras, where San Jose, Cartago, and other cities are located midway between the oceans. There is the cold region of the higher mountains with its chilling mists and often ice and frosts. And, finally, there is the warmer Pacific coast with its distinctively dry season from December until April, where the prolonged absence of rain is evident in less underbrush and jungle than marks the Caribbean side and where, in dry season, brush fires and forest burnings are not unusual.

But back to our motor car. The first shafts of the morning sun gild the hilltops in gold, leaving black shadows in the hollows. Every leaf and petal is bathed in heavy dew. A large bird sits sunning itself and preening feathers on a dead limb 100 feet above ground. Increasing batteries of light unfold the country in panorama. No conservatory in the world, however magnificent its display of orchids and exotic flowers, of majestic palms, or of brilliantly colored and fanciful plants could rival the millions of acres of the dense and wonderful growths beheld in Costa Rica. Great wreaths of mist are drifting from the valleys. Birds are calling from the forests. Kingfishers go winging up the streams and, in the shallow pools, the white plumed heron and her mate hunt frogs and minnows. A young Jamaica Negro and his bride each with a shotgun, out after game, perhaps a *Iuscions tepescuinte* or *paca*, perhaps a turkey, pass us on the right of way. Giant trees, 150 to almost 200 feet in



STREET SCENES IN SAN JOSE.

Upper: A good view of the stately columns of the cathedral fronting on a plaza in the heart of the capital. Center: Another street with imposing buildings. Lower: The Avenida Central. The building over which the flag flies is the legation of the United States. The balconies fronting the street are a special feature of Central and South American architecture.

height, with clear boles 80 to 100 feet up to the first branches, crowd thickly into dark green forests that stretch away in unending masses, merging, finally, into the rough flanks of the distant Cordilleras. These forests, embracing rosewood, mahogany, and more than 45 other varieties of hardwoods, are worth billions of dollars. Ferns, yellow lilies, and morning-glories line the railway embankment. Long vines trail from the tops of the tallest trees to the earth. Orchids blossom in every crevice of the branches and graceful tree ferns rise at the edge of the clearings.

It does not begin to get warm until 9 or 9.30 in the morning and it is not hot until 11. But even at that hour in the glades of the forest and in the forest aisles cut for the railroad lines it is cool. As for underbrush, in these virginal forest growths, there is scarcely any. If one knows the lay of the country he may ride for days at a time without leaving the forest shadows. Swamps may be and usually are impassable. So, too, are forests which have been burned or cut over, thus allowing space and light to encourage the growth of underbrush. But many of the woods have clear floors and the darkness below is only broken where the tropical sun, glinting through the infrequent spaces of the dense tree tops, sends down golden shafts of light. I had heard that there are many snakes in Costa Rica but in six weeks' constant traveling saw but one.

About noon we stopped for luncheon at Estrella, a small hacienda settlement near the end of the line. But before this we had halted to visit a small but thriving cotton plantation, a nursery for the growing of coconut trees, and I had gotten off the car once to photograph a troop of monkeys playing in a lofty tree near the track, but at once they grew silent and disappeared. The cotton grew lustily on a flat of black soil near a river. The coconuts had been planted under the shade of bananas and were almost ready for transplanting to the sandy sea beach.

The midday meal in Costa Rica is usually quite an affair, partly because there are at hand so many appetizing things to be eaten, but more particularly since there are no bounds to the hospitality of a Costa Rican, whether he be rich or poor. In this case we had a delicious pavo, or wild turkey, as the *pièce de résistance* of our meal, and also some appetizing cuts of a wild hog that had been killed the day before. Oranges, nectarines, bananas, egg plants, alligator pears, Irish potatoes and cabbages from the highlands, lettuce, yams, orange marmalade, and pastries completed a repast that was finished off by the delicious Costa Rican coffee which comes as a bottled extract, the preparation of the coffee requiring only the application of the extract to the warmed milk. In commenting upon meals, it may be observed that Costa Rica is a paradise for the sportsman and nature lover and the abundance of wild game contributes not a little to the menus of



Photograph by Hamilton M. Wright.

SCENES IN SAN JOSE.

Left: One of the principal hosteries. Many excursion parties in recent years have taxed this and other hotels to capacity, and a magnificent new establishment is proposed.  
Right: New post-office building, under construction when the picture was taken.





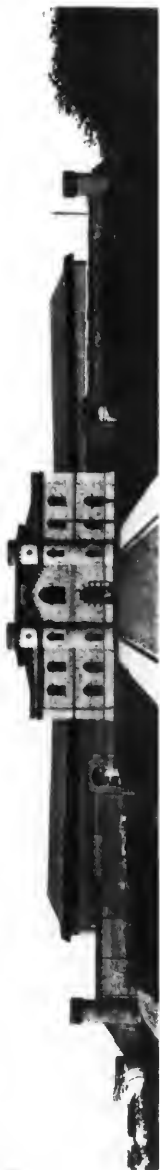
TYPICAL RESIDENCES OF REPRESENTATIVE COSTA RICANS IN SAN JOSE.

the residents and also of the visitors at the hotels. Wild pigeons were served in the hotels of San Jose when the writer was there. There are two well-known varieties of wild turkeys and at least seven game birds of allied genera. Quite as great a delicacy for the table is the magnificent curassow, of which the crested variety is the best known. This fine bird, with broad brown-flecked breast, stands quite as high as its cousin the turkey. It travels usually in groups of from 4 to 12 birds. I have several times seen them in clearings in the forests. Deer abound, wild hogs, and also the smaller peccaries, are very numerous. When feed becomes scarce the hogs migrate, in huge droves, from one portion of the country to another. It happened that I stopped near the scene of one of these migrations, near the flanks of Mount Turrialba. More than 800 hogs were said to comprise the herd, and fresh pork became quite plentiful. This was by no means an unusually large herd, for I am credibly informed that as many as 2,000 sturdy, nervous porkers have been seen in a single herd.

It was dusk that night when we again came into the railroad yards at Port Limon. This attractive city, center of the yards and shops of the Northern Railway of Costa Rica, was well lighted and had thrown aside the cares of the day. The municipal band was rendering a concert in the public park. Well-dressed throngs listened to the music or promenaded in the evening breeze upon one of the two great steel and concrete piers that, provided with railway trackage, cranes, and derricks, give Costa Rica, on the Atlantic coast, unsurpassed facilities for the transport of passengers and freight. Indeed it is customary for chartered steamers with excursionists to be met on the pier by special trains. A seven hours' ride takes them to San Jose.

He who rises early must repair to bed betimes. Next morning at dawn we were well upon our way to the dashing River Reventazon. Sleepy homes we passed surrounded by cacao orchards, or groves of oranges, tangerines, or grapefruit, homes from whose chimneys wisps of gray smoke rose into the chill morning air, telling of a day's work already begun. For the first 35 miles out of Port Limon the railway gradually creeps to the foothills. Low rolling country, haciendas, pastures marked by huge moss-bearded trees, occasional lagoons mirroring their surroundings, and villages of Jamaica natives are features of the landscape. Then comes the abrupt transition into another world: the precipitous journey to the highlands.

The splendor points of the great American Rockies, Pike's Peak, Long's Peak, Mount Harvard, Mount Yale, and Mount Princeton, rise thirteen and fourteen thousand feet above the sea. Those who are inspired by the spectacular phenomena of nature travel thousands of miles to behold these majestic cloud-swept crags and their vast crevasses of ice and snow. But these appealing peaks start from an



SCENES IN THE CAPITAL CITY, SAN JOSE, COSTA RICA.

Upper: Artillery barracks on the extreme right; offices of the minister of war in center. Lower: The insane asylum. These large grounds abounding in fine shade trees, shrubbery, etc., afford excellent recreation for patients who are not dangerous. A great outer wall surrounds the grounds.



Photographs by Hamilton M. Wright.

#### MODERNIZING INFLUENCES IN COSTA RICA.

Upper: The motor car is growing in popularity and is an incentive for constructing improved highways. The car shown in the picture belongs to the post office department and greatly quickens mail service.  
Lower: Interior view of one of the new creameries where butter and cheese are manufactured in increasing quantities.

environing territory that is as much as 6,000 feet above sea level. The heights of the mountains in relation to the country about them is to that extent diminished. Contrast with Colorado's peaks the Andean chain extending through Costa Rica. Chirripo Grande, the tallest of these, is 13,424 feet high; Mount Poas and Mount Irazu, the volcanoes, and a score of other peaks are somewhat less. But it is scarce 160 miles from sea to sea in Costa Rica. Her peaks rise almost from the sea itself, the rapid ascent being most pronounced upon the Pacific side.

The glories of the Alps or the Andes, of the Canadian or the American Rockies do not transcend, in my opinion, those of the Central American Switzerland. From the lava swept crater of grim Mount Irazu may one behold two oceans. On a bright day, when the clouds are low, he may look upon that most remarkable of visions, snow white fields of mist, as far as the eye can reach, under the radiant, brilliant light of the tropical highlands, a light undiminished in intensity by the mists of sea level. And at nightfall he may regard the sun, magnified many times, as a ball of molten fire, it sinks into purple, red, and white seas of cloud.

On the way to the lower canyon of the Reventazon one sees many of those curious and intelligent birds, the great golden tailed oriole, called by the Spanish "Ora Pendula." The Ora Pendula, which is about the size of a small crow, iridescent blue-black, and with bright yellow tail, weaves a gourd-shaped hanging nest, from 3 to even 4 feet in length, of the fibers of banana, the long skeins of Spanish moss, or, if these be not handy, of what material it can find. The orifice is small, reaching not more than 3 inches in diameter, but the lower part of the nest is a foot or more wide. I have counted 147 of these nests upon the lofty branches of a silk cotton tree. Strands that, altogether, will measure not more than the thickness of one's little finger are employed to attach the new home to the limb, and their weaving is the first construction undertaken by the clever little artificer, since the entire nest is built from the top downward. The nest does not last more than one season, for the exposure disintegrates the fibers. The golden tails are most companionable birds, and are indifferent to the presence of human beings. Once, while dining, we heard a great commotion in a nest in a nearby tree. It was violently agitated and raucous cries came from within. The parent birds hovered about calling in great distress. Thinking a serpent had gained access a shot was fired through the upper portion. When, to our surprise, there emerged the bloody murderer, a toucan bird. Canaries, linnets, and humming birds are everywhere, and their absence of fear renders a journey most interesting. Vultures, of course, abound. Once, rounding a curve at 35 miles per hour, we came upon one starting to fly from the middle of the track. When



Photographs by Hamilton M. Wright.

PHASES OF COSTA RICAN COFFEE PRODUCTION.

Upper: Coffee drying beds where the grain is exposed to the sun. Center: Large piles of coffee berries and a few of the workers. Lower: One of the mills where the berries are washed and the outer husk removed.



Photograph by Hamilton M. Wright.

#### COFFEE PICKING.

Upper: A Costa Rican boy hard at work on a plantation. Lower: A typical settlement of workers. Notice that the company employing them has constructed the houses several feet above ground in order to make life more healthful.

we reached him he had risen no higher than my shoulders, and almost overturned the car.

For 60 miles the Reventazon River dashes down a bowlder-strewn course, a cascade of white. One enters by the lower valley of the Reventazon which, within 2 miles becomes precipitous, the walls of the hills soon rising 1,500 to 2,000 feet. The railroad ascends the gorge until it is almost 1 mile above the river, hanging to the edges of precipitous cliffs. In that brief 60 miles one ascends from the Tropics to the Temperate Zone. Like Jack in the Bean Stalk, he clambers into a new world set above the clouds.

Cartago, ancient seat of learning, is the first city on the line after leaving the canyon of the Reventazon. It has an altitude of 5,000 feet above sea level, and is slightly on the Atlantic side of the Continental Divide. The city has been almost entirely rebuilt since it was destroyed by a trembler proceeding from Mount Irazu a few years ago, and the ruins of that earthquake have been crushed to make fine, broad city streets. Cartago has a population of about 12,000 persons. Near the city is a famous hot spring, much patronized by tourists. Those who visit the summit of Irazu often start from Cartago. The journey may be easily made by mule back in half a day. The incline is gradual. Indeed from Cartago Irazu belies its lofty elevation, 11,200 feet, and seems like some gigantic low-lying mound, lacking, as it does, the sharp cone or apex that usually distinguishes Central American volcanoes.

About 12 miles farther on, and over the divide, is San Jose, splendid capital of Costa Rica, altitude, 3,800 feet and a modern Athens. The city lies as on the floors of a great natural amphitheater with towering hills upon three points of the compass. Its broad streets are paved with granite blocks or else newly concreted. Its shops are smart and up-to-date with notable displays of New York and Parisian fashions. The famed Teatro Nacional, costing \$1,000,000 gold, more than bears out its reputation as one of the finest theaters upon the American Hemisphere. I was particularly attracted by the sculptures in the vestibule, some of the best of which are by Costa Rican artists. That of a mother and child was executed by a promising young sculptor of Cartago. The exterior of the building is of white marble. The interior lobbies and foyer are of colored Italian marble. Old tapestries, mural paintings, gold plate, and sculptures are used in the ornamentation. The magnificent foyer is in Louis XVI architecture though the building as a whole partakes more of Italian than French renaissance. The double stairways leading from the vestibule are after those of the Paris opera house. The seats are of rosewood and mahogany with the national crest stamped in embossed leather. Downstairs adjoining the lobby are two large grill rooms, while, on the second floor, from the mag-





Upper and lower photographs by Hamilton M. Wright.

#### GLIMPSES OF COSTA RICA'S BANANA INDUSTRY.

Upper: Method of cutting the banana from the tree. Center: Close view of the tree and its fruit on a young plantation. Lower: Loading the fruit on a railway train by which it is shipped to the port. All bunches for foreign markets are cut while green and ripen to a yellow color some days after leaving the plantation.



Photographs by Hamilton M. Wright.

OTHER AGRICULTURAL INDUSTRIES.

Upper: Part of a tobacco plantation. Lower: Thriving cotton plants on the low coast lands near the border of Panama, an infant industry that promises important results.

nificently frescoed salon one passes to the president's room, the ladies dressing room and other compartments, or directly to the theater itself, in the center. The building offers a wonderful example of restraint and good taste, and is truly magnificent withal.

Round about San Jose are many attractive country homes and estates. Some of the estate dwellings are built of adobe in Spanish mission style and some of the more conventional brick. But all are spacious and have the appearance of hospitality and well being. The grounds are attractive and are ornamented with cypress, palms, flowers, and flowering vines that find so congenial a home in Costa Rica. In these countryside residences one is inevitably reminded of the old plantation homes and estates in the South of the United States before the Civil War. Those homes were famous among North Americans for their cordiality and good cheer, a reputation that, after more than 50 years, still flourishes. In Costa Rica social life has the charm of long personal acquaintance. House parties and visits among friends are most frequent, and dancing and music favorite diversions. In the homes of those who entertain one will find not only the American magazines but those of France and Spain.

The roads are well kept and hedged and not infrequently one will see merry parties setting forth on horseback, always an attractive sight, for the young women of San Jose are notable for their beauty. Also, they are accomplished, having a pronounced talent in music and a skill in literature and linguistic abilities that will surpass that of their northern sisters who usually speak but one language.

The people of Costa Rica boast as their ancestry the finest blood of Spain. This lineage is reflected in their very great courtesy. One day while driving in San Jose the driver was accosted by a policeman, whereupon he turned back and drove around the block. A lady in that block was quite ill, the officer said, and he feared the noise of the diligencia on the cobbles might cause her distress. In other ways the attitude of the people is reflected. The longest sentence that may be imposed for any crime in Costa Rica is 20 years. The percentage of crime is less than in most countries. The national penitentiary is an admirable institution with workshops where prisoners are taught furniture making, etc. Vegetables are cultivated by the prisoners in the grounds inside the walls. The national library and the museums are both of interest, the latter presenting very complete exhibitions of the fauna of the country and also relics of the Indian tribes, both present and prehistoric. Much has been written of the educational institutions of Costa Rica, and I could not add to what has been said, except, perhaps, that the work of the high-school students in painting and sculpture is often so well done that it would hardly be considered the work of amateurs and, least of all, of children.



Photographs by Hamilton M. Wright.

#### ON COSTA RICA'S PACIFIC SHORE.

Upper: A section of the beach at Puntarenas. The latter has about 5,000 population. Center: A glimpse of one of the parks. Lower: Turtle raising, an industry that has in recent years grown to large proportions. The two workmen have captured an extremely large specimen.

Puntarenas, on the Pacific, is the great watering place for San Jose. The train, over the Government railway, leaves San Jose about 8 in the morning, arriving at Puntarenas at 2 in the afternoon. It was with regret that I left the beautiful old capital with its life and gaiety and my new-found friends, who were so eager to make my stay a pleasant one. The train was crowded to the aisles and I was the only American aboard, but it was not long before I found myself chatting with some acquaintances of the country. At each station out of San Jose it was met by throngs of pretty misses in stylish mode, young men smartly clad in riding costumes, with black shining puttees, and numerous dog carts, and diligencias. Often one saw the picturesque old Spanish costume, the short blouse jacket, the loose braided trousers, high-heel boots, and broad-brimmed hat.

At noon all hands filed out of the train for lunch. Fried and fricasseed chicken, veal, lamb, beef, stuffed eggs, vegetables, fruits, iced drinks, beer, and coffee were sold by the pretty young women at the tables. We had been rolling downhill four hours, and still had two hours of descent before we should reach the long plateau that projects into Nicoya Gulf. Already the cypress and eucalyptus trees had disappeared, and great bunches of cacti mingled with palms and geraniums in the gardens.

At Puntarenas the hotels and clubhouses were filled. Throngs of bathers crowded the beach. Children from an orphanage from San Jose were down upon their holiday. But there were several days to wait before my steamer should come to bear me north, so I took some fascinating trips up the Gulf of Nicoya. Some day, it is said, the national railways of Nicaragua may follow the old cart road down to Costa Rica, but the route is a difficult one, and connection between Siquirres and the foot of Lake Nicaragua could probably be easier made. Puntarenas is not as developed as is Port Limon, where the Northern Railway and United Fruit Co. have developed hotels, hospitals, machine shops, storehouses, piers, etc., but with the growth of commerce upon the Pacific this development is sure to come.

One morning early a steamer whistle electrified those who waited. I hurried to the pier, got aboard a launch, and in a few hours saw fade from sight the purple shores centuries ago visited by Sir Francis Drake, but to me more vivid than any history could make them, for they marked the borders of Costa Rica, queen of the mountain lands.



# THE SCHOOLMASTER OF TRADE

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**W**HAT have the exporters, the merchants, and manufacturers of the United States to learn in the matter of over-seas trade in order that they may compete with the European countries when peace is restored? And if there be much (or little) to learn, who is the proper schoolmaster? As applicable to the Latin-American trade, how shall these questions be answered?

Manifestly, as referring to the future, answers to the questions involve conjecture as to what that future will be. The European War will undoubtedly bring many changes to the world, even to the world of commerce and business. The future will not be what the past was. Production and distribution will be in some measure changed. The commercial world—and the political as well—in both the warring countries and in the countries not at war, is guessing as to what these changes will be and the measure thereof. Such guesses, if shrewdly made, are the great strategy of international politics and of international commerce as well. But, like all strategy of peace or of war, it must be based upon a correct view of the past and the present. To guess intelligently what will be, one must know not only what is but also what has been.

If the exporters, the merchants, and manufacturers of the United States in the past have proven themselves less resourceful, less energetic, less competent, in fact in any way inferior to their German, French, or English rivals in Latin-American trade, then manifestly they needed to go to school. The only thing worth considering was to find the best schoolmaster. If, again, the exporters of the United States have failed in the past, then in all probability they will fail in the future; and so they still need the schoolmaster. Offhand this failure in the past has been assumed by a large section of the American press, and Germany has been pointed out as the proper schoolmaster. Wonderful stories have been and are yet being told of German commercial success in Latin America. The spreading of such stories is and always has been part of the German program. It creates an atmosphere, which is supposed to have a depressing effect on rivals. The English, French, Italian, or American exporter, and in particular the latter, is apt to be reticent about what he is doing in foreign countries. Not so the German. He claims everything "and then some," if one may use slang. As illustrating this, some time ago a story was cabled from Buenos Aires to the effect that agricultural machinery from the United States imported into Argentina since the

war was giving great dissatisfaction: that German machinery used prior to the war was much better made and more suitable to the country. This story, with much detail as to why the German machinery in general use in Argentina prior to the war was better, was published in a number of American papers with no comment whatever. Other stories of a like kind showing dissatisfaction with American products or methods, as compared with German, are coming every day, and are being printed in the leading papers of the United States. What are the facts? Briefly, that Germany prior to the war had no hold whatever on Argentine agricultural machinery imports. She had been ousted from this field more than 20 years ago—horse, foot, and dragoons. American machinery had done the ousting, because it was better made and more suitable to the country and the crops. The trade was more intelligently handled by American exporters, and as a consequence they secured it. Prior to the war, Australia and England were still making a bid for this trade, but Germany was dead and buried. Yet outside of the exporters (i. e., the United States Harvester Co.), but few people knew the facts when they read this paragraph, and the Harvester people didn't think it worth while to talk.

On the surface, German commercial methods in Latin America appeared to be successful, but when examined closer the fabric was seen to be somewhat shaky. In teamwork (i. e., the coordination of all elements in furtherance of the single purpose to secure trade for Germany) the structure appeared perfect, if one left out of consideration the ethics of the case. Not only did the structure appear perfect, but every kind of a side prop was used. In Germany the manufacturers, the banks, the producers and importers of raw material, the trade and industrial schools, the newspapers, the universities, the selling agencies, the railways, and even the labor organizations all moved in one groove, and that groove was chiseled out by the German Government. A tariff system was devised which effectively assisted German over-seas trade, both imports and exports, and at the same time protected German home industries. The whole nation marched as one man. The organization was not confined to Germany; it extended abroad. It took in the steamship lines and German banks and merchants wherever located. Its scouts were in every field. Its influence was seen and felt in enterprises not ostensibly German. In Latin America wherever there was a German there was a propagandist of German methods and trade. Nothing was neglected. Every influence, social, sentimental, commercial, or political, was used for the benefit of German trade or to the injury of German rivals. Over all was the diplomatic and consular services directing and driving everything into the German groove.

Against this perfected system the individualism of the United States or of England or France might have seemed impotent, but it

did not prove so. Before the outbreak of the war German trade was gaining nothing, at least nothing worth the while, in Latin America as against the trade of the three countries mentioned, or for that matter against the trade of any other commercial country—Belgium, Holland, Italy, Spain, etc. In fact, Germany was losing ground slowly but surely. The German machine, effective as it has proven itself in war, was not effective in peace. To the superficial observer this may not have been apparent, and if one must judge from the loud boasting of the Germans—not apparent to Germany—but this latter does not follow. In fact there is much to show that thinking Germany realized before the war that German trade and industry was playing a losing game. To understand how Germany was losing trade in Latin America one must view the field, both territorially and also from the standpoint of the commercial progress of Latin America itself. Was Germany or any other country outstripping its rivals in territorial trade gains? Most certainly not Germany. On the contrary, the United States, beginning at the Mexican border, had extended its trade, both import and export, prior to the European war, over Mexico, Central America, the adjacent West Indian Islands, and down into South America, almost completely ousting Germany and all other countries therefrom. With tentacles far flung the body of American trade was slowly but surely creeping southward, keeping pace with the progress of the countries themselves and overwhelming, step by step and country by country, English, German, and all other European trade. Meanwhile, American news and trade papers and American economists and politicians joined in chorus, led by the German choirmaster, all singing the praise of German endeavor in Latin America.

Brazil, Bolivia, Paraguay, Uruguay, Chile, and Argentina were the strongholds of the German trade. Here, if anywhere, is to be found that so much heralded German commercial success. Yet German exports after 30 or 40 years of endeavor represented less than one-fifth of the imports of these six countries, less than 70 per cent of the imports from the United Kingdom (without colonies), and only about 25 per cent more than the imports from the United States. The figures in 1913 were: United Kingdom, \$255,034,179; Germany, \$175,744,271; United States, \$141,540,585.

The center of the German effort to capture Latin-American trade was in Argentina, and German exports to Argentina represented nearly one-half of the whole of German exports for the six countries, including Argentina, and nearly one-third of the total to the 20 countries of Latin America. German exports in 1913 represented 16.9 per cent of the total of Argentine imports for that year. The percentage for 1910 was 17.4; for 1911, 18; for 1912, 16.6.

The following table shows the percentages that the imports from the seven leading commercial countries bear to the total Argentine imports for the years 1883, 1893, 1903, and 1913.



Countries.	1883	1893	1903	1913
United Kingdom.....	38.3	32.7	34.2	31.1
Germany.....	8.7	9.4	13.0	16.9
United States.....	6.1	7.9	12.7	11.7
Italy.....	4.3	4.2	11.2	8.3
France.....	19.2	17.8	9.7	9.0
Belgium.....	4.1	7.7	4.1	5.2
Spain.....	4.7	5.0	2.7	2.9

The table shows a large and progressive growth in German trade for 30 years, gained almost entirely at the expense of France. The apex of German trade was in 1911—United Kingdom, 29.6; Germany, 18; United States, 14.3; Italy, 8; France, 10.4; Belgium, 5.3; and Spain, 3.1. In 30 years Germany increased its proportion of the Argentine trade 94 per cent, Italy 94 per cent, and the United States 141 per cent. All the other countries except Belgium lost, France most heavily. When one considers that in Argentina, the very center of German trade activity, the United States made progress at a pace 50 per cent greater than Germany, one begins to lose faith in the story of wonderful German trade efficiency. If, however, one goes a little deeper into the character of the trade, he begins to see that the truly wonderful story is that of the advance of United States trade. In 1883, 52 per cent in values of United States exports to Argentina were spirits of turpentine, unwrought lumber, and kerosene oil. There were some plows, agricultural machinery, and unbleached cotton cloth, and these represented the bulk of the articles which competed with German or English goods. In 1913 turpentine, lumber, and kerosene represented only 22 per cent, and nearly all the remaining 78 per cent was of competing goods.

So that we see that even in Argentina, the stronghold of German trade, the United States advanced more rapidly than Germany, notwithstanding the perfection of the German machine centered there, with its steamships, banks, and traders, the United States having neither ship nor bank and scarcely a trader in the country.

Both Germany and the United States are new entrants in the race for over-seas trade in manufactures, but Germany was first in the field. German manufactures were pouring into Latin America from Mexico to Argentina in competition with English and French goods years before the United States was shipping anything to these countries, except flour, codfish, lumber, and the like. Yet in 1913, prior to the outbreak of the war, the United States had passed Germany in 14 of the 20 countries of Latin America—that is, the United States exceeded Germany in exports to these 14 countries in the ratio of more than 4 to 1—\$187,412,096 to \$43,822,005. In the remaining six countries (Argentina, Brazil, Chile, Paraguay, Bolivia, and Uruguay) the United States trade was over 80 per cent of the German trade—United States \$141,540,585, Germany \$175,744,271. For the whole 20 countries the United States export trade (Latin American imports in the table following) exceeded the German exports in the proportion of 3 to 2. This scarcely looks like the American business man needed the German schoolmaster prior to the war.

## LATIN AMERICAN TRADE—1913.

	Totals.		United States.		United Kingdom.		Germany.	
	Imports.	Exports.	Imports.	Exports.	Imports.	Exports.	Imports.	Exports.
Mexico.....	\$97,886,169	\$159,209,808	\$48,649,778	\$116,017,854	\$12,659,047	\$15,573,522	\$12,610,385	\$8,219,000
Dominican Republic.....	164,272,728	169,823,050	75,965,529	131,753,610	16,730,191	18,427,165	9,473,543	4,707,548
Haiti.....	9,272,278	10,869,947	5,799,063	3,600,768	593,319	241,810	1,677,833	2,008,884
Guatemala.....	8,100,125	11,315,559	5,908,056	11,000,000	1,800,000	1,800,000	5,855,541	4,200,000
Guatemala.....	10,062,328	14,449,926	5,653,060	3,923,354	1,650,387	1,600,029	2,043,329	7,663,557
Salvador.....	6,173,545	9,928,724	2,491,446	2,823,851	1,493,846	705,097	713,835	1,699,694
Honduras.....	5,132,678	3,300,254	3,457,074	2,869,188	712,790	13,467	58,327	176,112
Nicaragua.....	5,770,096	7,712,047	3,244,098	2,722,385	1,136,611	998,364	619,214	1,876,698
Costa Rica.....	1,798,497	9,332,437	4,353,793	3,891,646	3,333,436	4,421,036	1,078,167	509,439
Venezuela.....	18,030,103	29,483,787	6,944,132	8,475,531	4,296,294	2,297,738	2,586,986	5,563,768
Colombia.....	28,535,800	34,315,800	7,029,500	18,801,800	5,837,400	5,566,000	4,012,200	3,216,200
Ecuador.....	8,836,689	15,780,367	2,817,754	3,833,728	1,620,062	1,620,062	1,583,129	2,627,353
Peru.....	29,591,452	44,409,610	8,530,225	14,741,639	7,761,225	16,539,110	5,132,039	2,966,884
Brazil.....	326,428,369	313,164,687	51,289,682	102,592,923	79,881,608	41,701,815	57,043,754	41,392,410
Brazil.....	21,357,305	36,531,390	1,577,200	218,165	4,229,639	29,348,987	5,835,632	3,109,758
Brazil.....	56,896,397	65,162,001	143,078	.....	.....	.....	.....	.....
Paraguay.....	120,274,001	144,653,312	18,089,158	30,413,286	36,500,211	112,500,000	19,800,000	12,000,000
Chile.....	408,711,966	468,999,410	60,171,867	22,207,965	126,659,989	116,756,774	64,172,279	56,178,368
Argentina.....	1,326,639,784	1,547,989,270	328,652,681	481,127,162	314,786,589	324,777,740	210,566,276	103,394,915
Totals.....	100	100	24.79	31.08	23.73	29.98	16.55	12.49
Per cent of total.....								

† Estimated.

In reading the table above it must be remembered that it is compiled from Latin American official statistics converted into United States money and that "imports" and "exports" are from the Latin American standpoint—i. e., imports into the several countries of Latin America and exports therefrom.

Figures are sometimes quite eloquent if one knows how to read them, but they never tell quite the whole story. Nearly \$220,000,000 of trade that Germany had looks impressive, although much below the figures for the United States or for England. The point that the figures do not tell is that the German trade was precarious, somewhat artificial, and by no means well based. Its bases were long credits and cheap goods. Long credits and cheapness are undoubtedly attractive baits with which to fish for trade, but not necessarily for the best kind of trade. Furthermore, long credits and cheapness are like boomerangs, having a return curve often to the hurt of the user. It was notorious that German losses in Latin America were much greater than British or American losses. Many well-informed persons believe them to be greater than both combined. The Germans had what amounted to an almost complete monopoly of the bad risks. On the contrary, American losses from bad credits were almost negligible. The leading New York house in the South American export field, through one of its officials, has stated that its losses in South America, extending over a long period, amounted to a very small fraction of 1 per cent.

No doubt Americans have been too conservative. The writer of this article has said so often, but, on the other hand, he does not believe that German methods in granting credits were either wise or that in the long run they made for increased business. But it was in the matter of cheap goods that German methods at their worst were seen. Germany treated Latin Americans as on a plane with Chinese and Central Africans. It was thought that anything might be sold if only cheap enough. Price was everything; quality nothing. The result might have been foreseen. The flood of cheap, flimsy, and gaudy Brummagen wares that poured into Latin America undermined the German reputation. The German stamp on an article was a grave handicap even when the article itself was not bad. It may be said that there were a few, but very few (principally textile), manufactures of German origin which kept up the standard. Even the dishonest subterfuge of placing American and English labels on German goods did not save the situation. Just prior to the European War German trade in most of Latin America was in such a parlous state as to be in danger of immediate dissolution. This was due to many causes, most of which are not mentioned here, but no other had greater weight in breaking down the German commercial structure in Latin America than this loss of reputation due to cheap and inefficient goods.

RELACION HISTORICA  
DEL VIAGE  
A LA AMERICA MERIDIONAL  
HECHO  
DE ORDEN DE S. MAG.

PARA MEDIR ALGUNOS GRADOS DE MERIDIANO  
Terrestre, y venir por ellos en conocimiento de la verdadera Figura,  
y Magnitud de la Tierra, con otras varias Observaciones  
Altronomicas, y Phisicas:

Por DON JORGE JUAN, Comendador de Aliaga, en el Orden de San  
Juan, Socio correspondiente de la Real Academia de las Ciencias de Paris,  
DON ANTONIO DE ULLOA, de la Real Sociedad de Londres:  
ambos Capitanes de Fragata de la Real Armada.

PRIMERA PARTE, TOMO PRIMERO.



IMPRESA DE ORDEN DEL REY NUESTRO SEÑOR  
EN MADRID

Por ANTONIO MARIN, Año de M.DCC.XLVIII.

L. 4. PL. 606  
Cap. X.

RELACION DE VIAJE

regularmente mientras los unos están lavando se emplean los otros en cortar Material; y así no tienen lugar de pasar los Lavaderos. La Ley de este Oro es por lo regular de 22. Quilates; alguno passa de ella, y llega hasta 23; y por el contrario baja tambien, aunque no es comun que sea menos de 21. Quilates. En el Partido del Chocó, habiendo muchas Minas de Lavadero, como las que se acaban de explicar, se encuentran tambien algunas, donde por estar disfrazado, y envuelto el Oro con otros Cuerpos Metalicos, Jugos, y Piedras, necesita para su beneficio del auxilio del Azogue; y tal vez se hallan Minerales, donde la Platina (Piedra de tanta resistencia, que no es facil romperla, ni defmenazarla con la fuerza del golpe sobre el Yunque de Acero) es causa de que se abandonen; porque ni la calcinacion la vence, ni hay arbitrio para extraer el Metal, que encierra, sino à expensas de mucho trabajo, y costo. Tambien se encuentran entre estas Minas algunas donde hay mezclado con el Oro el Metal de Tumbaga tan fina, y con las mismas propiedades, que la del Oriente; siendo la mas singular en ella, el no criar Verdin, ni extraerse por medio de los Acidos, como sucede con el Cobre ordinario.

1027 Del Oro, que se faca en todos estos Lavaderos, ò Minas de la Provincia de Quito, mucha parte circula en ella; pero se detiene alli poco tiempo; porque inmediatamente continúa su curso àcia Lima, y esta es la que en alguna manera ayuda à sostenerla, para que no defcaezca enteramente: otra gran porcion se dirige inmediatamente àcia Santa Fè, ò Cartagena, la qual no es regular entre en Quito.

1028 En el Partido de la Villa de Zaruma, que pertenece al Corregimiento de Loxa, hay varios asientos de Mi-

THE FIRST PRINTED MENTION OF THE EXISTENCE OF PLATINUM.

Left: Facsimile of the title page of the book containing the first printed mention of platinum. This is the first volume of the account written by Don Jorge Juan and Don Antonio de Ulloa of their journey to South America in 1735, with the French expedition, to measure a degree of the meridian for the determination of the true figure and the magnitude of the earth. Printed in Madrid in 1748. Right: Facsimile of the page in Don Antonio de Ulloa's "Relación Histórica de Viaje à la América Meridional," in which appears then mention of the metal platinum. It is here called "a stone of such resistance, so that it can not easily be broken or reduced in size by a blow delivered on a steel anvil."

In 14 of the 20 Latin-American countries, notwithstanding the strenuous efforts made by Germany to acquire or to preserve the trade, the result had been practically failure. The imports from Germany in these countries was only slightly over 11 per cent of the whole and less than one-fourth of the imports from the United States.

A careful consideration of the figures above may with propriety lead one to believe that after all the United States has no very great need for a schoolmaster in matters of over-seas trade—at least not as to Latin American trade.

W. C. W.

## PLATINUM--WITH ESPE- CIAL REFERENCE TO LATIN AMERICA' ∴ ∴ ∴ ∴

**O**F the two really "noble" metals, metals that possess at once malleability and ductility, and are not attacked by most of the acids, namely gold and platinum, the latter has now become many times the more valuable. It is indeed difficult to realize at present that in the first half of the past century, after the discovery of platinum in the Urals, the Russian Government issued a platinum coinage, the intrinsic value of the coins being reckoned as less than six times that of silver, and only a little more than one-third that of gold, whereas in the past year, 1916, platinum sold at five times the value of its weight in gold.

The Russian platinum coinage, begun in 1828, in the reign of Nicholas I, consisted of 3-ruble, 6-ruble, and 12-ruble pieces, worth (at par) \$2.40, \$4.80, and \$9.60 according to the value of the ruble at that time; the coins contained about 2 per cent of iridium. As the 3-ruble piece weighed 10.31 grams the metal was considered to be worth but 23 cents a gram (\$7.15 a troy ounce). By ukase of June 22, 1845, the further coinage was stopped. This was due to the rise in the value of platinum and the consequent exportation of the coins for their metal worth.<sup>2</sup> The total amount was as follows:

Denominations.	Number of pieces.	Weight in grams.	In troy ounces.
12 ruble.....	3, 174	143, 545	4, 615
6 ruble.....	14, 847	406, 739	13, 076
3 ruble.....	1, 373, 691	14, 190, 228	456, 216
Total.....	1, 392, 012	14, 740, 512	473, 907

<sup>1</sup> By Dr. George F. Kunz.

<sup>2</sup> Gen. J. F. Schubert "Monnaies russes des derniers trois siècles," Leipzig, 1857, p. 276. (Atlas, Pl. XXXIV, Figs. 955, 956, 957; paper by "P. C. W." in the American Journal of Numismatics, Vol. XXXVII, No. 3 (January-March, 1903), p. 75.



Photograph by C. H. Canning.

PLATINUM IN COLOMBIA.

The new town of Andagoya at the confluence of the rivers San Juan and Condolo. Andagoya is the center of platinum-tredging activities on the Condolo.

The nominal worth of these coins was about \$3,000,000, but the metal in them would now bring nearly \$50,000,000. It seems probable that the great demand for platinum for electrical uses in the sixties caused the melting down of most of these coins for they are now extremely rare.

A precursor of the legal Russian coinage of platinum, was the counterfeit coinage of Spanish doubloons (gold coins worth \$8.24 from 1730 to 1772, and \$8.08 from 1772 to 1786). A piece of the same size was struck in platinum and the surface was then gilded; as the specific gravity of the only partially refined platinum was approximately that of gold, these spurious pieces could be circulated without much difficulty. In our day such a counterfeit doubloon would be worth intrinsically about \$40, even taking into account the lower grade of the platinum used.

In view of the many uses to which platinum can now be put and of its rapidly increasing value, it seems strange that European knowledge of its existence is dated not farther back than 1735, when the South American deposits, now within the limits of the Republic of Colombia, were visited by the Spanish traveler Don Antonio de Ulloa (1716-1795), a member of the Royal Society of London, who had been appointed with Don Jorge Juan to accompany a French scientific expedition sent out by the Government to execute the measurement of an arc of the meridian on the plain of Quito. The scientists chosen by the Académie des Sciences for this purpose were La Condamine, Godin, Bouguer and Joseph de Jussieu. Although the first publication of Ulloa's observations was made in his "*Relación histórica del viaje á la América meridional*," issued in two folio volumes at Madrid in 1748, specimens of the new metallic ore had already been brought to England from Jamaica as early as 1741, by Mr. Charles Wood, an English metallurgist, the material having reached him by way of Cartagena in the then New Granada, later a part of Colombia. New Granada was constituted a separate viceroyalty in 1740, the territory having previously been under the rule of the viceroy of Peru. Of the appearance and qualities of the new metal Mr. Wood stated<sup>1</sup> that the "*Platina de Pinto*," otherwise called "*Juan Blanco*," was smooth and brilliant, of uniform structure, and not liable to rust or tarnish on exposure to the air. He adds that the Spaniards did not take it from veins as ore, or as metallic mass, but in powder or small grains. He believed that it was rarely secured entirely pure, since in all the examples he had seen he always observed an admixture of black and shining grains, similar to those found on the coasts of Virginia and Jamaica, this being a rich vein ore, attracted by the magnet; there were also generally certain particles of a yellowish hue which seemed to be of a different nature.

<sup>1</sup> William Watson in "*Philosophical Transactions*," Vol. XLVI (1751), pp. 581-596.



Photographs by Mr. Hensey.

SCENE ON ONE OF COLOMBIA'S RIVERS, WHERE  
PLATINUM ABOUNDS.



WASHING FOR PLATINUM IN THE STREETS OF  
QUIBDO, COLOMBIA.



He asserted that the Spaniards had learned the secret of melting it, and since they made many sword-guards, buckles, snuff-boxes, etc., of it, he concluded that it must be quite abundant. The specimens from Cartagena had been bought for a much lower price than that of silver, and he had learned that it had formerly sold at a still lower price. The designation "Platina de Pinto" had been given because the specimens in question came from the River Pinto, the name "platina" itself was equivalent to "little silver," from its resemblance to the latter metal.

There is recorded a statement made in 1743 by a certain Emmannel Mendes de Acosta to the effect that, in the beginning of 1743, a warship brought from Jamaica to some London merchants, ingots having the color, the structure, and the specific gravity of gold; however, after having been subjected to the most searching tests they were found to be only 20 carats fine. Moreover, Mr. Charles Wood stated, on the authority of a man named Ord, a factor of the South Sea Co., that the latter once received in payment of a debt of 12,000 livres, ingots in which the gold was alloyed with such an amount of platinum that he could neither dispose of it, nor find any means of refining it.<sup>1</sup>

The famous scholar, Julius Caesar Scaliger (1498-1558), in his commentary on the "De Subtilitate" of Jerome Cardano, states that, according to information he had received, there existed in the region between Mexico and Darien a number of mines whence was extracted a metal which could not be fused by fire nor by any of the processes so far known to the Spaniards. This he brings forward to combat the common doctrine that all metals were fusible.<sup>2</sup> It is in no wise impossible that we have here, in 1557, when Scaliger wrote, the very earliest notice of platinum.

While the credit of furnishing the first definite data in relation to the new metal has been commonly accorded to Sir William Watson, because of his communication of the facts in his possession to the Royal Society of England in 1750, the most important of the papers he presented was that by Dr. William Brownrigg (1711-1800) and the experiments cited are those the latter made with specimens furnished to him nine years before by his relative Charles Wood. Brownrigg was both physician and chemist and had graduated from the University of Leyden in 1737.<sup>3</sup>

<sup>1</sup> Le Platine, l'or blanc, ou le huitième metal, recenu d'expériences faites dans les Académies Royales de Londres, de Supe, &c, sur une nouvelle substance métallique tirée des Mines du Pérou, qui a le poids et la fixité de l'or," Paris, 1758, p. 15. This anonymous work bears a notice from the French chemist Macquer, under date of Oct. 20, 1751, expressing his approval of it. Indeed, some bibliographers incline to attribute the compilation to him, but the author was probably Jean Morin, Canon of Chartres Cathedral.

<sup>2</sup> Julii Caesaris Scaligeri, "Exotiarium exercitatumum Liber XV de Subtilitate ad Hieronymum Cardanum," Francofurti, p. 1592, p. 323; Exercitatio LXXXVIII "Quae ad metalla."

<sup>3</sup> Dictionary of National Biography, Vol. LX, p. 47 (New York, 1899), and Vol. VII, p. 85 (New York, 1886).

The Swedish chemist, Henry Theophilus Scheffer (1710-1759), is said to have been the first to call platinum "white gold." In the *Memoirs of the Royal Academy of Sweden*<sup>1</sup> he states that he received a specimen of the ore in 1750. It was a dark-colored sand. He notes the extreme facility with which arsenic combined with platinum, even when but a twenty-fourth part was added to the metal. He sums up his results as follows:

1. That this body, without regard to its hardness, is a metal, since it is ductile.

2. That it is a perfect metal, as stable as gold or silver.

3. That it is none of the six old metals, for it is decidedly a perfect metal that contains neither lead, copper, tin, nor iron, since it suffers no diminution; and even if some particles of these metals should be accidentally combined with it, it would none the less be a perfect metal. Hence it is an eighth metal differing from those known up to the present time.

4. This white gold could not serve for uses in which it would have to be employed alone, since it is too difficult to melt except when combined with some other metal.

5. Its nature most closely approaches that of gold, so that it may justly be called "white gold," but it differs from gold by its tenacity, color, hardness and the degree of heat necessary for its fusion.

The earliest known treatise on platinum is a very interesting little French book entitled "*L'Or Blanc, ou le Huitième Métal*," published in 1758, and containing in abridged translation almost all the information that could then be gathered concerning the new metal; it is believed to have been written by Jean Morin (1705-1764), who became a canon of Chartres Cathedral, and professor of chemistry in the college of that city. In 1736 he was elected a corresponding member of the *Académie des Sciences* in Paris.

In the "*Encyclopédie*" of Diderot and D'Alembert issued in 1774, we read that some Hollanders who had been deceived on the South American coast by counterfeit gold ingots made of platinum, on making a second visit to the place where the deceit had been practised, seized upon the guilty Spaniards and hung them to the yard-arms of the Dutch vessels.

Among the early attempts to determine the specific gravity of platinum, those of William Lewis reported to the Royal Society in London in 1754, clearly show the difficulty in obtaining really pure platinum by the processes first employed. Lewis states that the crude platinum brought to London had a specific gravity of 16.995 according to a test made with a weight of 2,000 troy grains of the metal (about 4 ounces). When, however, the largest platinum grains had been screened so as to separate them as far as might be from foreign

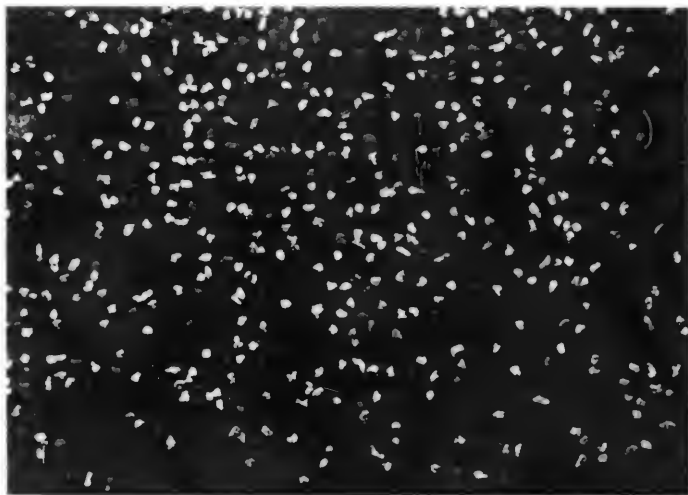
<sup>1</sup> *Handl. Akad.*, Stockholm, Vol. XIV (1751), p. 275.



Photograph by C. H. Canning.

A DREDGE OPERATING ON THE RIO CONDOLO IN COLOMBIA.

Platinum is frequently, although not always, found in the gold-bearing gravels of the Colombia rivers.



GRAINS OF CRUDE PLATINUM (NATURAL SIZE).

Average size of grains of crude platinum from Colombia, South America, illustrating the difference between these and the large Russian nugget shown on page 617.

substances, had been purified by fire, and then treated with aqua fortis and sal ammoniac they were found to have a specific gravity of 18.213. Lewis adds that the platinum would be much heavier if it were still further purified, since he found that there still remained an admixture of heterogeneous and light substances.<sup>1</sup> As is known, the refined platinum of to-day has a specific gravity of 21.5.

It was only in 1783 that a veritable platinum ingot was made by a European chemist. The honor of this accomplishment belongs to the French chemist Chabaneau (1754-1842) a native of Nontron, Department of Dordogne, who gained such a high reputation that the reigning Spanish sovereign, Charles III, called him to Madrid and created for him a special chair of mineralogy, physics and chemistry. He was given lodging in a palace and an annual stipend equivalent to \$2,200. It was in the laboratory with which he was generously provided here that he found the secret of rendering the new metal malleable, by taking the platinum sponge while it was at white heat, in the very moment of formation, and hammering it repeatedly while in this state.<sup>2</sup>

Of the first ingot made by Chabaneau his biographer, Jules Delanove, writes:<sup>3</sup>

Three months later, at the home of the Count of Aranda, there appeared upon a table an ingot some 10 centimeters cube (about 4 inches), with a beautiful metallic luster: it was malleable platinum. The enthusiastic Count started to pick it up, but failed to move it. "You are joking," said he to Chabaneau. "you have fastened it down." "No, indeed," said the professor, and he raised the little ingot easily, though it weighed some 23 kilograms (about 50 pounds). The Count had not thought that the light platinum sponge would thus appear as the heaviest of all (then known) metals.

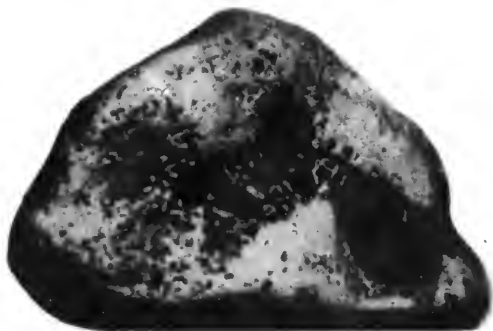
In 1783 the French chemist was accorded a patent for his discovery. When his patron, Count de Aranda, was appointed Spanish ambassador to France in 1787, Chabaneau accompanied him to Paris, so that by the exercise of his skill he might show how some of the malleable platinum could be worked up into ornaments for the French crown. The French court goldsmith Jeannety had been commissioned to undertake this work, but not being able to fathom the mystery of the process used by Chabaneau, was forced to revert to the method proposed in 1779, by Achard, of first alloying the metal with arsenic so as to make it fusible and then purifying it as much as possible of the admixture by successive treatments.

What are believed to be the oldest ornamental objects made of platinum, were excavated in the province of Esmeraldas, Ecuador,

<sup>1</sup> Philosophical Transactions, Vol. XLVIII (1754), p. 638.

<sup>2</sup> This and the succeeding paragraph are drawn from a most interesting paper contributed by Prof. James Lewis Howe to the Popular Science Monthly, January, 1914, pp. 64-70. It embraces liberal excerpts from a memoir of Chabaneau, written by M. Jules Delanove and printed at Périgueux in 1862.

<sup>3</sup> Loc. cit., p. 68.



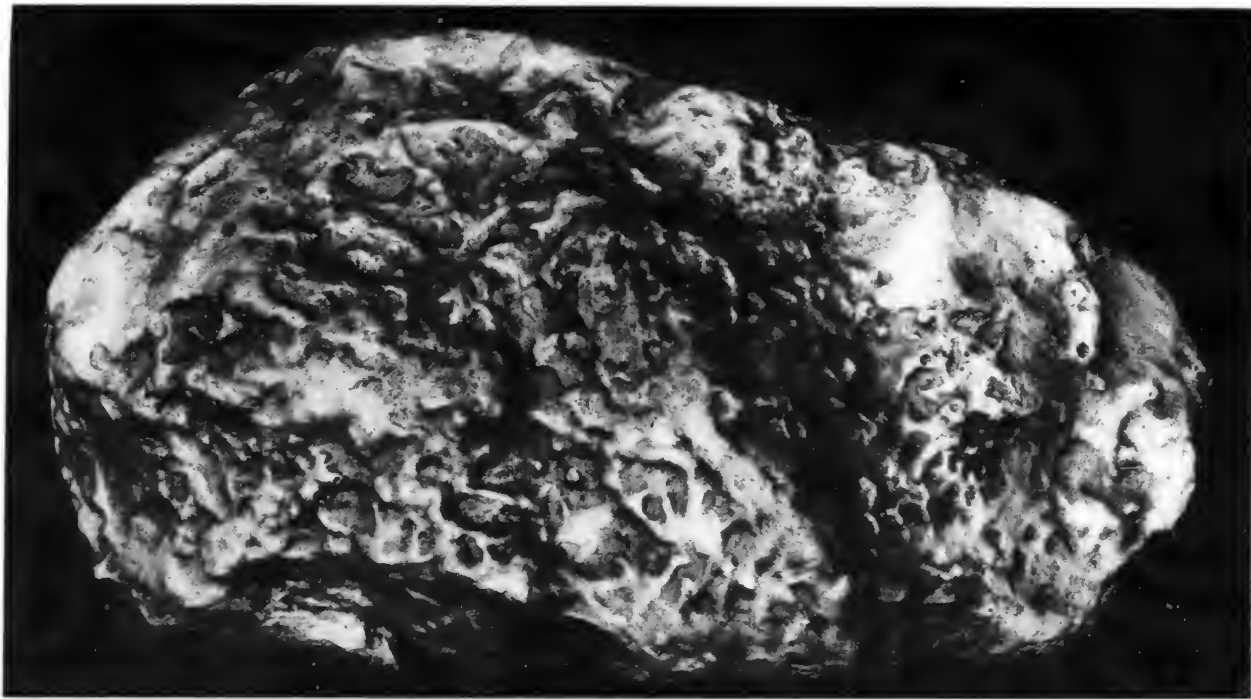
Courtesy of Sr. Arcesio Penagos, of Buenaventura, Colombia



Courtesy of Baker & Co. Inc., New York.

#### PLATINUM NUGGETS FOUND IN THE CHOCO REGION, COLOMBIA

Upper: Natural size of nugget, which is the property of a wealthy merchant of Buenaventura, Colombia. It is the largest ever found in South America, its weight being 800 grams. Lower: Natural size of nugget, found in 1896. Its weight is 435 grams, and contains about 80 per cent of pure platinum. Late reports from Colombia announce the recent discovery of extensive platinum deposits in the Cáceres district, Department of Antioquia.



THE GREAT DEMIDOV PLATINUM NUGGET, THE LARGEST IN THE WORLD.

Found in the Nizhni-Tagilsk region in 1833. It weighs, according to the Russian standard, 23 funts 48 zolotniks, equivalent to 25 pounds 9.5 ounces troy, 21 pounds 3.46 ounces avoirdupois, or 9,624 grams. In January, 1834, there was found at Martinov, where platinum was first discovered in the Urals, a slightly smaller nugget, weighing 20 funts 31 zolotniks (21 pounds 4 ounces troy, 18 pounds 6 ounces avoirdupois, or 8,335 grams). Dimensions of the Demidov nugget: 7 by 4 by 3 inches.

by Mr. D. C. Stapleton. Most of them are perforated for attachment, or for stringing, and can be described as circular or elliptical spangles. There is also a nose ring. These ornaments are made of gold and platinum combined, one or two thin layers of the latter having been hammered onto a thin layer of gold. They are thought to date back 2,000 years at least. Similar objects have been found in prehistoric graves in the island of Tola, at the mouth of the Santiago River, Ecuador. Those relics are now in the Museum of the American Indian, New York City.<sup>1</sup>

In view of the fact that Spain was probably the first country to receive information in regard to platinum, and probably also the first to receive specimens of the new metal, although the printed and dated records might seem to give the priority to England, it is perhaps something more than a coincidence that it was on Spanish soil that platinum was first discovered in Europe. This initial discovery was made at Guadaleañal, in the Province of Estramadura.<sup>2</sup> Here it occurred in some gray silver ores.

Platinum was found in the gold mines of Dakovlov, in the Urals, Russia, in 1819, in the sands of Neviansk, Bilimbayensk, in 1822, and in the Kurshinsk factories in 1824. In 1825 the richest Uralian sands of the Sucho-Vissimsk works in the district of Nizhni-Tagilsk were discovered. Daubrèe found, in specimens of the country rocks from the mines of the Tagilsk district, platinum in association with olivine, serpentine, and chromic iron.<sup>3</sup> The largest nugget found in Russia came from this district and weighs 23.5 fuints, or 9,628.88 grams (25 pounds 9.45 ounces troy).

The discovery of platinum in the Demidov mines of the Nyzhni-Tagilsk region in 1825, was made by an employee named Juan Makarovich Belov, as he was in search of gold. Of this he found only a small quantity, but a considerable amount of another metal, which upon being thoroughly tested proved to be platinum. This led to an extensive exploitation of the deposits, and by July, 1840, no less than 21 mines had been opened.<sup>4</sup>

The richest platinum sands are those of the Iss River, which, flowing down the eastern slope of the Uralian watershed from its source in latitude 58° 5' N., follows a tortuous course for some 30 miles to the point where it enters the Tura. Another tributary of

<sup>1</sup> Communicated by Director George C. Heys of the museum in letter dated June 21, 1917. See Martha H. Saville, "Archaeological researches on the coast of Esmeraldas (Ecuador)," Proc. of the XVI Int. Cong. of Americanists, Wien, 1909, pp. 341, 343.

<sup>2</sup> L. N. Vanquelin, *Annales de Chimie*, Vol. LX, p. 317, 1806; Wollaston, "On Platina and native palladium from Brazil," *Phil. Trans.*, Vol. XCIX (1809), p. 189.

<sup>3</sup> Translation of paper by Prof. Inostransev, of the Dept. of Geol. and Min. of the Petrograd Soc. of Naturalists, Nov. 8, 1892. See J. F. Kemp, "Platinum and associated metals," *Bull.* 193, U. S. Geol. Surv., pp. 76-81.

<sup>4</sup> *Schriften der in St. Petersburg gestifteten Russisch-Kaiserlichen Gesellschaft für die gesammte Mineralogie*, Vol. 1, Pt. 1, St. Petersburg, 1842, p. CXXXVI.

the Tura, the Veeya, is also rich in platinum. The area of the Tura Valley has furnished, since 1879, the largest part of the Russian output; before this date the Nizhni-Tagilsk deposits, about 130 miles to the southward, were the most productive.<sup>1</sup>

The following table shows the Russian production, amounts exported, and prices of platinum from 1901 to 1914, inclusive, according to the latest definite statistics available:

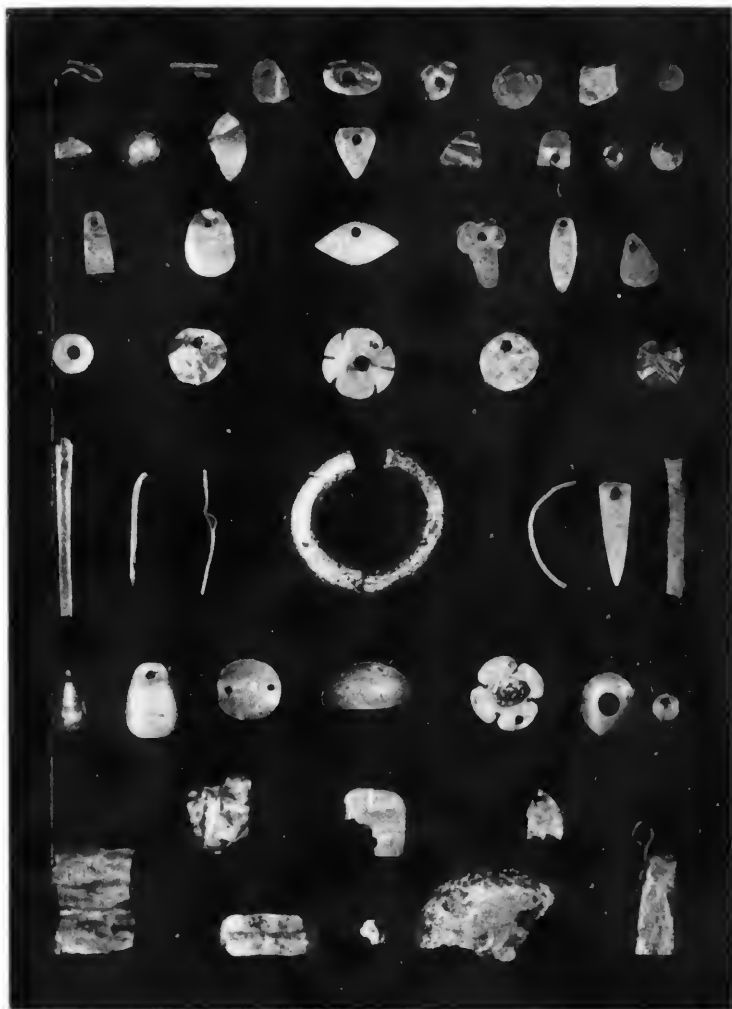
Year.	Production.			Exports.			Prices.		
	Poods.	Grams.	Troy ounces.	Poods.	Grams.	Troy ounces.	Rubles per pood.	Dollars per kilo.	Dollars per Troy ounce.
1901.....	389	6,372,236	201,872	136	2,064,006	71,627	11,112	\$151.01	\$11.12
1902.....	375	6,142,901	197,999	77	1,261,342	50,553	1,132	151.01	11.12
1903.....	367	6,011,556	193,285	117	1,916,585	61,619	11,170	145.49	13.85
1904.....	306	5,012,097	161,159	175	2,866,687	92,166	15,129	985.07	15.00
1905.....	320	5,211,912	168,532	117	1,916,585	61,619	17,455	518.11	17.03
1906.....	353	5,782,518	185,912	387	6,339,471	203,819	17,430	547.98	17.01
1907.....	329	5,389,372	173,272	298	4,881,559	156,945	31,000	1,068.92	33.25
1908.....	299	4,897,940	157,472	331	5,471,277	165,905	17,661	555.31	17.24
1909.....	313	5,127,275	161,815	493	8,075,897	259,645	14,208	146.68	13.90
1910.....	335	5,487,658	176,432	518	8,185,391	272,811	19,581	615.70	19.11
1911.....	352	5,766,136	185,385	420	6,880,019	221,198	19,791	622.36	19.36
1912.....	337	5,520,120	177,385	122	6,912,811	222,252	25,400	755.66	22.88
1913.....	299	4,897,940	157,472	381	6,211,187	200,658	30,911	1,192.76	37.10
1914.....	298	4,881,558	156,915	157	2,571,827	82,686	36,861	1,158.96	36.05

In Canada and in British Columbia there has been a small output of platinum, the most important area being in the valley of Shute Creek and along the Tulameen River, where it is crossed by a great peridotite dike. New South Wales, Australia, the Tayaka River, New Zealand, Borneo, Siam, and Burma have furnished trifling amounts. It has been discovered at Cornego de Lagens, Minas Geraes, Brazil; at Aicoipi, French Guiana; near Chocoma and Gracins, Honduras, and Xacala, Mexico, and in the River Jaky, San Domingo. In Europe traces have been met with in the French Alps, in Westphalia, in the gold sands of the Rhine, as well as in Transylvania and far-off Finnish Lapland. Finally it appears in regions as far distant from each other as the Congo Free State and Japan.

The presence of platinum in meteorites has been shown in several instances; both platinum and iridium were found by John N. Davidson in meteoric iron from Coahuila, Mexico, and also in a specimen from Tobica, in that country. A quantity of 608.6 grams of the meteoric iron from the first-named locality gave 0.014 gram of platinum and 0.0015 gram of a black powder considered to be iridium. Platinum also appeared in a meteoric iron from New South Wales.

<sup>1</sup>C. W. Purington, "The platinum deposits of the Tura River system, Ural Mountains, Russia," *Trans. of the Am. Inst. Min. Eng.*, Vol. XXIX (1900), p. 16.





Courtesy of American Museum of National History, New York City.

#### PREHISTORIC ORNAMENTS OF GOLD AND PLATINUM.

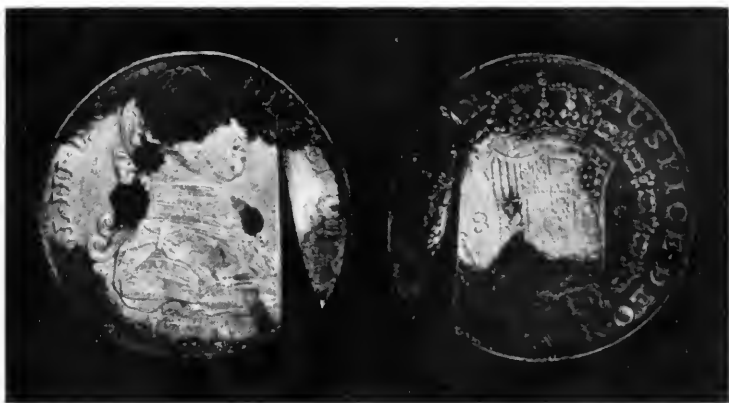
These were found in graves of the aboriginal Indian inhabitants of the island La Tolita, at the mouth of the Santiago River, Ecuador. In most cases a layer of platinum, cut to correspond with a similar one of gold, has been hammered on to the latter, so that one side of the ornament is of gold, the other side of platinum. Occasionally, however, two layers of platinum have been hammered on either side of a central layer of gold.

Australia, according to analysis by J. C. H. Mingaye, of the mines department of New South Wales.<sup>1</sup>

In a paper read before the Second Pan American Congress in Washington, D. C., January 3, 1916, Dr. Tulio Ospina, director of the School of Mines at Medellin, Colombia, gave some valuable and interesting details regarding the platinum deposits of Colombia. He estimates the area of the alluvial deposits of gold and platinum at over 5,000 square miles, the region lying west of the central ridge of the Colombian Andes, in the drainage basin of the Atrato and San Juan Rivers, and extending south of the latter to the Mira River, in the direction of the coast line. The stream beds in which platinum occurs are those in which the Tertiary conglomerates have become eroded, the deposits being reconcentrates of the older gravels. The Tertiary conglomerate is formed by rounded boulders of basic rocks, such as diabase melaphyre, peridotite, and dunite. A much larger proportion of platinum to gold is found in gravels of the San Juan River than in those of the Atrato, the two metals occurring in about equal quantity in the former, while in the latter the proportion is about 85 per cent gold to 15 per cent platinum. There are estimated to be 68,000,000 cubic yards of gravel that can be regarded as certainly profitable for working, and there is a reserve total of 336,000,000 cubic yards which may also prove productive. English and American capital control the most productive area. A dredge operated for a time, in July, 1915, on the Condoto River by the Anglo-Colombian Development Co., appears to have shown good results. Other dredges are projected, and some surveying has been done with a view to developing electric power. The United States Geological Survey has learned that there are indications of considerable areas of promising platinum deposits on the Atrato River, from its headwaters to a point well below Bete. Samples of gravels received by the Survey from the neighborhood of Quibdo, while showing considerably more gold than platinum, contain enough of the latter metal to merit interest.

The rejection of platinum as waste in the operation of refining gold led to some strange happenings in Colombia. The platinum separated from the gold by the dry, or "blowing" system was either cast into the street or thrown through cracks in the building where the work was done. Later, when platinum became valuable, a considerable quantity of the metal was thus discovered in Quibdo, capital of the Choco district, where much gold refining was done. As a result the entire town of some 1,500 inhabitants was turned into a mine, and natives were employed in working the streets for the Government, while many property owners mined under their houses. In one case a man went so far as to tear down his store, and was

<sup>1</sup> Mining Industry, Vol. VIII, p. 477, 1899.



COUNTERFEIT DOUBLE DOUBLOON OF CHARLES III OF SPAIN (1759-1788), DATED 1771.  
STRUCK IN PLATINUM.

Split and considerably corroded, presumably in the removal of the gilding applied to its surface so as to make the coin appear to be of gold. Diameter, 1 1/2 inches; weight, about 25 grams. The double doubloon (doblon onza) was then worth about \$16.50, many times more than the value of the platinum in the counterfeit when it was executed. Now, however, the intrinsic worth of the counterfeit would be about \$4, more than five times the value of the genuine coin.



COUNTERFEIT DOUBLOON OF ISABELLA II OF SPAIN (1833-1868), DATED 1836.

This coin, seven-eighths of an inch in diameter and weighing about 13 grams, was struck of platinum and then gilded to imitate gold. The worth of a genuine gold coin of this type at the time was about \$7.87, while the platinum in it was worth not more than \$1.70. To-day, however, the counterfeit is worth about \$12 or more than five times its weight in gold.

rewarded by recovering enough platinum to rebuild on a larger scale and clear \$4,000 in American gold coin.<sup>1</sup>

Colombian platinum was only worth from \$5 to \$6 the Spanish pound in 1810. As this pound was equivalent to 14 $\frac{3}{4}$  troy ounces, the ruling price would be at the rate of from 34 cents to 41 cents an ounce, or but a fraction over 1 cent a gram. In 1823 the price fell even lower, to from \$3 to \$4 a pound, because the exportation of platinum had been prohibited.<sup>2</sup>

*Exports of platinum from Colombia to the United States for fiscal years ending June 30 (1905-1916).*

Year.	Grams.	Troy ounces.	Total value.	Value per gram.	Value per troy ounce.
1905.....	35,457	1,140	\$21,504	\$0.61	\$18.86
1906.....	72,036	2,316	45,763	.63	19.76
1907.....	170,945	5,496	100,206	.59	18.23
1908.....	33,965	1,092	25,576	.75	23.42
1909.....	74,400	2,392	36,440	.49	15.23
1910.....	49,766	1,600	31,383	.63	19.49
1911.....	171,162	5,503	147,820	.86	26.86
1912.....	206,123	6,627	219,128	1.08	33.07
1913.....	325,374	10,461	363,731	1.12	34.77
1914.....	385,279	12,387	398,657	1.03	32.18
1915.....	506,925	16,298	584,245	1.15	35.85
1916.....	770,471	24,774	1,067,805	2.18	67.73

Analyses of four specimens of platinum ore from Oregon, California, Russia, and Colombia, respectively, made by Deville and Debray in 1859, illustrate the varying proportions in which different constituents may be present.<sup>3</sup>

	Oregon.	California.	Russia.	Colombia.
Platinum.....	51.45	85.50	77.50	76.82
Iridium.....	.40	1.05	1.45	1.18
Rhodium.....	.65	1.00	2.80	1.22
Palladium.....	.15	.60	.85	1.14
Osmium.....			2.30	
Iridosmine.....	37.30	1.10	2.35	7.98
Gold.....	.85	.80		1.22
Iron.....	4.30	6.75	9.60	7.43
Copper.....	2.15	1.40	2.15	.88
Sand.....	3.00	2.95	1.00	2.41
	100.25	101.15	100.00	100.28

A rough estimate of the whole amount of platinum so far produced and still extant in the world might place it at 4,000,000 ounces (124,400 kilos), a quarter of which, or 1,000,000 ounces, is in the United States, besides about 400,000 ounces (12,440 kilos) of the associated platinum metals. Of the various uses to which this plat-

<sup>1</sup> Communicated in a letter, dated Feb. 20, 1917, from William J. Hayes, of Buenaventura, Colombia, South America, to the American Museum of Natural History, New York City.

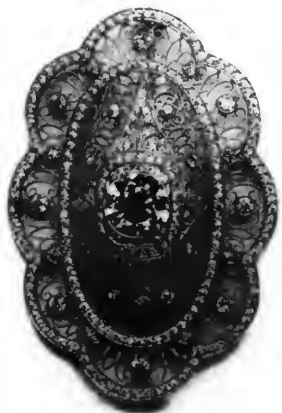
<sup>2</sup> Mollien, "Travels in the Republic of Colombia in the year 1822-23," pp. 307, 457.

<sup>3</sup> *Annales de chimie et de physique*, 3d ser., Vol. LVI, p. 449; 1859.



#### PLATINUM MEDAL OF LOUIS XVIII.

A platinum medal struck at the time of the restoration of the monarchy in France to commemorate the signing of the constitutional charter by Louis XVIII on June 4, 1814. The obverse bears the bust of the king by De Puymarin, after F. Andrien and the inscription "Ludovicus XVIII. Franc. et Nav. Rex." On the reverse Louis is figured seated on a throne chair and handing the newly signed charter to a standing, helmeted female figure, personifying France; the inscription reads: "Fundamenta libertatis publicae charta constitutionis. A. rege. tradita. IV. IVS. MDCCCLXIV." The reverse is by J. J. Jaley. The diameter of the medal is 51 mm., and its weight is 151.50 grams., 4.77 ounces, giving it an intrinsic value of \$511.35, at the present price of platinum.



Courtesy of Tiffany & Co.

#### BROUCHES OF PERFORATED PLATINUM.

Brooches of perforated platinum. This shows how little of the metal is used in the finest jewelry. The openwork is more delicate than lace.

inum has been put, the following may be regarded as an approximately correct statement:

	Ounces.
For catalyzing.....	400,000
Dental purposes.....	1,000,000
Chemical apparatus, etc.....	1,000,000
Electrical devices.....	500,000
Jewelry.....	500,000

Of the total amount of platinum utilized in the world, about 400,000 ounces have found employment in catalyzing processes, distributed in the different countries about as follows:

	Ounces.
United States.....	200,000
England.....	100,000
Germany.....	70,000
France.....	30,000
	400,000

The largest uses have been for dental purposes, about 1,000,000 ounces; and probably another 1,000,000 ounces for chemical and physical equipment, while for electrical apparatus some 500,000 ounces have been required. The net amount worked up into jewelry does not probably exceed 500,000 ounces, although the total sales may have reached 1,000,000 ounces, but from two-thirds to three-quarters of this amount is returned to the refiners and then again used ornamentally.

This would give us in all something less than 4,000,000 ounces as the amount of the metal now worked up and utilized in one form or another.

One is apt to think of platinum only as sold by gram or ounce, and not in relation to its value per carat. But at \$105 per ounce, platinum is worth 67.6 cents per carat; iridium at \$160 per ounce is worth \$1.029 per carat; and as the specific gravity of platinum is 21.50 and that of iridium 22.40, this means that platinum weighs 6.11 times more than the diamond, 5.35 times more than the ruby, 7.96 times more than the emerald, and 8.27 times more than the amethyst.

Iridium weighs 6.36 times more than the diamond, 5.57 times more than the ruby, 8.30 times more than the emerald, and 8.62 times more than the amethyst.

Therefore, a piece of platinum the size of a 1 carat diamond would be worth \$4.12, the size of a 1 carat ruby would be worth \$3.62, the size of a 1 carat emerald would be worth \$5.38, the size of a 1 carat amethyst would be worth \$5.59; and a piece of iridium the size of a 1 carat diamond would be worth \$6.54, the size of a 1 carat ruby would be worth \$5.73, the size of a 1 carat emerald would be worth \$8.54, the size of a 1 carat amethyst would be worth \$8.87.



PLATINUM UTENSILS.

Dish for boiling acids. Sieve. Rack for holding vessel. Platinum still, for use in distillation. Crucible.

A cubic centimeter (0.061 cubic inch) of platinum is worth as follows in comparison with the following other metals:

Metal.	A cubic centimeter weighs—		Value.
	In grams.	In grains.	
Platinum.....	21.5	331.79	\$72.00
Iridium.....	22.4	345.68	115.25
Palladium.....	11.4	175.93	42.16
Gold.....	19.3	297.83	12.83
Silver.....	10.5	162.04	.265
Bismuth.....	9.8	151.24	.0766
Mercury (quicksilver).....	13.596	209.82	.0449
Cadmium.....	8.64	133.34	.0335
Tungsten.....	19.1	294.76	.03266
Cobalt.....	8.6	132.72	.0323
Nickel.....	8.9	137.35	.0108
Tin.....	7.3	112.65	.01
Copper.....	8.9	137.35	.0046
Aluminum.....	2.58	39.82	.0032
Antimony.....	6.62	102.16	.0022
Zinc.....	7.12	109.88	.00193
Lead.....	11.37	175.47	.0015
Iron.....	7.86	121.30	.000276
Water.....	1.0	15.432	

The method of refining platinum employed in the United States assay is described as follows:<sup>1</sup> In the electrolytic process of refining gold, platinum remains in solution in the gold chloride electrolyte, from which it is precipitated by means of ammonium chloride. The precipitate is then well washed and reduced at a red heat to a metallic platinum sponge. This naturally contains impurities, and is therefore redissolved in aqua regia, and evaporated almost to dryness, so as to expel the nitric acid, sulphur dioxide being then passed through it until all the gold is precipitated. Upon this it is oxidated to bring all the platinum into a platonic state and precipitated with pure ammonium chloride. The precipitate is then reduced in the usual way to metallic platinum sponge.

The marvelous ductility of platinum may be better conceived when we consider that out of a single troy ounce of the metal it would be possible to make an almost infinitely slender wire that would reach from Santiago, Chile, across the continent to Rio de Janeiro, a distance of about 1,800 miles. To draw out platinum into so exceedingly fine a wire it is covered with a thin layer of gold. This new wire is drawn to the thinness of the former one, and the gold is dissolved away. A small section of this second wire is then given a coating of gold, redrawn, and the gold covering dissolved. After this process has been several times repeated the wire, finally secured, is still intact but virtually invisible.

<sup>1</sup> From letter of Hon. Verne M. Bovie, superintendent of the U. S. assay office at New York, to the writer, dated June 6, 1917.



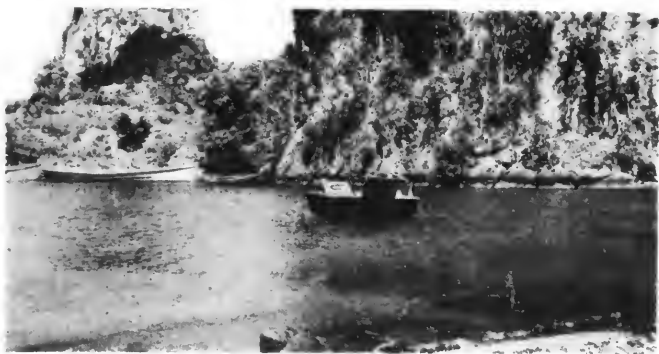
# THE TOWN OF BARACOA AND THE EASTERN PART OF CUBA<sup>1</sup>

THE historic town of Baracoa may be said to be the western outpost of the Maisi district of Cuba. In an extremely isolated position, Baracoa can only be reached from other parts of the Republic by water communication. The nearest railroad terminal on the north coast is Antilla (Nipe Bay), and from here one is forced to take one of the coastal steamers of the Empresa Naviera de Cuba in order to get to one's destination. The trip to Baracoa can also be made from the south coast by embarking at either Santiago de Cuba or Caimanera on the return voyage of the coastal steamer.

Baracoa is the oldest existing settlement in Cuba, and it was in 1512, two years before the first building was erected in Santiago de Cuba, that the *conquistadores* laid out the plans for the present town. That Columbus visited the harbor of Baracoa when he coasted the northern shore of Cuba on his first voyage is almost certain, and the admiral undoubtedly observed the prominent table mountain, *El Yunque* (the anvil), which dominates the harbor and can be seen for miles. It is claimed, in fact, that it was Columbus himself who named this peak *El Yunque* from its strong resemblance to an anvil, but this is more a matter of local legend than of accurate historical record. Rising to a height of over 1,800 feet, the "Anvil" is easily visible for 30 or more miles and forms an excellent landmark for mariners approaching this part of the Cuban coast. Zoologically, *El Yunque* offers one of the best fields in Cuba and one which has remained practically unexplored; since the days of the noted Cuban naturalist Gundlach, who explored the summit in 1859, we do not believe that this peak has been investigated.

The town of Baracoa itself is situated on the shores of one of the most picturesque bays in Cuba. While the harbor offers a safe shelter to vessels during the greater part of the year, it is exposed to northeasterly gales and in consequence has a bad reputation with masters of sailing vessels. No tugboat being available, craft which have to depend on sails alone have considerable difficulty in leaving the harbor owing to its narrow mouth, and with strong northeasterly winds their departure becomes an impossibility. Baracoa has a

<sup>1</sup>By Theodoor de Booy.



SCENES IN EASTERN CUBA.

Upper: A ferry over the Yumuri, one of the smaller rivers in the extreme eastern part of the Republic. Center: A general view of Baracoa. Lower: Coffee cultivation, an industry that is growing in importance. The scene represents a phase of the drying process.

population of about 6,000 people, and judging from the stately buildings which can still be found must undoubtedly have lost a great deal of its former importance.

A direct line of small fruit steamers connects Baracoa and the neighboring coastal banana depots with New York. Several banana plantations are found between Baracoa and Cape Maisi on the north coast, and a not inconsiderable amount of fruit is exported. Of late years, however, due to various causes, the fruit trade has fallen off and the plantations do not seem to be as productive as formerly. Perhaps the most important industry of Baracoa itself is a coconut-oil factory where the coconuts from the neighboring plantations are crushed in order to extract the oil from the kernels. This valuable product serves as a base for the better kind of soaps and has a ready market in the United States. In addition to this, the coconut meal, i. e., the residue after the oil has been expressed from the kernels of the nuts, is a valuable by-product and is used in Baracoa for the fattening of hogs.

Another export of Baracoa consists of wax gathered from the wild bees that have built hives in the uncleared parts of the country. These hives are located by professional wax hunters, who scale seemingly impossible rocks to secure their prize. Not infrequently the bees build their storehouses in the entrances of the limestone caves with which the countryside abounds, and in consequence visiting archeologists to this region may do well to remember that wax hunters will often be able to tell of caves which are unknown to the other inhabitants. In many of these caves one is likely to find aboriginal remains and artifacts of great archeological value.

The first village of importance to the eastward of Baracoa is Mata. This is a calling station for the banana steamers coming to Baracoa, and from here large quantities of this fruit, gathered from the surrounding country, are exported. Mata itself is but a small village of perhaps 30 houses; its harbor is too shallow to allow steamers to anchor and in consequence the bananas are carried off in lighters to the collecting steamer which lies some distance offshore. From Mata to the mouth of the Yumuri River the road follows the beach more or less, whereas the road from Baracoa to Mata allows no view of the sea. While in places progress is somewhat impeded by the heavy sand, the road from Mata to the Yumuri ferry makes up in beauty what it lacks in convenience.

The Yumuri River—and it should be noted that Cuba boasts of two Yumuri rivers, the other one being found near Matanzas in the center of the island—has a width of about 200 yards at the mouth with, in all seasons excepting the rainy season, a depth of not over 3 feet. This lack of depth is due to sand banks which form in the mouth of the river thanks to the heavy swell which deposits large



Photograph by Hamilton M. Wright.

**TWO FEATURES OF TRADE AND TRAFFIC IN ORIENTE PROVINCE.**

Upper: A glimpse of the picturesque region traversed by the railroad in reaching the Nipe Bay outlet, northeast Cuba. Lower: Preston, situated on Nipe Bay, opposite the port of Antilla. Beyond the houses may be seen the broad expanse of this great bay, so important in the trade of eastern Cuba.

quantities of coralline sand. Some short distance from the mouth can be found a large ferry which carries the traveler and his horse to the other shore. There being no carriage roads between Baracoa and Maisi, there is of course no necessity for a bridge or for a ferry large enough to transport vehicles.

To all who have traveled in the West Indies, the mouth of the Yumuri River must forever linger in their memory as perhaps the most picturesque spot visited. With towering banks on either side, the Yumuri wends its peaceful course toward the sea, protected as it were by the deep cañon it has cut for itself during untold centuries. The very walls of this cañon are covered with verdure, with here and there a snow-white spot of limestone to show the underlying foundation and to relieve the green monotony. It is possible to follow the Yumuri for a considerable distance from its mouth by canoe, as its depth increases once the sand banks at the entrance of the river are passed.

The ferry once crossed, the path ascends the table-land in a dizzy zigzag which at times puts a great fear into the traveler's heart, especially so if his horse should happen to be stumble-footed. The table-land is fully 300 feet above the level of the sea and stretches from the banks of the Yumuri east to the shores of Cape Maisi. It is bounded north and south by the sea, and while the writer wishes to impose no fanciful geological theory upon his readers, the plateau has to him every appearance of having been caused by a series of successive submarine upheavals. This theory is all the more feasible when one examines the shores of Cape Maisi, where three distinct graduated steps bear evidence, by the sea-worn caves that can be seen in each successive step, of the various water levels. Furthermore, the entire table-land is of a coralline limestone formation, and it is more likely to suppose that this land was elevated by an upheaval than that it was at one time submerged when the level of the sea had a greater height.

The summit of the table-land once reached, one is close to the small village of Sabana Grande, sometimes known as Sabana Vieja. This village consists of about 12 houses, a *fonda y posada* (a hotel of the smaller sort), and a jail, and makes no pretense to being a metropolis. It is a useful place to the traveler, however, as it is here that he can hire fresh horses for the continuance of his journey and has the opportunity to obtain a meal or to spend the night. Perhaps the first thing that will strike the newcomer are the cool nights on this plateau. When Baracoa and the rest of the Cuban Republic are smothering under the heat of a tropical sun, this table-land is invariably cool, and the nights are such that a blanket not only is a comfort but an actual necessity. The cold winds coming from the Atlantic through the Windward Passage between Cuba and Haiti are responsible for this



Photograph by Harris Bros., Habana, Cuba.

#### THE BANKS OF THE MAYARI RIVER.

The Mayari River flows into Nipe Bay, after meandering northward from its source in the mountains of the eastern tip of Cuba. Along its banks are some of the oldest tobacco plantations of the Republic, and although displaced in popular favor by the more celebrated crop of the Vuelta Abajo in the western part of the island, the Mayari tobacco still has a steady market abroad.

phenomenon and are also responsible for the destructive storms which occasionally visit this region.

The entire tableland consists of a coralline limestone formation covered with the typical red clay resulting from the decomposing rock. The land, while of course very rocky, is ideally suited for the cultivation of bananas and coffee, and the agriculture of these parts consists almost solely of these two commodities. A limited number of horses and cattle are also raised throughout this region and the horses rank among the best that can be found in Cuba. At certain times of the year the roads and woods are fairly covered with the ripe guava fruit, so much so, in fact, that the odor of the decomposing fruit becomes offensive. Alligator pears also cease to be a luxury in a land where every tenth tree in the woods bears this fruit and where one has to be careful, when the pears are in season, not to slip on the ripe pears which are scattered underfoot. It will be seen, therefore, that the Maisi district has rich resources and is but awaiting the building of roads and the establishing of a small coastal steamer service to repay whoever goes into the exploitation of this land on an extensive scale.

From Sabana Grande to the east, the tableland of Maisi is known as La Gran Tierra de Maya (the great land of Maya), thusly named after the Maya River which finds its source here. It is here that extensive plantations are found, where coffee and bananas are raised, and it is here that in aboriginal times the Indians must have had their favorite abode. The Maya River is generally marked on maps as the Maisi River, but is locally only known by the former name. It is only visible in the rainy season, and the natives claim that in the dry season it runs underground through a series of caves and empties itself in the sea at some distance offshore. While there are in the West Indies several instances of underground rivers in the coralline lime formation and also quite a few fresh-water springs which bubble to the surface in the sea itself, the writer is of the opinion that in this particular instance the Maya or Maisi River disappears because there is no water in it and not because the water wends its way in subterranean channels towards the sea. The bed of the river forms part of the road from Sabana to Maisi in the dry season and in the rainy season offers serious obstacles to the progress of the traveler.

The inhabitants of the Gran Tierra de Maya live in a manner which can only be compared to that of the patriarchs of old. Each finca (farm) is self-supporting, and it is but seldom that the proprietor seeks the busier marts of Baracoa. Where a lavish nature provides palms, which supply not only wood for the house but also roof covering, food, and clothing, and calabash-trees, which go far toward filling a want for kitchen utensils; where guinea grass grows like weeds and furnishes a never-failing supply of fodder for cattle and horses:



THE DOCKS AT DAIQUIRI, THE NORTHERN TERMINUS OF THE CUBA RAILROAD.



where fruits are found in wild lavishness and the smallest cultivated patch will sustain a large family and where, lastly, a half acre of coffee bushes will keep a Cuban supplied with enough pocket money to have funds to lose on the outcome of a cockfight—the favorite outdoor sport of Cuba in general and of this region in particular—it is no wonder that the inhabitant of the Gran Tierra de Maya does not wander far from his native heath. The only wonder is that the land is so sparsely settled, where it could sustain so many people.

In pre-Columbian days there is no doubt but that this plateau was the abode of a large tribe of aborigines. Thanks to the researches of Dr. Montane of the University of Havana, who was the first scientist to point out the importance of the archeology of this region, of Mr. M. B. Harrington, of the Museum of the American Indian-Heye Foundation of New York City, who made a systematic survey of the caves and the kitchen-middens of Jauco and Maisi, after a preliminary survey by the writer in 1914, a great deal more is known of the arts and crafts of the Cuban Indian than formerly. Caves abound near Cape Maisi and on the south coast between Maisi, and Jauco, where the Indians placed their dead and left artifacts to bear mute testimony of their advancement in the crafts: large deposits, known as kitchen-middens, which in reality are nothing but refuse heaps where the Indian threw his empty shells, broken implements, pottery, etc., testify to the extent of the pre-Columbian occupation. It would be impossible to estimate the number of aboriginal inhabitants; that it was larger than the present-day population is certain. Of these Indians, no pure-blooded specimen remains to-day.

Nevertheless, while the aborigine is no more, his influence can be extensively seen throughout the Gran Tierra de Maya. The very shacks of the poorer class of natives are fashioned in a manner recalling the drawings of Indian houses in the early Spanish historians. Many of the words used have an Indian origin. Their sandals are pleated after the Indian fashion, and the dress of their children at times resembles the Indian simplicity.

As has been stated, the tableland terminates in three distinct terraces near Cape Maisi. From the summit, the mountain ranges of the Island of Haiti can distinctly be seen and recall to one's mind the ill-fated Indian cacique Hatuoy who ruled not only over part of Haiti but over the eastern part of Cuba as well. Pre-Columbian canoe navigation must have been extensively carried on and the pottery and other aboriginal specimens from eastern Cuba resemble greatly the artifacts from the western part of Haiti. As the written records of the early Spanish settlers and discoverers are vague and frequently inaccurate, it will be understood what importance is



Courtesy of Royal Mail Steam Packet Co.

A PICTURESQUE SCENE IN A MODERN SETTLEMENT IN THE NIPE BAY DISTRICT.

attached to the archeological investigations that have been carried on.

Beside Sabana Grande, the even smaller village of Monte Christi or Guiniao is found on the plateau of the Gran Tierra de Maya. This village is only about half the size of Sabana and is no more than a collection of native shacks. Many of the larger fincas have a larger number of laborers and other dependents than Monte Christi and the only reason for the existence of this settlement is that it serves as a sort of half-way house between Sabana and Jauco on the south coast. One passes Monte Christi and shortly afterwards comes to the edge of the tableland again. The dried-up bed of the Galeta River serves as a descent in order to reach the sea level and to follow the beach to Jauco. This descent is even more precipitous than the descent near the Yumuri River and the road at times becomes almost lost in the mass of stones which forms the river bed. Here again is a treasure-land for the zoologist and more particularly for the conchologist, as this is the home of the wonderful *Helix (Polymita) picta*, "of which land snail nearly 1,000 color variations are known, each vying with its neighbor in beauty." One reaches Jauco, a settlement of greater importance than Sabana, Maisi, or Yumuri, and a port of call for some of the large coastal schooners sailing from Santiago de Cuba. Inhabited mostly by fishermen, Jauco nevertheless exports a considerable amount of the produce from the table land above. The Jauco River waters the large pasturages directly under the plateau and is responsible for the luxuriant herbage upon which the cattle exist.

It is between Jauco and Cape Maisi to the east that the larger number of caves are found. The investigator will be forced to examine these afoot, as no road or bridle path makes horseback travel possible. And as this trip will undoubtedly be lengthy, the traveler is advised to have his kit follow him in a boat from one stopping place to the other. The steep terraces, resembling nothing so much as Cyclopean stairs, seem literally to be honey-combed with cave entrances. Everyone of these has to be examined, as the Indians not only seem to have used the larger caves as shelters or as places of worship, but also were in the habit of depositing the bones of their dead in the smaller caverns. It is, of course, understood, that Indian remains are not found in every one of the caves—in fact, one only finds proof of an Indian occupancy in something like six per cent of the caves explored. But when proofs *are* found, the artifacts are always so much better preserved than when they are encountered in the ground, that the 6 per cent fully make up for the 94 per cent of the caves in which one finds nothing.

Following the coast in this manner, one finally reaches the massively built lighthouse of Cape Maisi. The busy Windward Passage opens up to view and a steady stream of fruit and cargo steamers pass both



A PORTION OF PICTURESQUE NIPE BAY, CUBA.

This picture was made as a tropical storm was about to break over the region. Such storms frequently last only a short time, but the display of lightning and the downpour of rain astonish the stranger.

south to Jamaican and Central American destinations with products of northern manufacture and north to American ports laden with the fruits of the tropics. It is customary for mariners to take Cape Maisi as a "departure" and the traffic in consequence stands quite close inshore, as most travelers who have made a trip to either Jamaica or Panama can testify. Maisi itself is another small settlement, consisting principally of two lighthouse keepers and their families and a number of fishermen whose catch mostly consists of the hawksbill or tortoise shell turtle which abounds in these waters.

Passing the settlement of Maisi and the dry mouth of the Maya or Maisi River, there are but few huts or settlements on the north coast between Maisi and the mouth of the Yumuri. A few fishermen have a small settlement at Baga and live in a manner bordering on destitution. The coast here below the tableland is somewhat swampy and unhealthy.

A road leads from Cape Maisi to the Gran Tierra de Maya above and leads through the wildest part of the entire wild region. The lands on either side of this road are virgin forest, plentifully sprinkled with valuable hardwoods, and would amply repay development. No squatter has seen fit to raise even a temporary shack, and the forests are only visited by the hunters of wild pigs and beeswax. But parts of the Cuban Republic are fast building up, and it is quite likely that the existing conditions in the extreme eastern part of Cuba may soon change when capitalists inform themselves of the riches that are awaiting development in this hitherto neglected portion of the Republic.



# ADDRESSES BEFORE THE SOUTHERN COMMERCIAL CONGRESS IN NEW YORK

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**T**HE Ninth Annual Convention of the Southern Commercial Congress, which was held in New York October 15-17, 1917, was a pronounced success both in attendance and in the amount of work accomplished. Among other features of the convention were the notable addresses delivered by a number of distinguished guests. Of these the BULLETIN has been furnished with the text of two, both of which deal with the growing spirit of Pan Americanism and are therefore reproduced herewith.

Minister Calderon, of Bolivia, well known throughout the United States for his thoughtful and scholarly addresses, spoke in part, as follows:

Mr. Chairman of the Southern Commercial Congress, Ladies and Gentlemen: In October of 1913 I had the honor of addressing this congress, when we in America, and the whole world with us, celebrated the completion of that gigantic work, the Panama Canal. By cutting asunder the Isthmus that separated the two great oceans the United States opened a new and shorter route of universal intercourse. The republics of North and South America became closer neighbors and anticipated with joy an era of more friendly and increasing relations. We all felt that mankind had made a big advance in the common endeavor to forge ahead in the onward march of progress, based on right, justice, and peace, the great fundamental principles of civilization. We saw in inspiring vision the development and growth of fellowship amongst all countries, linked by love, which is the eternal and all pervading force and the essence of life.

The world grows smaller as nations get in constant and almost uninterrupted touch with each other. Men and women travel in comfort and ease. Cable, wireless, and telephone messages reach them from home with marvelous rapidity to the farthest points. The interest in all human events has been quickened with the growth of quick transportation, instantaneous communication, and the development of international commerce and industry.

We have consecrated this Western Hemisphere to democracy, which means that all men have the same rights and duties; that the welfare of the community is based on the welfare of its individual members; that the people have the right to govern themselves, and that the fountain of all authority is the people itself. We in America are all inspired by the same ideals, and the greatest contribution to the advancement and happiness of men is the establishment of democracy in this continent. God has put man on earth and filled his soul with lofty aspirations, to be the master and not the abject tool of the self-appointed lords of autocracy, who claim their will as the supreme law.

The largest portion of the territory of the United States has never known any other authority but that of the people. The scattered savage Indian tribes that roamed at

will all had their own freely elected chief, and when the white settlers came here seeking for freedom, they from the start consecrated the majestic forests, the fertile lands, and the great rivers of this new world to be the home of free and independent men. The English colonies grew in the same spirit; and when an ill-advised king infringed on their rights they revolted, fought, and conquered independence. The United States has one uninterrupted tradition of freedom, and through it, has prospered and become the foremost power in the world. We in South America have been less fortunate. Three centuries of kingly despotism crushed the spirit of the peoples and made them the servile subjects of its authority. We had to fight for fifteen years to free ourselves and become independent, and then had the hard task of adjusting ourselves to a life of freedom under democratic institutions. The period of apprenticeship was painful, but we have at last entered into the orderly way of progress and are growing in strength as free and independent nations. Pan-Americanism is not an empty word; it is the expression of very vital aspirations. It means and has the force and power of the combined determination of all the Republics of America to maintain inviolate the democratic form of government, to preserve peace, and to respect the independence and sovereignty of all of them. The United States has given explicit sanction to those aspirations when President Wilson declared in his historic address at Mobile that this country would never take an inch of territory of any other republic. Public opinion here grows more and more convinced that the wonderful development-wealth, and financial power of this country could never have given to it before the world the influence and ascendancy that it has acquired, if back of that material strength were wanting the moral prestige for its policy of justice, of fair dealing, and of practical respect for the rights of other nations, which makes the United States a true exponent of democracy.

At the time of the opening of the Panama Canal it seemed as if peace could not be interrupted. Not only new ways of easy and rapid intercourse all over the world were opened, but man invaded the realm of the birds and extended his dominion to the air. In the midst of all this progress toward the union of the family of nations, suddenly burst out, like a devastating tempest, the most appalling war of all times. The Hohenzollern and the Hapsburg are in Europe the last representatives of autocracy, who can not and never could understand, that civilization has canceled the medieval assumption of the divine power of kings. They remain true to their traditions of military and arbitrary rule and are the natural enemies of freedom and democracy. It is the most remarkable fact that a nation that has attained the highest degree of scientific, industrial, and commercial development has been misled to believe that the world belongs to the strongest and that might and military rule are superior to justice and right. After years of careful and most complete preparations the Prussian Kaiser has started the present war simply because he thought the time ripe to crush the nations that represent right and democratic ideals. The issue of this bloody and savage fight is then very plain and clearly defined. From the moment that international treaties were declared scraps of paper and necessity the supreme law; to the time that the commerce of the world was barred from the seas and merchant ships of all nationalities sunk, there is no possible compromise. Liberty and democracy will dominate or might and military rule will take its place.

The United States after patiently hoping to avoid a clash and save the world further misery, has at last been compelled to enter into this fight for the defense of the principles upon which are based all its history, its greatness, and its very existence as a free nation.

The hour has arrived when every democratic country of this continent must in the name of Pan American solidarity take its place alongside of the United States as the defender of right and democracy. Bolivia, my country, so understood its duty. When the German Government notified my Government of the unrestricted sub-

marine war it answered promptly that even if Bolivia had no ships, its international trade was vital to the country, and it could not acquiesce in a policy so contrary to every principle of law and humanity, and therefore declared that her policy was to stand in this crisis solidly with the United States, who in this emergency was the champion of democracy and of the rights of all the American Republics. Bolivia knew well when she broke relations with Germany that it was not a question of entering actively in the war, but that the moral and unqualified support of every nation conscious of its duties as a member of the community of republican and sovereign nations was as necessary and important and that she could not stand aside when might and autocracy threatened the very existence of democracy. Should the time come for Bolivia to contribute actively, she would most certainly and willingly give her quota of men, who would know how to give a good account of themselves and be a credit to their country.

In 1913 the United States gave the world the Panama Canal as a peace offering; to-day she has drawn the sword for democracy and the preservation in the world of justice and right. God grant that the day of the final crushing out of militarism and autocratic power may soon light distracted humanity, and the glorious cause of liberty embodied in the flag of the Stars and Stripes, once more in peace and good will, be the emblem of union of all the Republics of America, forever free and independent.

Director General Barrett spoke on the subject of "The War and the New Pan America," as follows:

The end of the war will be the beginning of a new era for Pan America and Pan Americanism. After the war will come a new America, which will mean a new "All America," or Pan America, and a new Pan Americanism. In the crucible of this mighty struggle are being burned out the old animosity, the old distrust between North and South America. The purified residue will be a new mutual confidence, a new good will, and a new cooperation for the common good. Pan American comity and commerce, Pan American travel and trade, Pan American intercourse and intimacy will then have a new inspiration and a new force.

When the war is concluded we will realize that it has done more than any other international influence since the declaration of the Monroe doctrine in 1823 to develop ideal and permanent Pan American solidarity; that it has accomplished more than all the diplomatic notes of a century to make the Monroe doctrine an unquestioned principle in the relationship of nations. After the war the Monroe doctrine must and will become a great Pan American doctrine. Then it will belong to, and be espoused by, every other American Government from Canada, Cuba, and Mexico south to Argentina, Uruguay, and Chile, as much as by the United States. Then, being Pan American and supported by every American Government, it will be forever accepted and respected by the rest of the world; and, in its essence, become a world doctrine standing for the integrity, independence, and self-government of every nation, great and small.

Victory for the United States and the allies will remove for all time the only international menace to the Monroe Doctrine. The new Pan America and new Pan Americanism which will follow the war will also be so powerful in their own inherent strength and backing that never again can a new menace from the old world assert itself.

No other nation of America can honestly and logically even intimate that the United States has entered this world struggle for any selfish purpose of territorial aggrandizement or for the slightest advantage over its sister American Republics. No matter what doubts and discussions there may be concerning acts and wars of the past, there can be only one opinion throughout Pan America concerning the attitude of the



United States in its present course. Every man, woman, and child from northern Canada to southern Chile knows absolutely in his heart that the United States is fighting for causes and principles just as dear to every South and Central American Government, people and person as they are to the Government, people, and persons of the United States.

Every thoughtful statesman and commoner in every American nation must admit that victory for the enemies of the United States would mean the conquest and subjugation directly or indirectly not only of the United States but of the other countries of this hemisphere. It is, therefore, sublimely gratifying that the sober public sentiment of practically all the twenty Latin American Republics—eighty millions of people—is overwhelmingly pro-United States and pro-Allied in this struggle of democracy against autocracy. It would seem, in consequence, to be only a question of time when all the Latin American countries must follow the dictates and demands of this public sentiment and align themselves with the United States and the Allies. Otherwise, they may find themselves delaying and possibly preventing the triumph and supremacy of the basic principles which inspired them to fight for their independence and upon which they wrote their constitutions and constructed their nationalities.

There should be no hasty criticism of Argentina, of Chile, of Venezuela, of Colombia, of Ecuador, or of any other Latin American Government which may have not yet taken a decisive position in the present conflict. We must trust that each Government is acting honestly and refuse to admit that influence and propaganda are holding these Governments back in their final decision, just as we must decline to admit that such influence and propaganda kept the Government of the United States for nearly three years, in the face of unspeakable irritation, from taking the final step.

On the other hand, let not any part of Pan America blind itself and refuse to read the handwriting on the wall, which tells us that there is surely, even if slowly, rising an overpowering flood tide of public sympathy with the purposes, ideals, and inspirations of the United States in this terrific fight of immortal right against mortal evil in the relations of nations. This flood, if the war continues another year, must inevitably sweep over all Latin America from the Rio Grande to the Strait of Magellan, making even benevolent neutrality impossible.

Then, when the sun shall shine on that happy day, all America—Pan America—shall, so to speak, form a choir of nations and peoples and chant in perfect unison a new hymn of Pan Americanism, a new anthem of Pan American cooperation and good will, confidence and commerce, progress and peace, which will be taken up by all the nations and peoples of the world and will herald the coming of the day when there shall begin everlasting peace and good will among all men and all peoples throughout all time.



# LUNCHEON IN HONOR OF CUBAN MINISTER

ON October 24, 1917, the Fifth Avenue Association of New York gave the first of its winter luncheons at the Biltmore Hotel. The guest of honor and principal speaker was Dr. Carlos Manuel de Cespedes, Minister of Cuba to the United States, the luncheon having been designated as a recognition of Cuba as an ally in the present war.

His honor John Purroy Mitchel, mayor of New York, welcomed the guest of honor in one of his happy speeches, in which he alluded to the father of Dr. Cespedes as one of the great leaders of the Cuban struggle for independence in 1868, and whose patriotic devotion and noble services to his country were the choicest heritage of the distinguished son, guest of honor of the present occasion, whose great services to his country in the diplomatic field had proved him to be a "worthy son of a worthy sire." Dr. de Cespedes, moved by the inspiration of the occasion, replied in an eloquent and stirring address that brought great waves of applause, a few extracts from which are herewith reproduced. After gracefully expressing his appreciation of the great compliment paid him and through him to his beloved country, the minister continued:

Need I assure you of the deep appreciation of the Cuban people for this spontaneous and princely recognition of the act that placed the Republic in line with the United States on the side of liberty and democracy in the greatest war of all time?

May I confess, without pretended modesty, how I feel on this occasion, not so much for what you thought of me when you asked me to become your guest of honor, but rather for what you think of my country and the attitude of my countrymen? Yet how could they have decided otherwise without dark treason to the glorious past and utter blindness to the perils of the future?

I would have felt sad indeed if at the hour in which the fate of liberty is at stake, Cuba, who became a free and independent nation by the triumph of the same principles and ideals for which we now fight, should have sought to barter with a monstrous declaration of neutrality her untainted birthright to freedom, for the humiliating benevolence of Prussian autocracy; should she have eluded the trials of patriotic sacrifice and the hardships of her duty to mankind, when her natural ally, the author of her present safety, nay, the very champion of her cause when she faced alone and unaided the greatest armies that ever crossed the Atlantic, to maintain the right of a European sovereign over her small but tried people, stood in the arena of the old controversy, and, with the eloquence of her grand example, called to arms the liberal nations of the New World that they might share in the glory of the marvelous crusade and in the grateful remembrance of the future generations.

What would such a neutrality avail against the devastators of Belgium, the conquerors of Serbia and Roumania, the enslavers of little Montenegro? Will it avail any nation, no matter how strong or weak, if the United States should fail in an hour of universal misfortune, and the torch of liberty should fall from the hands that raised

it in the sky? In the present momentous day of your national history, as also in the history of the world, I hesitate to proclaim when the United States appeared as greater and more worthy of universal admiration. Was it when they grasped the implements of labor to open up to international commerce the famous route that had been the dream of preceding centuries, or when they drew the sword and offered the wealth of the Nation to make the world safe for democracy?

If there is anything more impressive than the United States at peace, working out its lofty destinies with a keen sense of the joys of life in the pursuit of happiness and civilization, it is certainly the United States at war for the safety of humanity. Reconciling itself with the ideals of the fathers, the Nation has now set about its formidable task in grim earnest. As the days pass by, the evidence is made tangible that the power that is being developed to bring the enemy to terms will be something by far more decisive than was ever anticipated by the most patriotic expectations. It is a physical power to crush a system and at the same time a moral power to redeem nations that have gone astray.

In one of his beautiful conversations with the people, a great leader of men, as well as of sentiment and thought, your illustrious President, Mr. Wilson, once asked himself while pondering on the measures of his country's righteousness and the responsibilities of his eminent position, to what account he could best apply the tremendous power of this Nation that had been placed in his hands by the free will of his fellow citizens. A few years have passed and now the problem is solved. He offered it for peace; and when ruthlessness prevailed against the laws of humanity he put it at the service of humanity to reestablish the empire of international justice. To this cause Cuba has pledged herself with you in a brotherly spirit. Her cooperation as an ally will not be found wanting.

Mutual sentiments of esteem have brought us nearer than ever to you, and as our affection has grown, so our commercial relations. Fifth Avenue, today the magnificent boulevard of the Americas, has contributed to that growth.

At the head of your trade with Latin America, we hope to remain there forever. If, being your nearest neighbor, we are happy to have passed by far all our other sister republics, even the greatest among them, in exports to and imports from the United States, which represents a national triumph, we are happy also because we have inspired your confidence and have bought of you or returned to you in splendid earning, millions and more millions for the millions and millions you have invested in Cuba or in the products of Cuba. This is, however, only the beginning of relations that will increase and promise to establish permanently on the verge of your continental territory one of the most profitable and surest markets for the fruit of your soil and the products of your industries. When reading the official statistics of our commerce with the United States, I am sure that you have compared their result with the population of the Republic and felt that such a showing was a proof of many of the same qualities and virtues in the people of Cuba that have built up your own gigantic economic structure. This must suffice to guarantee the future of our good relations, as the mutual benefits obtained from every mode of our intercourse become every day more valuable and real.

It must not be forgotten that such a community of interest was preceded by the community of ideals that has brought us simultaneously to the camp of the allies in the present war. Though not as far advanced and wise as you in the use of democracy's instruments, we appreciate and love the advantages of the people, of the Government of the people, by the people and for the people, as opposed to the rule of kings and the institutions from which terror and despotism are derived.

After the luncheon, within 20 minutes, a number of those present subscribed to \$1,000,000 worth of Liberty Bonds, of which amount Dr. de Cespedes took \$5,000.

## PROMINENT IN PAN AMERICAN AFFAIRS . . . .

**T**HE HON. JOHN WATSON FOSTER, former minister to Mexico, Spain, and Russia and former Secretary of State of the United States, the father-in-law of the present Secretary of State, the Honorable Robert Lansing, and the dean of the United States diplomatic service, born in 1836, died in Washington November 15, 1917.

If there had existed in the United States a consultive body similar to that of the Older Statesmen of Japan, then John Watson Foster would have been a member and appropriately the chairman of this body. It has been said with truth that diplomacy is not a career in the United States. From Benjamin Franklin and Arthur Lee to John Hay and Elihu Root concern with diplomatic problems has furnished but one channel of activity for men whose lives have been for the most part devoted to other work. Participation in international affairs has ordinarily been but an incident in the careers of the best known, even the internationally best known, statesmen of the United States. But this was not true of Mr. Foster. From 1873 to his death in 1917, a period of 44 years, his work was entirely in the diplomatic field or along cognate lines. So true was this and so closely had these 44 years of connection with international questions identified John W. Foster with the diplomatic service that even his nearest friends had almost forgotten that in his earlier life he had been a soldier, a politician, and a newspaper editor.

Born in the State of Indiana on March 2, 1836, he was graduated from the University of Indiana in 1858 with the degree of master of arts. For one year he studied law in the Harvard Law School and at the outbreak of the Civil War in 1861 was practicing his profession in the city of Evansville in his native State. He entered the Union Army at the beginning of the war as major of the Twenty-fifth Indiana Volunteers. He was promoted to lieutenant colonel at the Battle of Fort Donelson and to colonel at the Battle of Shiloh. After the war in 1865 he became editor of the Evansville Daily Journal and remained such until 1869. He was postmaster at Evansville from 1869 to 1873; meanwhile in 1872 he was chairman of the Republican State central committee.

In 1873 his connection with international affairs began, a connection never to be broken until his death, November 15, 1917. He was appointed minister to Mexico by President Grant at the beginning of his second term in 1873, Hamilton Fish being Secretary of State. This position Mr. Foster held until 1880, through the Grant



JOHN WATSON FOSTER.



JULIO PUEYRREDÓN.



CARLOS A. MEZA.



ROLAND BRIDENDALL HARVEY.

administration and nearly through the administration of President Hayes, with William M. Evarts Secretary of State. Mr. Foster served during the last year of the Hayes administration, 1880 to 1881, as minister to Russia. After the inauguration of President Garfield in 1881, with James G. Blaine Secretary of State, Mr. Foster retired from active connection with the diplomatic service and began in Washington the practice of international law as counsel before international commissions and arbitral boards, but was recalled to the service in 1883 and appointed minister to Spain. This was after the death of President Garfield and in the administration of President Arthur, his successor, with Frederick T. Frelinghuysen Secretary of State. Mr. Foster served as minister to Spain until after the inauguration of President Cleveland. He then returned to the practice of international law and remained engaged in this work until he was appointed by President Harrison in 1891, Mr. Blaine at this time being Secretary of State, as special plenipotentiary to negotiate reciprocity treaties with Brazil, Spain, Germany, the British West Indies and other countries. Mr. Blaine resigned as Secretary of State on June 4, 1892, and on the 29th of the same month John W. Foster was appointed and confirmed by the Senate as his successor. In this position he remained until February 23, 1893, about two weeks before the end of the Harrison administration. After his retirement as Secretary of State Mr. Foster served in Paris as agent of the United States in the Bering Sea arbitration case. In December, 1894, he was invited by the Emperor of China to take part on behalf of China in the peace negotiations with Japan following the Chino-Japanese war. Mr. Foster arrived in Japan in January, 1895, a few days ahead of the Chinese commissioners. As may be remembered, these commissioners were not clothed with full powers, in consequence of which the Japanese commissioners refused to treat with them. Mr. Foster accompanied the unsuccessful commissioners back to China and returned with Viceroy Li Hung Chang, sole commissioner on the part of China, who signed the Shimonoseki treaty of April 17, 1895. Throughout the negotiations Mr. Foster acted as the principal advisor of the Viceroy Li. The connection between the former United States Secretary of State and China formed at that time endured through all the changes in the China form of government up to the time of Mr. Foster's death. He was one of the representatives for China at the Second Hague Conference in 1907. Before this, however, he had again served his own country as ambassador on special mission to Great Britain and Russia in 1897, and as agent of the United States before the Alaskan Boundary Tribunal in London, 1904.

Mr. Foster was the author of *Biography of M. W. Foster; A Century of American Diplomacy in the Orient; Arbitration and The Hague Court; The Practice of Diplomacy, and Diplomatic Memoirs.*

Dr. JULIO PUEYRREDÓN was born at San Pedro, Province of Buenos Aires in the year 1855, and died in the city of Buenos Aires October 17, 1917, at the age of 62 years. Member of a family which from colonial days has furnished to Argentina a long line of distinguished statesmen and soldiers, the best known of whom in the earlier years was General Juan Martín Pueyrredón, elected Supreme Director of the Argentine Republic in 1816, and after whom the department (partido) of Pueyrredón in the Province of Buenos Aires and the town of Pueyrredón in the Province of Córdoba are named, Dr. Julio Pueyrredón was himself a man well in the front rank of the later-day builders of Argentina. He was a graduate of the University of Buenos Aires with the degree of doctor in law in 1880; he practiced his profession for many years and sat in the Provincial Legislature; but Dr. Pueyrredón's principal activities were along other lines. He was best known as a scientific agriculturist, a man interested and in the forefront of many things appurtenant to the agricultural and particularly the cattle industry of his native country. He served on numerous agricultural commissions, as delegate to national and international conferences of agriculture. He was a prominent member of the Argentine Rural Society, perhaps the single greatest agency in the upbuilding of Argentine agriculture, and was president of the society in 1896 and 1897. Dr. Pueyrredón took the greatest interest in all matters of civic improvement, and was in 1889 one of the founders of the well-known Civic Union of Argentina. Of him *La Prensa* of Buenos Aires says: "Dr. Julio Pueyrredón was an exponent well qualified of the most cultured center of metropolitan society and the prototype of the progressive and intelligent agriculturist. He was one of those men who could pass from the actual business of farming to the salon without losing his habitual aristocratic bearing and distinction. In this he followed the best traditions of Buenos Aires society."

In the recent death of Dr. DON CARLOS A. MEZA, secretary of the Salvadorean Legation in Paris, the Republic of Salvador has lost one of its most promising young diplomats. Dr. Meza was well known in Washington, and the announcement of his untimely death brought sorrow to scores of his friends in the diplomatic and social circles of the capital of the United States. He served as secretary of the Salvadorean Legation in Washington from February 22, 1913, to 1916. On October 13, 1916, he was appointed secretary of the Legation at Paris, and was in the discharge of the duties of that post when death called him. Dr. Meza was born in the city of Santa Ana about 27 years ago, and was educated in the schools and higher institutions of learning in that city, subsequently taking his degree in law at the National University. He was a young man of exceptional attainments and brilliancy, of pleasing person lity, and gave promise of a splendid career.

ROLAND B. HARVEY was born in Baltimore County, Md., October 12, 1870, son of William Pinkney and Virginia Jordan Harvey. His earlier educational training was in private schools in the city of Baltimore and afterwards in like schools in Switzerland, France, and Germany. He took the degree of bachelor of arts at Johns Hopkins University in 1895, and of bachelor of laws at the University of Maryland, Baltimore, in 1896. He was admitted to the bar of Maryland immediately after his graduation by the law department of the university, and one year later, in 1897, to the bar of New York. He practiced law in the city of New York for two years, 1897 to 1899, after which he returned to his native State. For three years from 1904 he was assistant state's attorney of Baltimore City. In 1907 he resigned this office, and in 1909 retired from the practice of law and entered the diplomatic service of the United States. His first appointment in the service, August 27, 1909, was after examination, as secretary of legation and consul general to Roumania and Servia and secretary of the diplomatic agency in Bulgaria. Mr. Harvey acted as chargé d'affaires at Sofia from March to July 1910. His second appointment was as secretary of legation in Lima, Peru, in February 1, 1912. He did not serve in this position, but was transferred to the legation at Santiago, Chile, where he remained for nearly two years, serving as chargé d'affaires, in the absence of Mr. Henry P. Fletcher, the minister (afterwards ambassador) to Chile, from May to August, 1912, and from September, 1913, to February, 1914; the latter period covered the visit of former President Roosevelt.

In February, 1914, nearly six months before the outbreak of the war in Europe, Mr. Harvey was transferred to the embassy at Berlin where he served as second secretary of embassy until Ambassador Gerard and the embassy staff were ordered from Berlin in February 4, 1917, after the rupture of diplomatic relations between the United States and Germany. Thus his service in Germany covered two and a half years of the most eventful period of the great war.

In the death of Mr. Harvey, which occurred November 14, following an illness of several months duration, the immediate result of a fall breaking his hip bone, the United States loses a most loyal, accomplished, and capable diplomatic servant. His two years' service in Chile gave him a broad and balanced knowledge of South American affairs.





# PAN AMERICA IN THE MAGAZINES

Felix Pardo de Tavera, the celebrated Argentine sculptor is the subject of the July installment of the "Sculptors of the Americas" series running in the Spanish edition of the BULLETIN. The following is the English version of the article:

In the large number of monuments and statues which grace the Argentine capital and add so much to its beauty the artistic genius of the country is well represented. Sculptors who claim Argentina by birth or adoption have contributed their proportionate share of splendid monuments and imposing statues and many of the sculptural decorations from the Argentine ateliers compare most favorably with those of the foreign sculptors.

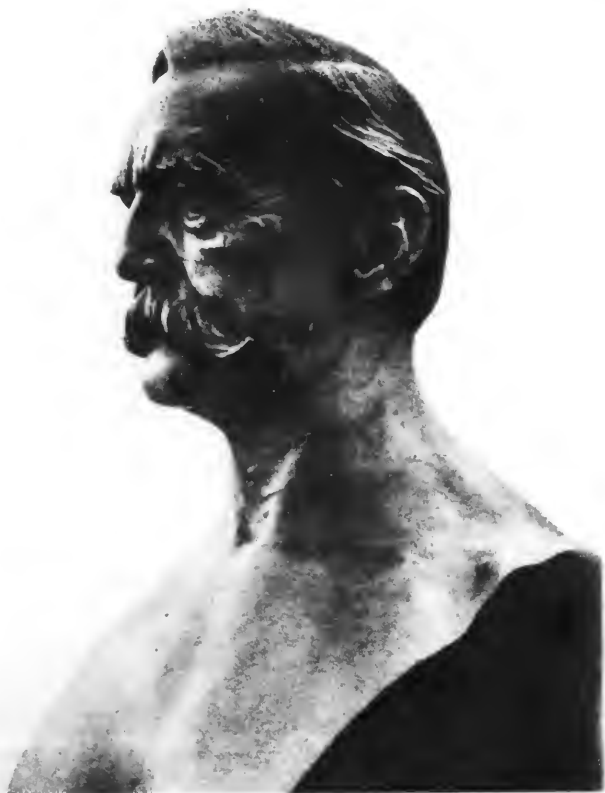
Among the Argentine sculptors the name of Dr. Felix Pardo de Tavera is perhaps as well known as any because of his numerous and notable productions. An Argentinian by adoption, he has lived in that country for over a quarter of a century and has drawn inspiration and encouragement from its aesthetic life. The story of his career from physician to dilettante painter and finally to an eminent sculptor is not without interest. Born in Manila, Philippine Islands, he received his early schooling in the Municipal Atheneum of the Jesuit Fathers. As a young student he showed unusual artistic tendencies and studied drawing in conjunction with his other school work. An early painting of the Virgin Mary which he attempted attracted much attention and won a position on the walls of the college at Manila. Medicine, however, was his chosen vocation, and,



DR. FÉLIX PARDO DE TAVERA,  
SCULPTOR.

His innate artistic temperament, manifested from childhood, induced him to abandon scientific work and confine his activities entirely to sculpture, a field in which he has been eminently successful. At present he is considered the most notable sculptor of the Argentine Republic, his adopted country.

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BUST OF DR. PELLEGRINI.

This marble bust of the celebrated statesman and former President of the Argentine Republic, Dr. Carlos Pellegrini, is the only one made from life. The work shows the exquisite skill of the artist, who, by noble and vivid lines, portrays the character of his model.



C'EST MI.

This bronze statue, of which many copies have been made, was awarded the prize of honor at Barcelona and acquired by the Museum of that city. It may be said that this gracious achievement brilliantly marks the beginning of the author's triumphal career, inasmuch as it is one of his first productions.



THE SECRET OF THE ROCK.

This high relief in marble was exhibited in 1904 at the World's Fair, St. Louis, where it obtained the great medal of honor. Critics consider this production one of the best works of the celebrated Argentine sculptor.

completing his preliminary school work in Manila, he went to Paris to continue his education.

In 1886 Tavera was awarded a diploma from the medical faculty of Paris. In Paris and in Ber sur Mer he worked under the eminent Dr. Calot specializing in infants' diseases. But even as a medical student his interest in art continued to grow and he spent his spare hours at the Julien Academy where he developed a knowledge of painting under Bouguereau and Tony Robert Henry. At the end of the second year, however, he abandoned brush and palette for chisel and hammer.

While passing a summer at Switzerland the young physician-painter was attracted to a little shop where a small group were modeling artistic vases and pitchers from baked clay. He joined the class and before long excelled in turning out similar objects of art. Returning to Paris, he commenced to devote himself to modeling busts and bas-reliefs.

In this class of sculpture he found ample opportunity for the expression of his conceits and their skillful execution. In 1889 he received his first official recognition when he was awarded a silver medal at the Fine Arts Exhibit at Paris for his bronze statue representing a woman engrossed in thought. Three years later at the exhibit of Barcelona this same bronze won much praise and was granted a diploma of honor. It was also acquired by the Spanish Government for its art collection in the Museum of the House of Deputies.

The following year Dr. Tavera exhibited, at the Paris Salon of the Society of French Artists, a bronze statuette representing a little street urchin. He called this happy concept "C'est Mi," a fitting title, for the pert expression of the little gamin is delightfully refreshing. This figure has enjoyed great popularity wherever it has been exhibited, and many a replica has been made of it in response to commissions. In the Barcelona exhibit of 1891 it received a diploma of honor, and the Government added it to its sculptural collection.

"The Struggle for Life" is a bronze group which the sculptor exhibited for the first time in the Salon of Paris. The subject is given a light allegorical interpretation. A terra-cotta bust of the Spanish Adelantado, Don Miguel Lopez de Legazpi, commanded the admiration of critics and was purchased by Spain for display in the Navy Museum of Madrid. Other groups, more or less known to art students of Europe and South America, include his "La Corvée," a symbolic representation of Service; "El Cnco;" and a full standing figure of the noted Spanish painter Goya.

About this time Dr. Tavera was winning a place for himself in sculptural circles, and his reputation became established. He left Europe for Argentina, and, settling in Buenos Aires, adopted the citizenship of that country, and then entered upon a period of sus-



MODEL OF MONUMENT TO RIZAL.

This miniature monument to Rizal—inspired poet, celebrated physician, and martyr of Philippine independence—is in the Museum at Manila. On the front of a column overlooking a group of Philippine warriors stands a matron representing the country, holding in her arms the inanimate form of Rizal, on whose forehead a winged figure is depositing a laurel crown. The posture as a whole suggests grandeur and incites to meditation and respect.



THE RASCAL (EL CUCO).

This group, which was exhibited by its author in 1892, is surprisingly realistic. The modeling, as well as the movement of the figures which comprise it, and especially that of the man, show the skill which the sculptor possesses for reproductions in clay of curious scenes from real life.



PANDORA.

This marble statnette, now the property of Dr. Rómulo S. Naón, Argentine Ambassador in Washington, is a beautiful drawing-room adornment. The gracious and delicate harmony of the lines of the female figure, as well as the mysterious expression which seems to be depicted on its face, brings to memory the exploits of this beautiful woman of Greek mythology.



TWO WORKS OF PARDO DE TAVERA.

The Gormand. Statue in colored marble wrought in real artistic taste, and in which the author expresses the egoistic satisfaction portrayed on the face of a gluttonous child on being able to satisfy the desires of its appetite. This valuable work belongs to Fr. Eugenio C. Noc, of Buenos Aires.

In the Park. In this bronze group, which was exhibited in the Gallery at Paris in 1891, the artist has reproduced with exquisite skill one of the humorous scenes which often occur in the public parks. A young child seated on a wheelbarrow sees its peaceful repast interrupted by a roguish dog which tries to filch a slice of bread, but another older youngster quickly runs to the defense of the despoiled one and in a struggle with the animal compels it to desist. All the figures of the group are remarkably true to life.



tained sculptural activity. From his atelier came forth statues, busts, groups, and reliefs, gaining him further commissions and increasing prominence. He used both marble and bronze effectively.

Among the more important of his later efforts mention should be made of the piece of sculpture, "The Secret of the Rock," which was exhibited at the St. Louis Exposition in 1904 and for which he received the grand medal of honor. It is an alto-relief in marble exquisitely colored. Chiseled out of the marble rock is the beautiful head and graceful torso of a woman. It has made a strong appeal to art lovers everywhere. The masterly execution of the subject, the soft lines and exquisite charm which he has imbreathed into it make it one of the most striking objects of beauty in the art exposition at Carapachay, Argentina, where it is displayed.

Tavera's "Pandora" is another work which has won him much praise. It is a marble conceit based on the classic legend of Pandora and the secret box and is wrought with a nicety that reflects the talent of its maker. It was acquired by H. E., Dr. Romulo S. Naón, the Argentine ambassador to the United States, and adorns the embassy at Washington.

A bust of San Martin is another of his more notable achievements. It obtained the first prize in the Buenos Aires contest of 1910. The original marble of this great liberator-soldier-statesman graces the reception salon of the White House at the Argentine capital. A marble replica of it was presented by the Argentine Government to Chile and is exhibited in the treasury building at Santiago.

"The Cannibal," in spite of its terrible name, is another delightful conceit, cleverly executed. It represents a child innocently biting a little doll. It is a charming piece done in colored marble, and was acquired by Eugenio C. Noe for the private collection in his home.

Other works by Tavera include the statue of Dr. Julian Aguilar in the Hospital of San Roque at Buenos Aires; the statue of Esteban Adrogué in the town named after him; the full figure of Bernardo de Irigoyen adorning Avenida Montes de Oca; the bronze bust of Carlos Pellegrini modeled from the subject while alive; and the monument of the Drummer of Tacuari in the Plaza Máximo Paz in La Plata.

Dr. Tavera's works have received generous praise from eminent critics of Europe, and the press of France and Spain have been liberal in their appreciation of his efforts. Personally the sculptor is a man of charming presence, genial, sympathetic, and cordial. His artistic and discriminating tastes have combined to make his home one of genteel refinement and elegance.

**Sliding off the World's Roof**, in a recent number of the Ladies' Home Journal, is another interesting contribution by Mrs. Harriet Chalmers Adams to the literature dealing with the little-known regions of the eastern side of the Peruvian Andes. Mrs. Adams,

widely known as a world traveler and lecturer, is an occasional contributor to the BULLETIN, and is at her best when describing some of her adventurous experiences in the wilds of South America, regions that in many instances but few white men and no other white women have had the temerity to explore. The following excerpts from her article embody some of the striking and delightful descriptions of the region visited upon this occasion, and also throw an interesting side light on some of the aboriginal inhabitants encountered.

I stood on the Roof of the Western World—the summit of the Andes. In the melting snows at my feet lay the source of a headstream of the mighty Amazon. I had long pictured the view from this topmost portal—how the mountains would tumble down to the plain, range on range, canyon after canyon; how a vast wilderness would spread out before me, the beginning of an impenetrable jungle, stretching 3,000 miles from the Andes to the Atlantic.

Instead, I looked down on a sea of billowy clouds!

Into this cavern of mist we descended. There were nine of us, if you count the horses. My husband and I were in search of adventure; the English naturalist was bound for the forest to collect butterflies and moths for the British Museum; Pedro, the half-breed muleteer, was supposed to be the guide. There were four saddle horses, and a cargo animal laden with canned food and ammunition. Rifles hung from the pommels of our saddles; blankets and cameras were strapped on behind, and every saddlebag bulged with necessities for the journey into the wilds.

Peru may be likened to a tall gray-stone house with a steep flight of steps leading up to the roof. From this bleak roof rise the highest chimney peaks of the Americas—mountains perpetually snow-crowned, their imperial heads glistening in the sunlight like a Titanic chain of diamonds. Behind this chilly, drab house lies nature's loveliest garden, but no well-built stairway leads down to it. The traveler, bound for the vine-hung wonderland of the tropics, risks his life and slides off the roof.

We slid.

Never have I seen such a steep, slippery trail: it was in the bed of a brook which tumbled down the mountain side to a canyon far below. The wet mist enshrouded me, screening the rider ahead; the rain fell in torrents. My dejected white horse tripped over rolling boulders, hurling me to and fro in the saddle, and finally pitched me, heels over head, into the stream. There I lay until the men came to the rescue, looking, I am sure, like a wet mummy, for my costume that day was a wonder to behold.

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Now the trail left the river and climbed the cliff, where it wound along a stony ledge with a sheer drop of a thousand feet to the canyon floor below. It was a very narrow trail, not over 30 inches wide, with projecting crags and sharp turns. I was using a sidesaddle, but ever since this experience I have ridden astride. My horse, recalling the fate of pack animals who had struck the wall with their loads and fallen into the abyss, decided to avoid this catastrophe by keeping to the very edge of the trail, so my feet hung over the yawning chasm. By this time I was too exhausted to be greatly concerned whether I hung on or rolled off into eternity. I dimly recall a faint, winding, silvery thread far below in the mist—the river serpentineing its way through the canyon. It was midnight when we reined up at a hut on the edge of the forest, after 19 hours in the saddle!

This shelter hut belonged to an American mining company that had built the trail we were following. The company's office was up on the plateau, near Lake Titicaca, the mine itself some days' journey farther on down-trail. A lone American was posted at the shelter to oversee provisions and mail going in and gold and mail coming out. Here we left our friend, the naturalist, with his butterfly net for work by day



Photograph by Ralph Lohman.

QUICHA PEASANT WOMEN OF THE PERUVIAN HIGHLANDS.

These women are most industrious and busily spin their cotton as they drive the llamas along the Andean trails.

and his acetylene lamp to entrap inquisitive moths by night. The American boys at the mining office had dubbed him "Bugs," and the nickname clung to him. I can see him now, carefully sorting the opalescent beauties from his knapsack, his face all aglow at a new variety, dearer to him than the Kohinoor diamond. Poor chap! He died there of fever the next year.

Pedro failed to appear with the cargo animal that night, and the next morning there was still no sign of him. We assumed he had lingered behind in the village and would soon overtake us. Provisions were running low at the hut, and Mr. Adams and I decided to start on alone.

"Follow the river," said the friendly American who had sheltered us. "And be sure to look for the new trail at the foot of the canyon; I hear there's been a landslide on the old one."

He and good old "Bugs" stood in the cabin door, waving to us until we disappeared round a turn in the trail.

Our tortuous path had been cut out of the rock on the side of a gorge. It crossed and recrossed the canyon by means of swaying bridges hung on cables—bridges only 3 feet wide, without railings. They swayed like a hammock as we rode over them. I could not dismount and walk across when we came to a bridge, as there was no space of ground to drop on.

In spite of danger, fatigue, and a lean larder we were keenly alive to the beauty of this Agualani canyon. It is one of the loveliest in all tropical America. Its walls are hung with every variety of luxuriant tropical verdure and curtained with countless silvery waterfalls. Pink and white begonias as large as bushes grow beside the trail, and ferns of giant proportions. We looked down on waving palms, on great trees filled with orchids, and all agleam with iridescent butterflies. Maces of brilliant plumage and rainbow-beaked toucans flew by.

We had been on the alert all day for travelers bound up-trail, and now we saw a train of llamas coming toward us across the chasm. My husband slipped off his horse and dragged me over my pony's head. Then we ran to the widest place in sight, and flattened ourselves against the wall, leaving the more experienced horses to shift for themselves.

Over the swaying bridge came the llamas, heads erect, great, curious eyes wandering. Behind were two Indian drivers, calling "Buss-ss-ss," the hissing Andean cry that causes the pretty highland camels to prick up their ears and hasten their dainty feet. When they saw us they were in a panic, and as they scrambled past, trembling with fear, one poor, golden-brown llama made a misstep, struck a neighbor in his fall, and they both went over the brink. The picture haunted me for days.

As the day wore on we were drenched by the daily storm. Night found us stumbling along a rocky ledge in a torrential downpour and inky darkness, leading our tired horses. Our wet corduroy clothes felt as heavy as lead. The path grew narrower, narrower. Then it flashed on us: We were on the old trail with the landslide. With the animals behind, it was impossible to turn back, so we crept on hands and knees. The horses seemed to realize the danger, and were as cautious as we. Above the storm we heard the roar of the river below. Rocks fell about us. The earth slipped beneath us. Death was very near.

At last we reached a wider place and huddled there. After a while we groped our way down to the river and found that the bridge had been swept away. We could only curl up on the trail by the horses and wait for the dawn. The storm ceased, and the great, brilliant, tropic stars shone out. Nature's forest luminaries, the fireflies, glimmered through the canyon. A thousand voices spoke to us from the verdure; 10,000 insects came to torture our vigil. Dawn at length, with everything in the saddlebags soaked. As we breakfasted on a dozen malted-milk tablets that had escaped the deluge we wondered why Pedro had not come along with the food. Perhaps he, too, had strayed to the old trail. We called and discharged a pistol, but there was no response. Going down to the river to investigate we saw that the seething torrent had spared one log of the bridge. Food, shelter, and dry clothing lay beyond the river. We decided to risk the log.



LLAMAS ON THE HIGHLANDS OF PERU.

"Over the swaying bridge came the llamas, heads erect, great, curious eyes wandering. Behind were their drivers, calling 'Buss-ss-ss,' the hissing Andean cry that causes the pretty highland camels to prick up their ears and hasten their dainty feet."

The horses must remain behind, as no animals could brave that rushing current. We took off their bridles that they might graze, and left them to be guided through the stream by the dilatory Pedro when the waters abated. I embraced my dear little pony, who had not stumbled with me on the swinging bridges, and told him to "fill up on nice, juicy ferns." Then two travel-worn pilgrims began their circus act on the long, slippery log, high above the roaring river.

My husband improvised a line from bridles and fastened it about my waist. He held on to it while I lay flat and pulled myself across, inch by inch. In mid-current I got so dizzy I came near losing hold, but the hardest part was watching "the other fellow" crawl over. Then came the long march over the rocky trails, through swollen streams, in one of which I lost my footing and my companion pulled me out by my hair. Through it all I hung on to three precious possessions tied to my sombrero—my diary wrapped in oilskin, a necktie that a mother in California had crocheted for her boy at this far Andean mine, and a jar of cold cream.

The next 48 hours were a nightmare. We were alone in the wilderness, hungry, foot-worn, wet. But we reached the Inambari River at last, and staggered on toward the mine. I have read of royal receptions, of emperors receiving victorious generals, of kings greeting princes of the realm, but they pale beside our welcome at that American mining camp in the heart of the South American jungle.

There were 20 Americans and several hundred workmen, of mixed Indian and Spanish blood, at this gold-quartz mine, situated in the Peruvian Province of Carabaya, long celebrated as gold district. The Americans lived quite comfortably, as the company had gone to great expense to bring in luxuries, as well as necessities, on the backs of mules and llamas. The "boys" had porcelain-lined bathtubs, rocking chairs, a talking machine, and good things to eat. At breakfast, the day after our arrival, we had genuine American hot cakes and maple syrup.

When we had been a week at the mine, Pedro limped in with the saddle horses and a tragic tale. The cargo animal had fallen off the cliff this side of the Quichua village. Pedro had tried to save our belongings, without success. Yes; he had seen the precious caoutchouc bag with our clothes and my reserve stock of cold cream, but it was sailing down the river. I have since pictured the belle of some savage tribe attired in my blue and white striped gown.

On the desert coast and the wind-swept plateau of Peru we had heard the English-speaking residents refer to the mysterious land beyond the Andes as the "inside" country. "Harry is going 'inside' to look for rubber trees," or "Poor Jack went 'inside' last year with four other fellows. Never heard of them. Don't know whether it was savages or fever."

Through hard months of highland wayfaring, as we camped by isolated reed-fringed lakes or on the slopes of snow-clad mountains, I dreamed of the alluring forest beyond the frowning Andean wall. Now we had reached the promised land, at least we thought we had until we talked it over with the doctor, who had been a schoolmate of ours in California.

"No; you aren't really 'inside' yet," he said. "You must keep on down trail, if you want the real thing. At the end of the saddle trail the company has cut through the rubber forest. You'll have to hike through the bush to a navigable river. Not many of the rivers have names yet, as all the country beyond here is still marked 'Unexplored' on the Peruvian maps. Once in a canoe, it's straight paddling a good long way downstream until you meet the trading launches, coming up from the Madeira River for rubber."

To the inside of the "inside" we determined to go—to the vine-mantled shores of great, unnamed streams rushing on to the King of Rivers; to the twilight depths of the mightiest jungle on earth, peopled by savages who had seen few white men and no white woman, and their strange, wild kindred, the tapir, jaguar, sloth, anteater, and all the others that had thrilled me from the pages of the "Big Geography" when I was a youngster.

It required little persuasion for the doctor and the engineer to join the expedition, so now we were four. We took along a more experienced man than Pedro, fresh horses,



AGUALANI CANYON, PERU.

"This is one of the loveliest canyons in all tropical America. Its walls are hung with every variety of luxuriant tropical verdure and curtained with countless silvery waterfalls. Pink and white begonias as large as bushes grow beside the trail, and ferns of giant proportions. We looked down on waving palms, on great trees filled with orchids, and all agleam with iridescent butterflies. Macaws of brilliant plumage and rainbow-beaked toucans flew by."



PHOTOGRAPHS FROM THE PERUVIAN FORESTS.

Left: A rubber picker of the montaña. Center: A jaguar, shot by a gun trap. Right: A tapir.



and a sturdy cargo mule. We were all armed, as we were to depend largely on game and the savages were not to be altogether trusted. The men at the mine assembled to see us off, and some of them shook their heads at a woman's undertaking such a journey.

So we started, and first we came to the "place of the wonderful view." We looked back on the many ranges we had crossed, and far in the distance gleamed the towering snow peaks of the highest range of the Andes. Turning, we saw, as on a raised map, the long, winding canyon through which we were to descend to the plain.

Just then a troop of brown monkeys came swinging over our heads, chattering and scolding, frightened by a herd of peccaries that plunged out of the thicket. The men were in instant pursuit of the wild pigs, as they are good to eat. I stayed behind on the trail, to snapshot the monkeys, the first I had ever seen in the wilds.

On the days following, roasted peccary, tapir steak, parrot, and toucan soup were featured on our bill of fare. These I managed to eat. But I drew the line at monkey stew. The men said it was "all right," tasted "just like Belgian hare"; but it somehow seemed cannibalistic, and I went hungry rather than eat it.

Of all forest food I liked palm salad best, made from the heart of the young palm. It tasted like tender cabbage, but we had to chop down a beautiful tree every time we indulged in this delicacy.

\* \* \* \* \*

We left our horses at a rubber camp at the end of the saddle trail, and made our way on foot through the jungle. There are not enough uncomplimentary adjectives in the dictionary to describe this portion of the journey. When we were not forcing our way through the brush the trail was in soft mud into which our feet sank at every step. When we managed to pull one leg out the other sank in knee deep.

After an exhausting march we reached the Peruvian frontier post of Puerto Candamo, a few shacks at the meeting of two navigable rivers, where a young captain and eight negro soldiers were stationed. The white man hailed from Lima, the gay Peruvian capital far away near the coast. He was overjoyed at seeing us, and said he had met few civilized men and no white woman in three years. He and his men had been living on game, yucca, and plantain, the big cousin of the banana, since the provisions had given out, and were waiting anxiously for supplies. Our slim stock of canned goods looked good to the captain.

That evening we had a banquet. The post furnished fried plantain, boiled plantain, and stewed plantain, three dishes of yucca, and the everlasting monkey stew. Our offering consisted of beef broth made from compressed tablets, twelve crackers, tea, three cakes of chocolate and a can of peaches. It was the peaches that overwhelmed the captain. Behind each carved-log seat stood a hungry soldier, and never have I seen quicker service. We soon realized the danger of pausing for conversation; it was safer to hold on to one's plate.

We had slid down from 17,000 feet at the Andean pass to 1,200 feet above sea level, and were now in the land of the Chunchos, a powerful savage tribe. The Incas were never able to conquer these people; and they live now just as they did in remote centuries before the temples of the ancient Peruvians were erected on the shores of Lake Titicaca.

The policy of the few white men who had recently entered this region had been a gentle one, and the savages were inclined to be friendly. Our experience was the same with jungle people throughout the Amazonian valley. On later journeys into the interior, when Mr. Adams and I were alone and quite at the mercy of the natives, we were treated kindly.

The Chunchos have thatched shelters, navigate the rivers in canoes hewn from tree trunks, live on game and fish, shooting both with bow and arrow, and on forest products, principally plantain and yucca. Bathing daily in the river, they are more cleanly than the semicivilized Indians of the highlands.

It is a pretty sight to see a savage youth, clad in a garment of bark skin, paddling downstream from his banana plantation with his laughing girlwife attired in a bark skirt and a monkey-tooth necklace, their plump, naked baby sitting on a huge bunch

of bananas in the bow. Such a picture made me feel they should be left to paddle their own canoe; but when I saw how their bodies are scarred by the onslaught of armies of insects, and realized that the fear of evil spirits shadows all their days, I felt that civilization must march on.

Not far from Puerto Candamo we slept one night in a palmetto hut, built by the soldiers, on the edge of an impenetrable jungle. The hut was set up on stilts, and we climbed in on a ladder of vines, pulling it up after us.

That evening we four played games by the light of a candle, and all the insects of the forest came to impire. When they became too friendly we blew out the light, and the tired men threw themselves down on the uneven flooring and were soon asleep.

I had a softer bed of branches; but somehow I could not sleep. I stole to the door and looked out.

By the light of the moon the beauty of the tropical forest was unearthly. No pen picture can make one who has not seen it feel its haunting charm. I, first of white women, gazed on a new world as enchanting as the Eden of Eve. I looked down on treetops carpeted with bloom, on queenly tree ferns swaying in the breeze, on plumed palms bending their regal heads—the whole interlaced with vines and creepers into a waving sea of verdure. The dank odor of the jungle, which has ever since lured me, came to me on the wind. I felt an uncanny sense of life and movement in the great, silent forest. I listened breathlessly as one listens to the beating of the heart. Something stirred in the lurking shadows. \* \* \*

I crept back to bed and tied a chiffon veil over my face as a protection from the insects, but for a long time I could not sleep. I imagined that jaguars were playing tag under the house. I thought I heard a strange, flapping sound. \* \* \*

At dawn I called several times to Mr. Adams, but he did not answer. Running over to the corner of the hut where the men lay, I was horrified to see their faces covered with blood. Failing to waken my husband, I pulled frantically at the doctor.

He opened his eyes, put his hand to his face, and said "Vampires!" Then he roused the others.

The blood-sucking bats had paid us a visit in the night. The flapping I had heard may have been the fanning of their wings. Wakefulness and the chiffon veil had saved me, but the men had been heavy with sleep.

These terrible creatures bite the victim with their daggerlike teeth, inflicting a wound resembling a deep razor cut. The nose or ear is the usual point of attack, and the wound continues to bleed profusely after the vampire is satiated. Young children are sometimes so weakened by continual attacks from the vampire that they die, and bands of cattle and horses are known to have been exterminated.

We found that hundreds of these bats made their home in a hollow tree near the cabin. For many nights after I, for one, slept with one eye open.

From Puerto Candamo there is a navigable waterway across South America to the mouth of the Amazon, with the exception of the stretch of falls in the Madeira River, around which a railroad has been built. You will find the winding Tavara River on the brand-new maps, and can follow the course, by way of the Tampobata, Madre de Dios, and Madeira, to the Amazon. The Tavara's emerald shores were brightened by flowering trees in great masses of scarlet and gold and here and there were delicate pinks and whites, like blossoming fruit trees at home. We were well on our journey across South American; but it was not our plan to cross the continent at this latitude. We were to return to the highlands over the same difficult trail for further exploration in another part of Peru.

You may wonder how I managed in the wilds with scanty equipment. I relied on Dame Nature. She has vine-screened bathtubs in the river; soft leaves for towels and bark for soap in the forest. It is amazing how well groomed one can be, with care, even without the luxuries of civilization. Clothes become tattered, and shoes have a most annoying habit of wearing out; but the air and the sunlight, and the adventure and romance of exploration are full compensation to some of us for discomfort, hardship, and danger.



Courtesy of the New York Zoological Society.

A VAMPIRE.

"These blood-sucking bats bite the victim with their daggerlike teeth, inflicting a wound resembling a deep razor cut. The nose or ear is the usual point of attack, and the wound continues to bleed profusely."



THE ALEXANDER GRAHAM BELL MONUMENT AT BRANTFORD, ONTARIO, CANADA.

A splendid tribute to Dr. Alexander Graham Bell, the famous inventor of the telephone, was paid by the Canadian people when, on October 24, 1917, the above beautiful monument was unveiled at Brantford, Ontario. The Dominion Parliament, provisional legislature, the cities of Toronto, Montreal, Quebec, and others, the county of Brant and town of Brantford, as well as public-spirited citizens of Canada generally, contributed to the fund of \$50,000 raised by voluntary subscription for the monument. The design shows at the sides two heroic figures in bronze representing humanity sending and receiving messages, while the huge bronze panel, said to be the largest ever cast, depicts in relief Man discovering his power to transmit vocal sounds through space, a symbolical figure of Intelligence and three floating figures representing Knowledge, Joy, and Sorrow, carrying out the idea. The foundations, steps, and pedestals are of granite. The Duke of Devonshire, the Governor General of Canada; Sir Robert Borden, premier of Canada; W. F. Coekshutt, president of the Alexander Graham Bell Memorial Association, and many other noted citizens of the Dominion were in attendance and participated in the unveiling exercises. The guest of honor, Dr. Alexander Graham Bell, was present, accompanied by his wife, daughters, other relatives, and close personal friends, who had made a special journey to Canada to be present upon the occasion.

Since the expedition into the "inside" country of Peru we have reached many other unmapped regions where I have been the first white woman, yet no other land has been so dear to me. Here, in the din of civilization, the wander-torch gleams through my dreams, and the land of greatest lure lies in that enchanting forest country on the other side of the Andes.

## PAN AMERICAN NOTES

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### PROJECT REGARDING THE UNION OF CENTRAL AMERICA.

**O**WING to the suggestion made that a Central American Congress of Plenipotentiaries be convened in order to renew the conventions made at Washington in 1907 and especially the convention establishing the Central American Court of Justice, the Government of Honduras, through Señor Doctor Francisco Bertrand, President of the Republic, in accepting the proposition has communicated with the other Governments of Central America proposing that the projected Conference of Plenipotentiaries be principally occupied in establishing the bases of Central American Union.

President Bertrand made the proposition considering that the moment has arrived to reconstruct the old Central American Nation and being inspired by the sentiments of fraternity which now exist between the peoples and Governments of Central America.

The initiative of the President of Honduras has been accepted by the Governments of Central America and at present the bases and the fixing of the place for the assembly of the plenipotentiaries are being discussed.

Throughout Central America there have been founded clubs, propaganda centers, and newspapers favoring the idea. In the capital of Honduras the propaganda is under the direction of a central committee which has sent two delegates to each of the Central American States. These delegates have been cordially received by the Governments and have been the objects of enthusiastic demonstrations of sympathy on the part of student and workmen associations and also on the part of the newspapers and the people in general.

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### PAN AMERICAN MASS.

A Thanksgiving Day mass was held on November 30, at St. Patrick's Catholic Church, in Washington, and was attended by all ambassadors and ministers of the various American Republics, as well as by the Secretary of State of the United States and other Cabinet officials, and men prominent in public life. Bishop William T. Russell, who originated the custom of holding the Pan American mass on Thanksgiving Day when he was rector of the church, preached the sermon.

## BOOK NOTES

- The Danish West Indies: Under company rule (1671-1754)** with a supplementary chapter, 1755-1917. By Waldemar Westergaard, Ph. D. With an introduction by H. Morse Stephens, M. A. Litt. D. (Harvard), New York, The Macmillan Co., 1917. xxiv, 359 p. Illus. Maps. 8°. Price, \$2.50.
- Along the Pacific by Land and Sea.** Through the Golden Gate. By C. W. Johnston. Chicago, Rand McNally Co., 1916. ix, 259 p. 8°. Price, \$1.25.
- The Mexican Problem.** By Clarence W. Barron. With introduction by Talcott Williams, LL. D. Boston and New York, Houghton Mifflin Co., 1917. xxv, 136 p. Illus. Map. 8°. Price, \$1.
- El Supremo: a Romance of the Great Dictator of Paraguay.** By Edward Lucas White. New York, E. P. Dutton & Co., 1916. x, 700 p. 8°. Price, \$1.90.
- The Effects of Wars and Revolutions** on government securities, external and internal. By E. Kerr, New York, William Morris Imbrie & Co., 1917. 131 p. 8°.
- The Cane Sugar Industry:** Agricultural, manufacturing, and marketing costs in Hawaii, Porto Rico, Louisiana, and Cuba. Washington, Bureau of Foreign and Domestic Commerce, 1917. 462 p. 8°. [Miscellaneous series No. 53.] Price, 50 cents.
- Markets for Agricultural Implements and Machinery** in Chile and Peru. By Frank H. von Motz, special agent. Washington, Bureau of Foreign and Domestic Commerce, 1917. 48 p. 8°. [Special agents series No. 142.] Price, 5 cents.
- Methods of Computing Values in Foreign Trade Statistics.** By J. J. Kral, translator. Washington, Bureau of Foreign and Domestic Commerce, 1917. 23 p. 8°. [Miscellaneous series No. 59.] Price, 5 cents.
- Markets for Agricultural Implements and Machinery in Brazil.** By Frank H. von Motz, special agent. Washington, Bureau of Foreign and Domestic Commerce, 1917. 59 p. Illus. 8°. [Special agents series No. 140.] Price, 10 cents.
- Markets for Construction Materials and Machinery in Cuba.** By W. W. Ewing, special agent. Washington, Bureau of Foreign and Domestic Commerce, 1917. 61 p. 8°. [Special agents series No. 139.] Price, 10 cents.
- South American Markets for Fresh Fruits.** By Walter Fischer, special agent. Washington, Bureau of Foreign and Domestic Commerce, 1917. 163 p. Illus. 8°. Price, 25 cents.
- Foreign Tariff Notes. No. 23.** Reprinted from Commerce Reports, October-December, 1916. Washington, Bureau of Foreign and Domestic Commerce, 1917, pp. 53-92. 8°.
- The American Fertilizer Hand Book, 1917.** The standard reference book and directory of the commercial fertilizer industry and allied trades . . . Philadelphia, Published by Ware Bros. Co., 1917. 4°. 1 vol. Price, \$1.
- Markets for Construction Material and Machinery in Venezuela.** By W. W. Ewing, special agent. Washington, Bureau of Foreign and Domestic Commerce, 1917. 57 p. 8°. Price, 10 cents. [Special agents series No. 144.]
- Official Report of the Fourth National Foreign Trade Convention.** Held at the William Penn Hotel, Pittsburgh, Pa., January 25, 26, and 27, 1917. . . . New York. Issued by the secretary National Foreign Trade Convention Headquarters, 1917. xxxiii, 587 p. 8°. Price, \$1.50.
- Piano de Asunción.** [Asunción], Edición: Klug & Marés, S. A. Escala 1:10,000. Size, 17 by 25 inches. Price, 20 cents gold.

# SUBJECT MATTER OF CONSULAR REPORTS

REPORTS RECEIVED UP TO NOVEMBER 15, 1917.<sup>1</sup>

Title.	Date.	Author.
ARGENTINA.		
Projected law of licenses.....	1917. Sept. 7	W. H. Robertson, consul general, Buenos Aires.
Exports for the first 8 months of 1917.....	Sept. 15	Do.
Business conditions.....	Sept. 25	Do.
BRAZIL.		
Market for automobile and motor trucks.....	Aug. 28	S. T. Lee, consul, Rio Grande do Sul.
Practical suggestions to exporters.....	Sept. 5	A. L. M. Gottschalk, consul general, Rio de Janeiro.
Industrial Exposition.....	Oct. 1	Chas. L. Hoover, consul, Sao Paulo.
Packing houses in Minas Geraes.....	Oct. 4	A. L. M. Gottschalk, consul general, Rio de Janeiro.
Packing of American tin-plate shipments.....	Oct. 5	Do.
Port works at Rio Grande.....	Oct. 15	Do.
North American Copper Co. branch.....	Oct. 16	Do.
CHILE.		
Impossibility of securing official trade statistics of Punta Arenas for 1916.....	Aug. 25	D. J. D. Myers, consul, Punta Arenas.
Tax on stamped paper and revenue stamps.....	Sept. 25	L. J. Keena, consul general, Valparaiso.
Steamship line between Chile and Brazil.....	Oct. 3	Do.
COLOMBIA.		
Commerce and industries for 1916.....	Sept. 20	C. L. Guyant, consul, Barranquilla.
COSTA RICA.		
National Exposition.....	Sept. 22	B. F. Chase, consul, San Jose.
CUBA.		
Construction work.....	Aug. 24	G. B. Starbuck, consul, Cienfuegos.
Rubber goods manufacturing.....	Sept. 24	L. A. Christy, vice consul, Havana.
DOMINICAN REPUBLIC.		
New customhouse for Puerto Plata.....	Sept. 18	A. McLean, consul, Puerto Plata.
Export taxes.....	Sept. 20	Do.
Newspaper and publishing business.....	Sept. 21	C. S. Edwards, consul, Santo Domingo.
Market for automobiles in Santo Domingo.....	do.	Do.
Construction work in Santiago.....	Sept. 25	A. McLean, consul, Puerto Plata.
Bids for electric light in Santo Domingo.....	Sept. 25	C. S. Edwards, consul, Santo Domingo.
Importation of cotton seed prohibited except from United States.....	Sept. 26	Do.
Market neglected by United States manufacturers.....	Sept. 27	A. McLean, consul, Puerto Plata.
Need of sewers.....	Sept. 27	Do.
New Chamber of Commerce, Puerto Plata.....	Oct. 2	A. McLean, consul, Puerto Plata.
Open ing to windmills.....	do.	Do.
Ice plants.....	Oct. 7	Do.
Hippodromes for Puerto Plata and Santiago.....	do.	Do.
New Year's greeting to Latin American clients.....	Oct. 10	Do.
Market for plumbing supplies.....	Oct. 12	C. S. Edwards, consul, Santo Domingo.
Highway across the Republic.....	Oct. 16	A. McLean, consul, Puerto Plata.
New hospitals.....	Oct. 19	Do.
Monetary system.....	do.	Do.

<sup>1</sup> This does not represent a complete list of the reports made by the consular officers in Latin America, but merely those that are supplied to the Pan American Union as likely to be of service to this organization.

Reports received up to November 15, 1917 Continued.

Title.	Date.	Author.
ECUADOR.		
1917.		
Possible commercial arbitration agreement between the United States and Ecuador.	Oct. 4.	F. W. Goding, consul general, Guayaquil.
Cacao disease.	Oct. 16.	Do.
New fire insurance law.	Oct. 25.	Do.
HONDURAS.		
Public utilities and disposal of garbage.	Sept. 19.	F. J. Dyer, consul, Tegucigalpa.
New plow for Spanish America.	Sept. 27.	Do.
MEXICO.		
Value of exports for three months.	Sept. 30.	Wm. W. Canada, consul, Vera Cruz.
New American school of Tampico.	Oct. 1.	C. J. Pawson, consul, Tampico.
Export duties on metals.	Oct. 2.	L. K. Zabriskie, consul general, Mexico City.
Construction work.	Oct. 9.	Do.
Purchase of 50 tractors.	Oct. 12.	Do.
Bridge between El Paso and Juarez.	Oct. 16.	Do.
Electric railroad from Puebla to Tlaxcala.	do.	Do.
Export tax on petroleum products.	Oct. 17.	Do.
Increased tramway rates.	Oct. 18.	Do.
Modification of petroleum values.	Oct. 19.	Do.
Market for electric-light meters.	do.	G. C. Woodward, consul, Matamoros.
Market for shoes.	do.	Do.
Scarcity of Mexican currency.	Oct. 20.	Do.
Railroad through State of Chiapas.	do.	L. K. Zabriskie, consul general, Mexico City.
Petroleum exports for September.	Oct. 22.	Do.
Board of Agriculture of Jalisco.	Oct. 25.	J. R. Silliman, consul, Guadalajara.
Construction work.	Oct. 27.	L. K. Zabriskie, consul general, Mexico City.
Iron ore for sale.	Oct. 29.	J. R. Silliman, consul, Guadalajara.
Salt beds near Matamoros.	Oct. 30.	G. C. Woodward, consul, Matamoros.
Passenger rates increase.	do.	L. K. Zabriskie, consul general, Mexico City.
New Pacific Steamship service.	do.	Do.
Railroad service in northern Mexico.	Nov. 7.	E. A. Dow, consul, Ciudad Juarez.
PANAMA.		
Button factory.	Sept. 16.	A. G. Snyder, consul general, Panama City.
Ice and cold storage plant.	Sept. 26.	J. D. Dreher, consul, Colon.
Balsa wood in Colon consular district.	Oct. 3.	Do.
Largest apartment house in Colon.	Oct. 24.	Do.
PERU.		
Annual report on the commerce, industries, and finances.	Sept. 1.	Wm. W. Handley, consul general, Lima.
URUGUAY.		
Work on Montevideo shipyard suspended.	Aug. 21.	Wm. Dawson, jr., consul, Montevideo.
Exportation of twine prohibited.	do.	Do.
Annual report on commerce and industries.	Sept. 15.	Do.
Receipts and deficit.	Sept. 25.	Do.
Antiflocust campaign.	Oct. 3.	Do.
Permanent electrical exhibit at Montevideo.	Oct. 6.	Do.





# ARGENTINE REPUBLIC

Within a short time the series of WIRELESS TELEGRAPH STATIONS planned by the Navy Department of the Argentine Government to place the southern part of the Republic in wireless communication with the rest of the country will be completed. The only stations of the series referred to not yet ready for service are those which are being erected at San Julian, Territory of Santa Cruz, and at Punta Delgada, Territory of Chubut. The first of these was to be opened for use on the 20th of the present month, and the other installation, which will be on the lighthouse at Punta Delgada, will be completed as soon as the material can be brought from Buenos Aires. Each of these stations has a reach of 500 kilometers, and they, together with the stations in operation along the Atlantic Coast as far as Tierra del Fuego are permanent installations.—The Department of Agriculture has intrusted to a commission of employees the organization of an EXPOSITION OF INDUSTRIAL EXHIBITS, which it is proposed to hold on Florida Street, Buenos Aires. The object of the exposition is not only to show samples of the industrial products of the Republic, but is also to acquaint the inhabitants of the metropolis with these products. Preliminary steps have been taken looking to the erection by the Government of a building on Saenz Peña and Florida Streets, Buenos Aires, to be used as a permanent structure for exhibits of industrial products.—According to a report of the Director of the Agricultural Museum of the Rural Argentine Society the competitive EXHIBITS OF BARLEY for brewing purposes recently made in the national capital, met with the hearty approval of the growers of this cereal as well as of the manufacturers of beer and had the effect of encouraging the growers to produce a better grain than heretofore. The Quilmes brewery in Buenos Aires has distributed choice barley seed to 300 farmers and is conducting an information bureau for the purpose of assisting agriculturists in growing this cereal in such a way as to obtain the best results. Prizes were awarded for the best exhibits, and buyers were found for choice barley at 25 centavos above the current market prices.—An AUTOMOBILE TRIP was recently made from Puerto Madryn, Territory of Chubut, via Bahia Blanca, to Buenos Aires in five days, the distance covered aggregating about 2,000 kilometers, or an average run of 400 kilometers (249 miles) per day.—A permanent national COMMITTEE OF SCIENTIFIC AND TECHNICAL INSTITUTIONS was organized in Buenos Aires on September 29 last, delegates from more than 20 institutions participating in the proceedings.—The BUDGET COMMISSION of the national capital estimates the total expenses of the munici-

pality for the fiscal year 1918 at 39,623,560 pesos, currency (paper peso = \$0.4245), and the total receipts at 40,054,060 pesos, currency.—The RURAL ARGENTINE SOCIETY of Buenos Aires has elected Dr. Joaquín S. de Anchorena, President of the organization to take the place of Dr. Julio Pueyrredon, deceased.—Justice Ramón Montero Paullier, of the Supreme Court of Uruguay in Montevideo, has presented the Library of the College of Lawyers, located in the Palace of Justice, Buenos Aires, with a complete collection of the URUGUAYAN CODES.—According, to a report of the BOARD OF PUBLIC CHARITIES the number of persons cared for in the hospitals and asylums connected with that institution in 1916 was 19,116. The receipts of the board during the year referred to amounted to 4,757,882 pesos, currency. The proposed budget of the Board of Public Charities for 1918 amounts to, in round numbers, 4,000,000 pesos currency.—The CELEBRATION OF THE DISCOVERY OF AMERICA was held throughout the Argentine Republic on October 12 last under the name of "Fiesta de la Raza."—The Bureau of Commerce and Industries has submitted to the Department of Agriculture a detailed report concerning the MANUFACTURE OF PAPER in the Republic. The report also contains a minute study of the materials available in Argentina for the manufacture of paper.—COAL from the recently discovered Neuquen deposits, Territory of Chubut, has been tried as a fuel by the State railways and gave excellent results. The coal beds referred to are reported to cover an extent of more than 20 kilometers.—The EXPORTS OF CORN AND WHEAT from the Argentine Republic during the first nine months of the present year amounted to 792,506 and 743,572 tons, respectively.—The proposed BUDGET of the Argentine Government for 1918 estimates the receipts at 382,402,047 pesos, currency, and the expenditures at 382,386,579 pesos, currency. The estimated expenditures for 1918 are 10,638,228 pesos, currency, less than those of the previous year.—The board of directors of the Argentine Industrial Union in Buenos Aires has approved the bases, subjects, and program of the SECOND INDUSTRIAL CONGRESS which is to meet in Buenos Aires on September 25, 1918.



## BOLIVIA

For several years the congestion of freight and the inadequate service on the Arica-La Paz Railroad has been a serious handicap for mining companies operating in the region traversed by the road. Recently the Chilean Senate voted a sum of \$500,000 for further equipping this road with NEW ROLLING STOCK which, when acquired, will

make the freight and passenger service better than ever before. The Arica-La Paz Railroad, as will be recalled, was constructed in accordance with an international agreement between Bolivia and Chile, and was opened to traffic a year or two before the outbreak of the great war. The scarcity of railway supplies and inadequate shipping facilities are largely responsible for the shortage of cars and locomotives; but with the action above noted, it is hoped to improve the service at an early date.—Senor Alejandro del Carpio has been chosen **RECTOR OF THE UNIVERSITY OF TARIJA**. The selection of this distinguished Bolivian educator for the further extension of learning in the Tarija, in the southern region of Bolivia, has given general satisfaction. He has long been prominent in educational work in La Paz and other parts of the Republic.—The nomination of Dr. Placido Sanchez as **MINISTER OF BOLIVIA IN ARGENTINA**, which was announced recently, has been received with special satisfaction. One of the prominent newspapers of Buenos Aires, La Epoca, has sent a telegram expressing the pleasure of Argentine people in general at the appointment of this well-known Bolivian statesman to the Argentine mission.—Officials of the Antofagasta & Bolivia Railroad are being congratulated on the excellent **DINING CAR SERVICE** provided for the members of several foreign delegations who journeyed over this railroad to La Paz on the occasion of the recent inauguration of Bolivia's new President. From time to time many travelers note the good food supplied on dining cars of this road, which traverses one of the most arid regions of South America.—The **NEW RAILWAY** line from Viacha to La Paz, a distance of about 20 miles, was opened to traffic in September last. This link now completes the route of the Antofagasta & Bolivia Railroad actually into the Bolivian capital. Heretofore the trains of this road entering La Paz have used the Guaqui-La Paz tracks from the junction point, Viacha. The length of the main line from Antofagasta to La Paz is, including the new branch, about 720 miles. —The Minister of Industry has granted certain privileges for utilizing the **WATERS OF "EL PARAISO,"** Rio Mulatos, to Senor Ruperto Leiton. The latter proposes to exploit these waters and will import certain machinery for that purpose. At present large quantities of mineral and table waters are annually imported by Bolivia, but with the development of the above springs it is believed that the home product will largely replace imported waters, at least a new industry is to be given a trial. —Construction work on the **POTOSI-SUCRE RAILROAD** is progressing in a satisfactory manner, according to the monthly report of the director of works.—Bolivian newspapers report considerable agitation relative to the question of **ALCOHOLIC LIQUORS**. While prohibition in Bolivia may be a long distance away, there are many who believe in restricting the sales or in curtailing supplies of various kinds of liquors.



# BRAZIL

A bill to restrict or PROHIBIT EXPORTS OF CEREALS has been introduced into Congress by Dr. Barbosa Lima, Secretary of the Finance Committee of the Federal Chamber of Deputies. Dr. Vieira Souto, a noted Brazilian economist and member of Congress, made, in representation of the National Society of Agriculture, a notable address on this subject at one of the sessions of the National Cereals Conference which met recently in Corytiba.—An appeal to the people of Brazil, in the name of the Relief Committee of the Commercial Association of Rio de Janeiro, to secure AID FOR THE PEOPLE OF BELGIUM, signed by Dr. Nilo Peçanha, Minister of Foreign Relations, and Senator Ruy Barbosa, has been telegraphed to the governors of the States and to the Prefect of the Federal District.—Prof. Basilio de Magalhães is preparing for publication in Vol. LXXXI of the Review of the Historical Institute the originals of the “EPIHEMERIDES BRASILEIRAS” by the late Rio do Branco.—Dr. Amaro Cavaleanti, Prefect of Rio de Janeiro, has taken steps, in cooperation with the packing houses and meat dealers in Rio de Janeiro to prevent BEEF being sold at more than a reasonable price in the Federal Capital.—A bill has been introduced into the Chamber of Deputies of the Brazilian Congress providing for the founding of an AMERICAN INTERPARLIAMENTARY UNION, with headquarters at Rio de Janeiro, composed of special missions representing each country, with the object of defending principles of harmony and solidarity among the peoples of the Western Hemisphere.—According to press reports the Department of Finance of the Government of Brazil recently remitted £10,000,000 (£ = \$4.8665) on account of the FOREIGN DEBT of the Republic up to 1916, inclusive.—EXPORTS OF FROZEN MEATS from packing houses in Brazil continue to increase. This trade, which was begun in 1914 by a trial shipment of 1,415 kilos (kilo = 2.2046 pounds), valued at 1.1 contos (conto = \$270) currency, increased in three years to such an extent as to become one of the principal export products of the country. In 1915 Brazil exported 8,514 metric tons (metric ton = 2,204.6 pounds) of refrigerated meats, valued at 6,121 contos, paper; in 1916 the exports of this article rose to 33,661 metric tons, valued at 28,192 contos, and during the first seven months of 1917 the exports of frozen meats amounted to 39,622 metric tons, valued at 35,674 paper contos. The chief purchasers were Italy, France, England, and the United States.—During the years 1914 to 1916, inclusive, the Central Railway of Brazil transported 983,831 tons of MANGANESE ORE, 248,758 tons of which were hauled in 1914, 305,770 tons in 1915, and 429,303 tons in 1916.

During the first quarter of 1917 the railway in question hauled 261,706 tons.—The State of Espirito Santo, which began the cultivation of cotton commercially in 1915 with a production of 490 kilos, increased the quantity grown in 1916 to 21,653 kilos, and estimates have been made that the crop of 1917 will be 80,000 kilos. The cotton factories in the State referred to consumed in 1916, 112,742 kilos of raw cotton, and during the first quarter of 1917, 70,888 kilos. These figures show that in each of the years referred to it was necessary to import a considerable quantity of raw cotton to supply the demands of the cotton factories of the State. The State of Espirito Santo is not only encouraging the cultivation of cotton upon a much larger scale than heretofore, but has taken steps to introduce the growing of cereals especially upon the high tablelands of the commonwealth. The State of Espirito Santo lies between Bahia on the north, Minas Geraes on the west, the Atlantic Ocean on the east, and the State of Rio de Janeiro on the south. Its area is 44,839 square kilometers. The State is noted for its rich forests containing valuable woods. Of late years it has received considerable European immigration, is very progressive, and its agricultural wealth is being rapidly developed. The northern part of the State, with Sao Matheus as a center, is noted for its coffee and mandioca plantations. Victoria, the capital, situated on the Bay of Espirito Santo, has a good port and a large maritime trade.—The TWENTIETH CONGRESS OF AMERICANISTS, which was scheduled to meet in Rio de Janeiro in 1918, has been postponed until 1919, and advices are to the effect that there is a possibility of a further postponement.



## CHILE

The President of the Republic has approved the by-laws of the RENGÓ ELECTRIC TRAMWAY CO. and has authorized that corporation to do business in the Republic. This company proposes to construct and operate an electric tramway between Rengó station, Department of Caupolicán, and La Isla, and to build and operate such branches as it may deem expedient.—The Department of Industry has approved plans and estimates prepared by the Bureau of Public Works for the construction of the MELADO IRRIGATION CANAL, Province of Linares, with a capacity for irrigating 43,000 hectares of land.—Belisario Torres, a Chilean philanthropist recently deceased, bequeathed 500,000 pesos (peso = \$0.25) to be used in the establishment of a HOUSE FOR STUDENTS. Ground has been acquired and construction work begun on the building, which

will be large enough to comfortably lodge pupils from the Provinces who take the high-school technical course. The sum of 100,000 pesos of this fund will be put out at interest, and the proceeds used to send technical students abroad to complete their education. — During the latter part of September last the NEW SAVOY HOTEL, installed in one of the finest and most centrally located buildings in the City of Santiago, was opened to the public. The hotel is modernly equipped and is up to date in every respect. — The press of Santiago announces that the National Government has granted an exclusive concession to Rodolfo Cavada for the INDUSTRIAL USE OF A VEGETABLE PRODUCT called in Chile "barba de viejo" (Old man's beard). This plant grows extensively in the region comprised between the Linares and Villarrica Rivers near the coast, and produces a fibrous substance used for mattresses, pillows, packing, the manufacture of rope, etc., while the by-products are used as an agricultural fertilizer. — A law has been promulgated authorizing the condemnation of such lands as may be necessary for use in the construction of AQUEDUCTS in a number of the cities of the Republic, and appropriating 17,835,000 pesos, paper, for this work. — A law has been enacted authorizing the Government to negotiate a LOAN of 20,000,000, Chilean gold pesos (gold peso = \$0.365), the proceeds of which are to be used in improving the equipment of Government railways and in the construction of new lines. Of this amount 13,200,000 gold pesos are set aside to be expended on the North Central Railway system. — With the object of encouraging the cultivation of OLIVE trees and the establishment of groves that will produce fruit in sufficient quantities for the manufacture of olive oil to supply domestic needs, the Government has placed on sale 18,000 olive plants from the Vallenar, San Fernando, and Linares nurseries, and recommends that similar action be taken by the agricultural schools at Santiago, Talca, and Chillan. Chile imports annually olive oil to the value of three million gold pesos. — A number of IMPORTANT CONGRESSES have recently been held in Santiago, among which may be mentioned the First National Congress of Public Charity, the Pan American Dental Congress, and the First National Carpenters' Congress. — A MINERALOGICAL MUSEUM has recently been established at Arica, Province of Tarapaca. In addition to the exhibits of minerals and salts, agricultural products and other interesting objects will be displayed. — The President of the Republic has been authorized to establish four LEGATIONS in Latin America, one in Mexico, one in Colombia, one in Cuba and Venezuela, and one in Uruguay and Paraguay. — THE BUDGET OF EXPENSES of the Chilean Government for 1918 amounts to 201,686,480 pesos, paper (paper peso = \$0.245), and 65,341,171 pesos, gold, (gold peso = \$0.365).

# COLOMBIA

The President of the Republic has authorized the Municipal Council at Medellin to contract a loan of \$50,000, gold, the proceeds of which are to be used to purchase the TELEPHONE installation of that city.—By instruction of the Central Board of Hygiene the Municipal Council of Cartagena has issued an order for the establishment of a MUNICIPAL ANTI-TUBERCULOSIS DISPENSARY in that city.—Press reports are to the effect that Pearson & Son of London estimate the cost of the work for the IMPROVEMENT OF THE CITY OF CARTAGENA, including sewerage, paving of streets, etc., at \$3,836,890, gold. The statement is made, however, that some of the improvements are not urgently needed, and that the most necessary ones could be made at a cost of \$1,033,280.—About 30 miles to the south of the town of Mocoa, Department of Cauca, HOT SPRINGS have been discovered flowing from the crevices of rocks near the foot of a mountain. The temperature of the water from the different crevices varies from quite cold to 27° C. The waters are reported to have medicinal properties, and it is believed that the springs will become a great bathing resort.—According to the Statistical Bulletin of the Department of Valle, the population of that Department is 236,155.—Dr. Emilio Jaramillo of Medellin continues to prepare valuable formulas for the manufacture of CHEMICAL PRODUCTS of large consumption in the Republic entirely out of materials found in the country.—The STOCK CENSUS of the Department of Bolivar for 1916 shows stock as follows: Asses, 92,131, valued at \$1,842,620, gold; horses, 137,876, valued at \$5,515,040; cattle, 1,326,000, valued at \$33,125,810, goats, 20,823, valued at \$20,823; and hogs, 183,035, valued at \$1,098,210. In December, 1917, the THIRD NATIONAL MEDICAL CONGRESS will meet in Cartagena. The Congress offers for the best unpublished work the Manuel Forero prize consisting of a gold cup and cash to the amount of \$200, gold.—The Caribbean Shipping Co., of New York, has established a LINE OF STEAMERS between the Atlantic ports of Colombia and the American metropolis.—An AGRICULTURAL SOCIETY was organized at Tunja in September last with the object of encouraging the development of the agricultural resources of the Department of Boyaca.—A corporation with a capital of \$80,000, gold, has been organized at Medellin, under the name of PHARMACEUTICAL AND DENTAL UNION to engage in the importation and sale of dental supplies and the manufacture and sale of pharmaceutical specialties.—In 1916 the Department of Antioquia received from the Department of Bolivar 44,003 head of CATTLE, valued at \$1,690,211, gold, as compared with 45,326

head in 1915, valued at \$1,640,541.—Under a decree of the Department of Public Works a commission has been appointed to study the route of the URABÁ RAILWAY.—According to a recent message of the President to the National Congress the REVENUES of the nation from March to July, 1917, amounted to \$5,708,369, gold, as compared with \$7,246,464, gold, collected during the same period of the previous year.—In 1916 the IMPORTS OF RICE through the principal customhouses of the Republic aggregated 8,869,592 kilos, of which 4,667,652 kilos entered through the Port of Barranquillo, 3,076,795 through Cartagena, 632,709 through Santa Marta, and the remainder through the ports of Buenaventura, Riohacha, Tumaco, and Cúcuta.



## COSTA RICA

According to press reports the two COCONUT OIL EXTRACTING MACHINES ordered by the Treasury Department will soon arrive in Costa Rica. The vegetable oil industry is a very promising one, inasmuch as this product can be substituted for lard in the preparation of food. The Government proposes to set up one of these machines in Limon and the other in Puntarenas and to sell them at cost so as to encourage production. The INDUSTRIAL AGRICULTURAL EXPOSITION and the Stock Show of the Atlantic Coast District were held at Limon from the 12th to the 14th of October last, and were well attended. Some 200 exhibitors took part in the Exposition and displays were made of a large number of industrial articles manufactured in the National Capital and in other parts of the country. Many agricultural products were also on exhibition, and these showed in a striking manner the richness and fertility of the soil of the Republic.—With the object of ascertaining approximately the FOOD RESOURCES OF THE REPUBLIC, the President proposes to maintain in each of the offices of the Rural Guard, and in such other places as he may deem expedient, crop registers in which all persons engaged in agriculture shall be required to give full particulars of the crops planted and harvested. Data recently compiled show that the rice and bean crops of Costa Rica for 1917 are sufficient to supply the domestic needs of the nation and leave a surplus for export.—An executive decree has been issued requiring instruction to be given in the principal schools of the Republic in the WEAVING OF HATS from the pita or agave fiber.—A contract has been made with the Department of Promotion (Fomento) to install in Costa Rica within the next two years machinery for the extraction of paper pulp, and to establish within a year thereafter a PAPER FACTORY which will use material produced in the country



in the manufacture of paper. The factory proposes to produce within a term not to exceed five years after its establishment, all the paper that may be necessary for use in the Republic, and obligates itself to pay to the Government the sum of 2,500 colones (Colon = \$0.4653) should it fail to do so.—On the occasion of the celebration of the 96th anniversary of National Independence on September 15 last, the new building of the Juan Rafael Mora School in the City of San José was opened to public use by holding therein a NATIONAL EXPOSITION OF DECORATIVE AND INDUSTRIAL ARTS, which remained open until the 30th of the same month. This exposition, in accordance with a decree of March 30 last, is to be held annually for the purpose of encouraging the development of this branch of industry in the Republic.—The National Congress has enacted a law governing the utilization of the waters of the Republic in the production of ELECTRIC light and power.



The estimated production of the Cuban SUGAR crop for the year 1916-17 is 3,019,936 tons, as compared with 3,006,624 tons in 1915-16. The maximum price of raw sugar has been established by an executive decree at 4½ cents per pound wholesale, and 5½ cents per pound retail; refined sugar is 7¼ cents per pound wholesale, and 8½ cents retail. The price of loaf sugar is fixed at 9 cents per pound retail. It is understood that the term wholesale means not less than 300 pounds. The decree makes clear that no sugar is to be exported to neutral countries, and that the prices mentioned are subject to change by the Committee of National Defense. It is reported that not less than 4,000 Spaniards will soon arrive in Cuba to take part in the coming sugar harvest. The Department of Agriculture has recently inspected a number of the mountainous regions of the districts of the Province of Oriente with a view of obtaining timber for the market and using the cleared space for the growing of sugar cane.—On November 10 last new POSTAGE RATES on first-class matter became effective in the Republic of Cuba as follows: Letters and other sealed correspondence or packages, 3 cents per ounce or fraction thereof; postal cards, 2 cents each. These rates apply on mail to the United States and its possessions, with the exception of the Canal Zone. The registration fee is fixed at 10 cents.—Plans for increasing the war resources of the Republic of Cuba include the appointment by the President of a Cuban Council of National Defense, the establishment of a system of WAR FARMS and agricultural zones under the supervision of the Council referred to, and the cultivation of needed foodstuffs under the control of

the Government. It is expected that this will solve Cuba's food situation and release steamers for the transportation of the sugar crop. The importation and exportation of all foodstuffs is placed in the hands of the Cuban Government, as well as trade in petroleum and its products, coal, sugar bags, and other necessities.—According to "El Dia" (The Day), a daily newspaper of Habana, a **CREMATION PLANT** has been established in the National Capital. The erection of this plant and its acceptance by the Board of Health of the Government of Cuba was due largely to the efforts of Dr. Cándido Hoyos who has advocated for 15 years the burning of corpses as a humanitarian and sanitary measure.—A **GOLD MINE** has been denounced on the Julia plantation, province of Matanzas. The gold ore is reported to have been found there while making excavations for building.—**MATERNITY HOSPITALS** are to be established at various points in Cuba, the Province of Pinar del Rio having been chosen for the first hospital. According to press reports the Government has \$300,000 on hand for the erection and equipment of these hospitals.—In order to facilitate the **MARKETING OF THE SUGAR CROP** the Cuban Government proposes to lend \$5,000,000 to the railways of the Republic.—The Cuban authorities are reported to have decided to place strong restrictions on the **IMMIGRATION OF CHINESE**, permitting only merchants and agriculturists to enter the country. Chinese laborers contracted by sugar planters will be admitted in strict accordance with the new immigration law.—The Cuban **RED CROSS SOCIETY**, of which Mrs. Menocal, wife of the President of the Republic is the president, proposes to raise \$1,000,000 for its work in Europe. A hospital is to be established in France equipped with at least 100 beds and having a full complement of Cuban doctors and nurses.—The Isle of Pines Appeal recommends the production of **HONEY** on a large scale in that part of the Republic, inasmuch as flowers bloom there the year round and climatic conditions are most favorable for successful bee-keeping.—The Morro **WIRELESS** tower is to be transferred to the Isle of Pines. The new wireless station near the National Observatory, Habana, has a range of 3,000 miles and will soon be completed and ready for operation.

## DOMINICAN REPUBLIC

The **DOMINICAN CLAIMS COMMISSION** of 1917 has been empowered to receive, investigate, and adjust all outstanding claims against the Dominican Republic which had their origin after July 1, 1904, and prior to November 29, 1916, but no claim shall be considered by the Dominican Claims Commission of 1917 if such claim

in whole or in part was included in or adjusted or rejected under the plan of adjustment made to conform with the terms of the American-Dominican Convention of February 8, 1907.—The HIGH SCHOOLS (*Segunda Enseñanza*) of the Republic have divided their work for the school year 1917-18 into six courses, numbered from 1 to 6, respectively. The completion of the first three and one of the last three courses entitles the student to a diploma. Pupils to whom diplomas have been issued and who complete the remaining two courses are given teacher certificates.—The STAMP LAW of 1910 has been amended so that individuals or firms manufacturing articles within the Dominican Republic upon which a stamp tax is levied and upon which such tax has been paid shall be entitled to a refund of the amount of the stamp tax so paid when such manufactured articles are exported to a foreign country, provided that no such refund shall be paid if the amount of the stamp tax represented by any single exportation amounts to less than \$10, nor unless the articles are exported within one year from the date of manufacture, nor unless the prescribed landing certificate is presented with the claim for refund within six months from the date of exportation. The same law prescribes that every person, firm, society, or corporation that imports or is engaged in the manufacture of any article or articles that are subject to the stamp tax shall keep in his factory or office such records relating to the purchase of raw materials, quantity manufactured, sales, imports, etc., as may be required by the Director General of the Stamp Office.—The Dominican Republic, according to information contained in the "Listin Diario," a daily newspaper of the City of Santo Domingo, possesses coastal ZONES RICH IN FISH, among which may be mentioned the waters of the Beata Islands and of the Samaná Bay, in addition to an extensive coast region suitable at numerous points for the development of the fishing industry. The fishing waters of the coast contain one of the great storehouses of undeveloped wealth of the country and could be made to yield an enormous supply of cheap and palatable sea food.—An organization entitled "Compañía Anónima de Explotaciones Industriales" (Joint Stock Company of Industrial Exploitations) has been organized in the City of Santo Domingo with a capital of \$500,000, American gold, divided into 5,000 shares of \$100 each. All of the shares have been subscribed and \$125,000 paid in. The company proposes to engage in the purchase and sale of uncultivated lands and plantations, the cultivation of sugar cane and other staple products, the manufacture of sugar, the raising of stock, etc. The president of the company is Juan B. Vicini, and the secretary and auditor, Angiolino Vicini.—It is estimated that the Province of Seybo has 5,000,000 CACAO trees of which 4,000,000 are bearing.—Steps have been taken for the installation of a

HYDRO-ELECTRIC light and power plant at Seybo of sufficient capacity to furnish light and power to the municipality of Seybo and the immediate vicinity.

## ECUADOR

Preliminary steps have been taken by a number of Ecuadorian capitalists and business men to organize a national petroleum company. The chairman of the organizing committee is Dr. Carlos Viteri, and the Secretary is Eduardo Blanco, both of Guayaquil. This corporation is to be called, "La Sociedad Anónima Petrolífera Nacional" (The National Jointstock Petroleum Co.) According to recent estimates a thorough exploitation of the PETROLEUM DEPOSITS OF ECUADOR would bring into the National Treasury an annual revenue of 4,000,000 sucres (sucre = \$0.4867). The petroleum company referred to proposes to confine its operation for the present to the Santa Elena oil deposits where crude petroleum is found in paying quantities, and later to extend the scope of its activities to other parts of the Republic. By introducing modern machinery and methods into these oil fields, it is believed that a development will be had similar to that of some of the Mexican petroleum zones. Santa Elena possesses a good climate, the oil wells are near the coast and excellent transportation facilities are available for the shipment of the product, which could be piped at a small expense to deep water, thereby enabling the oil to be loaded on to vessels quickly and at a minimum cost.—The Ecuadorian STEAMSHIP COMPANY has been organized in Guayaquil with a capital stock of L500,000 (L = \$4.8665). The objects of the company, as stated in its prospectus, is the creation of a national merchant marine, the opening of the ports of the Galapagos Islands to unrestricted commerce, in so far as transportation facilities are concerned, and the encouragement of the development and exploitation of those islands. The headquarters of the company are at Guayaquil. One of the things it proposes to do is to purchase in the near future four vessels to engage in the coastwise trade and in the commerce between Ecuador and the Galapagos Islands.—A bill has been introduced into Congress proposing to levy an annual tax of one-half of a sucre (\$0.243) per head of cattle on hand on January 1, 1918, 1919, and 1920, the proceeds to be applied to the construction of the Sibambe to CUENCA RAILWAY.—The SOUTH AMERICAN BANK, a corporation recently organized in the city of Ecuador with a capital of 400,000 sucres, divided into 4,000 shares of 100 sucres (sucre = \$0.4867), has been authorized to establish its headquarters in the

Capital of the Republic and to operate branches at such places in the provinces as it may deem expedient. A recent statement of the four large banks of Ecuador, namely, the Commercial, the Pichincha, the Ecuador, and the Azuay, shows that they have a combined circulation of 11,783,620 sucres, and cash on hand amounting to 14,329,828 sucres gold and 1,002,464 sucres silver.—The Secretary of the Treasury has been authorized to negotiate a LOAN of 100,000 sucres with the Pichincha Bank of Quito for account of the consolidated debt.—The capital of the PUERTO BOLIVAR RAILWAY, according to an article published in "El Ecuatoriano," a daily newspaper of Guayaquil, is L600,000. Steps have been taken to modify the route of this railway as first surveyed. The Biblical coal deposits near which the railway in question is to pass, are being studied very carefully, as are also the Loja and Oriente regions. It is also proposed to complete this railway and open same to traffic to Cuenca by 1920, and to make this one of the principal features of the celebration of the hundredth anniversary of the independence of Cuenca. The railway will later be extended to Loja and Cañar.—According to statistics compiled by the Treasury Department of the Government of Ecuador the EXPORTS from the Republic in 1916 weighed 73,378,735 kilos and were valued at 36,151,629 sucres (sucre = \$0.4867).—The total FOREIGN TRADE of Ecuador for the year 1916 amounted to 55,349,513 sucres, represented by imports to the value of 19,197,884 sucres, and exports of 36,151,629 sucres. For the preceding year, 1915, the figures were: Imports, 17,300,707 sucres; exports, 26,533,064 sucres; total, 43,833,771 sucres. Valuing the sucre at 48.6 cents (10 sucres=L1), the foreign trade in figures of United States currency in 1916 was: Imports, \$9,330,171; exports, \$17,569,691; total, \$26,899,862. The figures for the preceding year were: Imports, \$8,408,143; exports, \$12,895,069; total, \$21,303,212. The increase in the year 1916 was: Imports, \$922,028; exports, \$4,674,622, or a total increase of \$5,596,650.



## GUATEMALA

The "Diario de Centro América" (Central American Daily), a newspaper published in the City of Guatemala, states, in a general article on the wealth of the nation, that in normal times the COFFEE production of the Republic is, in round numbers, 1,050,000 quintales (quintals) of 101.4 pounds each, of which 200,000 quintals are consumed at home and 850,000 are exported. Estimating the value of a quintal of coffee at \$10 American gold, makes the total annual production worth \$10,500,000. The coffee tree grows best in Guate-

mala at elevations varying from 2,600 to 4,500 feet above the level of the sea, and on a soil rich in humus having a clay subsoil. On elevations of from 1,500 to 2,000 feet, the tree must be shaded to produce the best results. Coffee trees flourish in a temperature of from 65 to 85 degrees Fahrenheit. The banana plant is extensively used to shade the coffee trees during the first two years of their growth. Coffee in Guatemala ripens in October. The fruit or "cherry" is then gathered, and the outer shell and pulp removed. The bean is then washed and dried in the sun. Coffee in Guatemala is called "pergamino" (parchment), and oro (gold). Coffee in *pergamino* is the grain of coffee after the red pulp, which gives to it the appearance of a cherry, has been removed, but still retaining the inner white or parchmentlike covering. Coffee in *oro* is the grain of coffee after the parchmentlike covering has been removed.—The COMMISSION, which was accredited to the United States under an executive decree of August 22, 1917, for the purpose of further strengthening the cordial relations existing between the two countries, has returned to Guatemala. The Commission consisted of Licentiate Manuel Echeverría y Vidaurre, Manuel María Girón and Engineer Claudio Urrutia.—The CHOCOLATE FACTORY installed in the City of Guatemala by Aguirre and Duran, and which was closed during part of the present year, has recently been opened for business under the management of Genaro Estrada, jr.—Francisco Yzazi has been appointed CONSULAR AGENT of the Government of Guatemala at Tapachula, Mexico.—The Department of Fomento has authorized T. & R. Dávila of the City of Guatemala, to establish an AUTOMOBILE PASSENGER, FREIGHT, AND MAIL SERVICE between the National Capital and Antigua (Old) Guatemala, a distance of about 25 miles. The Government authorizes the concessionaries to import free of duty four automobiles, 30 tanks of gasoline, 20 barrels of oil, and numerous other articles connected with the establishment and operation of the automobile line.—*Guatemala Agrícola* (Agricultural Guatemala) is the title of a new AGRICULTURAL MAGAZINE founded in the City of Guatemala by José V. Molina V., Ignacio Sáenz O, and A. Bauscarol, assisted by a corps of forty contributors. This publication proposes to cover the entire field of agriculture in such a manner that it will be easily understood by all its readers.—The total FOREIGN TRADE of Guatemala for the year 1916, according to the report of Sr. Don Rafael Ubico, Director General of Statistics, was \$19,177,180 United States gold, represented by imports to the value of \$8,539,294, and exports of \$10,637,886. The figures for the preceding year, 1915, were: Imports, \$5,072,476; exports, \$11,566,586; total, \$16,639,062. There was, therefore, an increase in imports for the year 1916 as compared with 1915, of \$3,466,818, and a decrease in exports of \$928,700, or a net increase in the foreign trade of \$2,538,118.

# HAITI

A recent executive decree prescribes that the 1916-17 EXPENSE BUDGET of the Haitian Government, provided for in accordance with the law of December 2, 1915, shall be effective during the fiscal year 1917-18.—Le Matin, a daily newspaper of Port au Prince, is authority for the statement that Vincent B. Thommins, a citizen of the United States, has gone to Cerca la Source to work the GUANO deposits in that vicinity, where he proposes to extract 10,000 tons of this fertilizer.—Press reports from the Haitian capital are to the effect that the Government proposes to begin actively in the near future the REPAIR OF THE PRINCIPAL HIGHWAYS of the country, among which may be mentioned the wagon road from Port au Prince to St. Marc, the l'Artibonite highways, and the northern roads of the Republic, so that it is predicted that early in the coming year one may comfortably go in an automobile from the National Capital to the cape. The repair and maintenance of these roads in good condition is a factor which will contribute largely to the development of agriculture and of the industries of the country.—Dr. Justin Dominique has been appointed CONSUL GENERAL of Haiti at Kingston, Jamaica, and has taken possession of his post.—A recent executive decree approves the by-laws of the TRANS-OCEAN TRADING CO., a corporation organized at Port au Prince on September 29, 1917, to engage in commercial pursuits, the purchase and sale of urban and rural property, the cultivation of the soil and the development of industries connected with agriculture, and authorizes the company to do business in the Republic.—The Official Gazette of the Government of Haiti has published the letters received by the Treasury Department, in answer to a circular asking whether they favored or opposed governmental measures to prevent EXPORTS OF FOOD SUBSTANCES. All of the replies were in the negative with the exception of two, so that the Haitian Government, at the time of going to press, had taken no steps that would interfere with exports of alimentary substances.—The President has declared the contracts authorizing the distribution of ELECTRIC light and power to the towns of Cayes de Jeremie, Port de Paix, and St. Marc, forfeited.—An executive decree of September 27, 1917, prorogues during the fiscal year 1917-18, articles 17 to 24, inclusive, of the law of October 24, 1876, and articles 52 and 53 of the law of August 3, 1900, as well as that part of the schedule of the latter law which refers to NEW PROFESSIONS and industries. The amount of the tax on vehicles and public entertainments is to be used for the maintenance of municipal hospitals.—In accordance with a decree of September 29, 1917, a number of SPECIAL CREDITS, amounting

to 1,252,039 gourdes and \$316,079, were made available to the Government. These funds are to be used by the different departments in defraying the national expenses during the first quarter of the present fiscal year.

## HONDURAS

A representative of the Troy Honduras Co. has solicited from the Government of Honduras for a period of 20 years from the date of the approval of the concession by the National Congress, 1,000 hectares (hectare = 2.471 acres) of Government lands, situated in the jurisdiction of Siguatepeque, Department of Comayagua, for the establishment of an AGRICULTURAL PLANTATION to be conducted in accordance with modern methods. The petitioner offers, among other things, to plant 100 hectares to cotton during the first year, and at least 200 hectares in the following year. It is also proposed to install within 18 months a factory for the manufacture of yarns, threads, and cloths with a capacity of 200 kilos of finished products daily. — On September 15 last the city of La Ceiba opened to public traffic a BRIDGE over the Cangrejal River. The structure has a width of 5 yards and a length of 280. On the same date Vaecaro Bros. inaugurated the electric light and power service in La Ceiba. A number of manufacturing establishments operating in that city propose to use electric power in manufacturing processes as soon as they can equip their plants with the necessary motors and machinery. The city of La Ceiba is rapidly increasing in population and is fast becoming one of the most important ports and industrial centers of the Republic. — The Department of Promotion (Fomento) of the Government of Honduras is preparing a pamphlet containing the curriculum adopted by the SCHOOL OF ARTS AND CRAFTS in Tegucigalpa and the rules and regulations governing that institution. One of the chief objects of the school is to train workmen along practical and theoretical lines and to give them a foundation for becoming specialists in the different branches of mechanics used in the arts and industries of the Republic. — The NATIONALIST CLUB, an organization allied with the labor unions of Honduras, was organized in Tegucigalpa in September last. Dr. Francisco Bertrand, President of the Republic, was elected honorary president of the club. — One of the most useful public works undertaken during the administration of President Bertrand is the construction of the NORTHERN HIGHWAY, a wagon and automobile road which will run to or connect with the principal Atlantic ports of the Republic. The road has been under construction for several months and 20 kilometers are ready for macadamizing, and it is stated that within six months the highway will be macadamized to Comayagua. — The Official Gazette of the Government of Honduras of July 7, 1917, contains the full text of the contract made with Soriano and Callejas for the establishment and operation of PACKING HOUSES in different parts of the Republic, and especially in the Department of Cortes, Yoro, Atlantida, and Colon. — The TOBACCO grown in the Department of Copan is of excellent quality and has become very popular abroad, especially in



Salvador, Guatemala, and Peru. A company was recently organized in Honduras to cultivate tobacco in the Department referred to, and to manufacture cigars and cigarettes.



## MEXICO

The Atlantic and Pacific coast CORN belts of Mexico have produced during the present year an abundant yield of that cereal. A shortage, however, has been experienced in the Central Plateau region of the Republic, due to decreased rainfall and early frosts. The Director General of Agriculture reports that the crops already harvested throughout the Republic have been good, and includes, corn, wheat, beans, potatoes, garbanzas (chick peas), etc. The National Government has instructed the governors of the States to increase as much as possible the acreage under cultivation, and to allot lands not cultivated by their owners to applicants who will produce crops.—The treasury department of the Government of Mexico has issued a statement showing the entire bonded and interest INDEBTEDNESS OF THE REPUBLIC to be 423,646,605 pesos, or the equivalent of \$211,823,303 American gold. The interest upon the various bond issues, which varies from 3 to 5 per cent, and which has not been paid during the revolutionary period, amounts to the equivalent of \$34,079,725 American gold. The total bonded indebtedness and accrued interest is, therefore, the equivalent of \$245,903,028 American gold.—Steps have been taken looking to the establishment of a CLAIMS COMMISSION to which all international claims shall be submitted. If appeals are made from the decision of the commission, it is proposed that they be settled by arbitration.—There are now in operation in the City of Mexico 2,165 AUTOMOBILES, 1,329 of which are for private use and 836 for hire. Among the latter number are 150 jitneys and 33 taximeters. There are also 2,457 coaches or carriages in the National Capital of which 900 are for private use and the remainder for hire. The department of Communication and Public Works has planned to build automobile roads throughout the Republic. One of the first planned to be completed will connect the City of Mexico with Juarez and El Paso, a distance of about 1,200 miles. The plan has the approval and support of the different States.—A permanent COMMERCIAL MUSEUM has been opened in the city of St. Louis. The exhibits are made up of contributions from different parts of the Republic.—The secretary of fomento has instructed that where persons ask for the use of GOVERNMENT LANDS FOR CULTIVATION, no more than 50 hectares (124 acres) shall be allotted to any one person, the object being to encourage small farmers and to prevent the monopolization of land.—As a result of the successful operation of the CONGRESS OF WORKMEN in the State of Sonora, similar bodies are to be established in other States of the Republic for the purpose of handling questions pertaining to labor and of carrying out the provisions of the new Constitution concerning labor.—Local capitalists have petitioned the Government for permission to build an ELECTRIC RAILWAY between the City of Mexico and Puebla.—Direct TELEGRAPH COMMUNICATION

between the City of Mexico and Merida, capital of the State of Yucatan, has been reestablished. The interruption dates from 1913.—Instructions have been issued forbidding the EXPORTATION OF IRON, especially that of machinery or other objects used in railway construction or transportation.—There was recently discovered in the historical Cortez mansion at Coyoacan, a suburb of the City of Mexico, a PARCHMENT of the year 1528 consisting of numerous pages showing the various portions of Mexico as then supposed to exist, together with plans of many of the cities. A reproduction of the volume is to be made for the study of experts.—Extension deposits of GUANO are reported by miners prospecting in the Sierra Madre mountains, State of Sonora, who state that many thousands of tons are available for shipment from large caves where this substance has accumulated.—During the fiscal year 1917 the United States imported from Mexico products valued at \$112,138,677 and EXPORTED to that country merchandise aggregating a value of \$78,659,893.—It is proposed to build a WAGON ROAD between the city of Monterey and Villa Galeana, State of Nueva Leon. At one place in the road a tunnel nearly 1,000 feet in length will have to be constructed.—A NEW PARCEL POST CONVENTION has been concluded between Mexico and the United States, and became effective November 1. The weight limit has been raised from 11 to 20 pounds.



## NICARAGUA

According to the Bluefields American, H. J. Thurston of Bay St. Louis, Miss., proposes to engage in the purchase of green sea turtles and calipee and to market same in tins under the name of NICARAGUA TURTLE PRODUCTS. The gentleman referred to, after a visit to the Atlantic coast in October last, stated that he had arranged with Brautigam & Co., of Pearl Lagoon to receive all turtles caught on the coast at a large crawl which has been installed at Tangwirra Cays. The firm in question will also receive at Pearl Lagoon, for account of Mr. Thurston, such quantities of dried calipee as may be offered, paying the highest market prices for same. Formerly Nicaraguan fishermen of the Atlantic coast region of the Republic sent their catches of turtles to Jamaica, but now that a market has been established on the coast of Nicaragua it is believed that greater advantages will be found in canning these products at home, that the market will be stimulated and a much larger catch than heretofore will be obtained. Mr. Houston is also considering the advisability of establishing a small cannery at Pearl Lagoon to handle the pineapples of the Atlantic coast which are of fine quality and available in abundance in that vicinity.—According to press reports the President, by an executive decree, has made an addition to the FORESTAL TAX LAW under which lignum-vitæ, sweet gum, hardwood, red ebony and other woods which were not classified under the original law are required to pay \$1 per thousand kilograms of timber cut for export. Any doubts or consultations concerning any other class of timber not specified in the law of August 25 are to be referred for final settlement to the Minister of

Development of the Government of Nicaragua.—An executive decree has been promulgated which authorized the Government of Nicaragua to dispose at public auction in October last of the abandoned machinery and MATERIALS OF THE ATLANTIC COAST RAILWAY, with the exception of such tools and machinery as the Minister of Development may indicate. Owing to the high price of iron at the present time it is believed that the Government will realize more at auction for the sale of the property referred to than it would have received by selling it in gross to local railway contractors.—In October last a MAHOGANY LOG, said to be the largest ever sawed in Nicaragua, was converted into lumber at Schooner Cay, the net production amounting to 2,500 feet of clean mahogany. The log, which was 16 feet in length, measured 62 inches at the smaller end, and was of a beautiful grain. Some of the boards cut were over 4 feet in width and from 4 to 6 inches in thickness. Another log over 6 feet through at the butt was brought to Schooner Cay. It is too large for the sawmill to handle and will be shipped to Philadelphia in bulk. This timber came from Camp Baloon on the upper Siquia River near Acoyapa and was floated a distance of approximately 400 miles before reaching tidewater.—The Collector General of Customs has instructed customs appraisers and liquidators in the maritime ports of the Republic to see that correct values are noted in EXPORT DOCUMENTS in order that same may be used in compiling the statistics of the exports of the country.—The ICE FACTORY and bottling works in Bluefields were recently consolidated into one plant and some new machinery was installed.—Drillings made at the Rosita Copper Mine in Prinzapolka are reported to have indicated the existence of PETROLEUM, and steps have been taken to organize in the United States a company to drill for oil deposits in that vicinity.—The NICARAGUAN DEVELOPMENT CORPORATION, a Chicago concern organized under the laws of the State of Arizona and with a nominal capital of \$1,000,000, is negotiating for the purchase of 90,000 acres of land in the Pearl Lagoon district. Newspaper advices state that this company proposes to dredge the Pearl Lagoon bar so that steamers may connect with the projected terminal of the proposed railway to Matagalpa to be constructed under what is known as the "Brautigam contract."

## PANAMA

In October last the new CIVIL MARRIAGE LAW became effective in Panama, under the terms of which the contracting parties are required to register their wedding with the State authorities, for which service a small registration fee is charged. While the religious ceremony may be performed in the church or elsewhere, it is not necessary to establish the legality of the contract. Unless the registration referred to is complied with a church marriage is invalid.—An ACETYLENE GAS and compressing plant, consisting of two Navy-type acetylene generators, each having a capacity of 200 pounds of calcium carbide at a single filling and generating 200 cubic feet of acetylene gas per hour, has been established in the

Balboa shops, Canal Zone. The installation includes a 100-cubic-foot gasometer, a purifying and drying apparatus, Chatillon and Osgood weight scales, an acetone charging apparatus, a gas meter, a 3-stage compressor, and a tank-charging rack with specially prepared cylinders to contain compressed acetylene gas.—A shipment from the United States of 1,200 CHICKENS of the early feathering varieties, consisting principally of Rhode Island reds, white Plymouth Rocks, white leghorns, and white wyandottes, was received last month at the Summit farm, Canal Zone. These fowls, which are in charge of an American poultry expert, are to be used for breeding purposes.—A recent executive decree suspends the provisions of the new Fiscal Code concerning the use of 5-cent stamps on checks and drafts until the National Assembly passes a law regulating this question. One-cent internal-revenue stamps will continue to be used on the documents referred to.—The Panama authorities have laid out a restricted FIRE ZONE in the city of Panama and the Canal Zone immediately adjoining, in which the construction and reconstruction of only fireproof buildings will be allowed.—The Government of Panama and the officials of the Canal Zone are negotiating for the construction and operation of a joint HOSPITAL near Corozal for the treatment of patients suffering from tuberculosis and mental derangement, on the basis of a payment by the Government of Panama of 75 cents daily for each tubercular or mental case sent by it to the hospital.—The Isthmian AGRICULTURAL COMPANY, with a capital of \$300,000, American gold, represented by 12,000 shares of \$25 each, has been organized in the City of Panama for the purpose of buying land and engaging in agricultural pursuits on a large scale. The headquarters of the company are to be in the City of Panama, but branches will be maintained in the interior of the Republic and in some foreign countries.—According to the new Fiscal Code, which became operative October 1, 1917, the impost on each liter of spirits produced is 15 cents and on each 32 gallons of beer \$1. Distillers are prohibited from selling spirits having a less gravity than 21 degrees Cartier, but anisette and rum may be sold up to 20 degrees. LICENSES FOR RETAILING LIQUORS shall be paid monthly according to classification. In Colon, Panama, and Bocas del Toro these licenses are fixed, according to classification, as follows: Class 1, \$100; class 2, \$75; class 3, \$50; class 4, \$25, and class 5, \$15. In the other Provinces of the Republic the licenses are, for class 1, \$20; class 2, \$15, and class 3, \$10. Persons who retail liquors by the drink and up to a demijohn equivalent to 16 liters are required to take out licenses.—The Government of Panama has acquired the 20 hectares of land occupied by the AGRICULTURAL EXPERIMENT STATION.—Since October 1 of the present year The International Banking Corporation of the City of Panama has kept its ACCOUNTS IN AMERICAN GOLD.

## PARAGUAY

The Senate of the Congress of Paraguay is considering a bill, approved by the House of Deputies, for the consolidation of the BUREAUS OF HYGIENE AND PUBLIC CHARITY under the

management of a Director General and a board of four of its members. These two bureaus have hitherto been governed separately and by different laws.—A bill has been introduced into the House of Deputies of the Paraguayan Congress providing for the establishment of a DEPARTMENT OF LABOR, ARBITRATION AND CONCILIATION to settle disputes between workmen and their employers.—The National Congress has enacted a law prescribing the form of payment, on and after January 1, 1918, of PENSIONS to war veterans and their successors in accordance with the laws now in force.—According to a recent report made by the board of directors of the BANK OF THE REPUBLIC at a general meeting of the stockholders, the profits of the bank for the fiscal year ended June 30, 1917, were 304,420 gold pesos (gold peso = \$0.965), of which 30,442 gold pesos were credited to the reserve fund.—The Department of Fomento (Promotion) has authorized the officials of Bahia Negra and Fuerte Olimpo to prohibit the cutting and shipment of PALMS on lands under their jurisdiction belonging to the State, without permission in writing from the Treasury Department or from the Department of Fomento, and transportation companies are prohibited from hauling cargoes of palms originating on the Government lands referred to unless authorized to do so by the Treasury Department.—The Minister of Uruguay in Asuncion, in compliance with instructions of the Office of Foreign Relations of the Uruguayan Government, has proposed to the Paraguayan Government that a TREATY OF COMMERCE be concluded between the two countries. The proposed treaty stipulates that the products of both countries shall be entitled to the privileges granted in the trade conventions of the respective countries to the most favored nation, and that a specified number of exports from each country be allowed to enter the other free of duty. In order to encourage commerce between the two nations it is suggested that special privileges be given to commerce in transit between the two countries by allowing the free use of Government warehouses, exemption from Government lighterage charges, storage gratis in Government warehouses for a period not to exceed one year, and the granting of reciprocal concessions in the coast-wise trade.—The Minister of Paraguay in Buenos Aires has advised his Government of the exchange of ratifications in that city on September 13, 1917, of a convention for simplifying the legalization of REQUISITORIAL AND ROGATORY LETTERS.—The Commercial Review of Asuncion states that the National Capital will soon have two more handsome buildings, one constructed by and for the use of the Board of Trade at a cost of 454,000 pesos, and the other by the Bank of Spain and Paraguay.—In compliance with a request of the Board of Trade of Asuncion an order has been issued by the Government prohibiting the EXPORTATION OF BOTTLES.—Recent estimates of the production of SUGAR in Paraguay in 1917 are 738 tons from a total area of 589 hectares planted to sugar cane. Drought and frosts have injured the sugar-cane crop during the last three years. In 1914 the production of sugar in the Republic was 2,539 tons; in 1915, 1,536 tons; in 1916, 788 tons, and in 1917 (estimated) 738 tons. A hectare of sugar cane in Paraguay in normal years yields 30 tons of sugar, but under unfavorable conditions this is reduced to 12 or a smaller number of tons. The annual consumption of sugar in Paraguay is 3,500 tons, so that the deficit during the present year is estimated at 2,762 tons.

# PERÚ

The total FOREIGN TRADE of Peru for the year 1916, according to the report of Señor Don Octavio Espinosa, Chief of the Statistical Division of Customs, amounted to 25,224,212 libras, of which 8,683,150 libras were imports, and 16,541,062 libras, exports. The figures for the year 1915 were: Imports, 3,095,545 libras; exports, 14,123,071 libras; total, 17,218,616 libras. Estimating the value of the libra at \$4.86 United States gold (the same as the British pound sterling), the value of the Peruvian foreign trade for the year 1916 was: Imports, \$42,200,010; exports, \$80,389,561; total \$122,589,571. On the same basis the figures for 1915 were: Imports, \$15,044,347. exports, \$68,638,128; total, \$83,682,475. This shows an increase in imports of \$27,155,663, and in exports of \$11,751,433, or a total increase in the foreign trade for 1916 of \$38,907,096.—There are now under construction in the city of Lima, at a cost of 480,000 soles (sol = \$0.486), the following BUILDINGS FOR THE CARE OF INDIGENT CHILDREN: A hospital for foundlings, a building for the girls' school of arts and crafts, and one for the boys' school.—The proposed EXPENSE BUDGET of the Peruvian Government, submitted to Congress by the President of the Republic for the year 1918, amounts to £3,975,616 (£ = \$4.86).—According to a report of the Treasury Department of the Government of Peru, there were minted in Lima from April 11, 1898, the date on which pounds were first coined in the Republic, to June 30, 1917. GOLD COINS to the number of 3,603,158 representing a value of £3,008,374, of which £582,477 were struck in 1916, and £643,533 during the first half of 1917. From June 30, 1902 to the same date of 1917, the imports of gold coin were valued at £4,173,328. From August 1914 to June, 1917, the silver coined in Peru represented a value of 5,106,163 soles (sol = \$0.486).—Representatives of Peru and Uruguay have signed a general ARBITRATION TREATY, subject to the approval of the Congresses of the two nations, to take the place of the treaty celebrated between these countries on December 4, 1915.—The Consul General of Peru at Manaos, Brazil, has compiled data showing that the EXPORTS OF PERUVIAN RUBBER through the port of Manaos during the first half of the present year consisted of 96,997 kilos of fine rubber, and 23,133 kilos of sernamby.—The Treasury Department has contracted with the "Compañía Salinera del Perú" for sufficient RICE to meet the domestic needs of the country, and has fixed the retail price of same at 30 centavos. (\$0.15) a kilo.—Congress has enacted a law authorizing the Provincial Council of Lima to negotiate a LOAN of £400,000, the proceeds of which are to be expended on works of sanitation in the National Capital.—About the middle of September last an AUTOMOBILE TRIP was made from Lima to Yangas, a hamlet on the Canta road, 70 kilometers from the National Capital, in two hours and thirty-five minutes, the return trip being made in two hours.

# SALVADOR

The President of the Republic has approved a contract made by the Department of Fomento with René Keilhauer, under the terms of which the latter agrees to organize in one of the States of the American Union, in accordance with State and Federal laws, a **HOUSE AND BUILDING CONSTRUCTION COMPANY** to operate in Salvador in a manner similar to that followed by building and loan associations in the United States. The company promises to invest in the country, within the term of 10 years, \$1,000,000, or a larger amount if necessary, provided it receives sufficient acceptable applications for the use of the money referred to, to enable it so to do. The value of the buildings erected by the company is to be repaid in annual installments representing 10 per cent of the total amount of each contract, from which sum interest at the rate of 8 per cent per annum will be deducted and the remainder applied to the payment of the principal. The company proposes to give preference in the erection of buildings to those constructed for the national and municipal governments and for charitable institutions, such as hospitals and asylums, after which work will be done for individuals, companies, societies, and corporations. The company agrees to organize within six months. Its capital, bonds, and interest coupons are exempt from national and municipal taxes.—Among the different celebrations which were held in the city of San Salvador on September 15, 1917, in honor of the ninety-sixth anniversary of national independence special mention may be made of the manifestations of fealty to the flag by the students of the capital of the Republic, and the official inauguration of the Venustiano Carranza **WIRELESS TELEGRAPH STATION** presented by the Government of Mexico to the Government of San Salvador and installed at San Jacinto, a suburb of the city of San Salvador. A few days before the official inauguration took place very successful trials were made at the new station and communication was maintained between the station referred to and that of Chapultepec near the City of Mexico.—The Salvadorian press states that the Governments of Salvador, Guatemala, Costa Rica, and Nicaragua have favorably received the invitation made by the Government of Honduras to hold a **CENTRAL AMERICAN CONGRESS** to consider the political union of the five Central American Republics.—The Red Cross of Salvador is waging an active campaign against infantile mortality. This organization has just established in the national capital a **FREE DISPENSARY** for indigent children up to 10 years of age.—A section of the **INTERNATIONAL RAILWAY** recently constructed between Zacatecoluca and San Vicente has been received by the representatives of the Department of Fomento. The section referred to covers a distance of 10 kilometers and forms part of the line which the International Railway Companies of Central America are building from the port of La Union to the capital of the Republic.—The Executive Power has approved a **PARCEL-POST CONVENTION**

concluded in the city of Washington on July 27 of the present year between Dr. Rafael Zaldivar, envoy extraordinary and minister plenipotentiary of the Government of Salvador near the Government of Washington, and Mr. Albert S. Burlison, Postmaster General of the United States of America, in representation of their respective Governments.

## URUGUAY

The URUGUAYAN SOCIETY OF INTERNATIONAL LAW has been organized in Montevideo and the following administrative committee for the period 1917-1919 has been appointed: Dr. Juan Zorrilla de San Martín, president; Dr. Antonio María Rodríguez, vice-president; Fermín Carlos de Yéregui, secretary; Dr. Adolfo Berro García, treasurer; and Drs. Baltasar Brum, Luis Alberto de Herrera, and Juan Antonio Buero, advisory members. Dr. Feliciano Viera, President of the Republic; Dr. José Batlle y Ordoñez; and Dr. Baltasar Brum, who signed the decree of December 29, 1914, establishing the organizing committee of the society, were elected honorary members of the same. In the near future the society will select five of its members to be proposed for membership in the American Institute of International Law, a Pan American organization which has its headquarters in Washington.—Luis J. Supervielle, President of the Board of Directors of the Insurance Bank, has consulted with Federico R. Vidiella, Minister of Finance, concerning the establishment and operation of a department of AGRICULTURAL LOANS in connection with the bank, a matter that is of the greatest importance to the country.—Referring to the ECONOMIC SITUATION of the nation the Minister of Finance states that the deficit for the present year will not exceed 1,500,000 pesos (peso = \$1.0342) and remarks that this showing is very satisfactory, inasmuch as the deficit estimated by the executive power was 2,700,000 pesos, and taking into consideration the fact that a number of negative factors have operated against the interests of the State, such, for example, as the noncollection of the departmental sanitary tax of 400,000 pesos, warehouse licenses of 250,000 pesos, other miscellaneous revenues, and a decrease in the amount of the taxes on real estate. Bearing in mind that the gold reserve of the country aggregates 47,000,000 pesos, that the prices of Uruguayan securities are higher than they were before the war, and that the outlook for an abundant crop of cereals and a large yield of wool is excellent, it must be acknowledged that the financial condition of the country is good.—The bank inspector has reported to the Treasury Department on the general CONDITION OF THE BANKS of the Commonwealth in July last. The gold coin on hand at that time was 46,777,281 pesos, of which 41,017,667 pesos were in the vaults of the Bank of the Republic and the remainder in the other banks of the country. The bank notes on hand representing gold coin amounted to 4,810,000 pesos, and the silver and nickel coin 1,948,337 pesos, of which 1,805,332 pesos were in the Bank of the Republic. The total cash on hand was



53,535,618 pesos, distributed as follows: 42,822,999 pesos in the Bank of the Republic and 10,712,619 pesos in the other banks. The current deposits aggregated 35,666,307 pesos, of which 15,374,741 pesos were in the Bank of the Republic and 20,291,566 pesos in other banks. The fixed time deposits amounted to 25,309,625 pesos, the Bank of the Republic having 7,768,811 pesos and the other banks 17,540,814 pesos. The discounts and advances aggregated 73,554,836 pesos, of which 33,372,947 were for account of the Bank of the Republic and 40,181,889 for account of the other banks. In June last these banks had coined gold on hand to the amount of 44,362,579 pesos, bank bills representing gold, 3,734,000 pesos, and silver and nickel coin 2,277,111 pesos, or a total of 50,373,690 pesos: The deposits in account current amounted to 34,998,447, fixed time deposits 24,310,998 pesos, and discounts and advances 72,667,103 pesos.—The rules and regulations governing INDUSTRIAL NIGHT COURSES for workmen and apprentices, formulated recently by the executive power, contain a number of important provisions. The courses for males and females are entirely separate, and the classes are conducted in connection with the existing industrial schools of the Republic, whether public or private, and are under the supervision of a Superior Board of Industrial Instruction and a National Inspector, who, in turn, are under the control of the Delegated Departmental Commissions. The courses cover nine months of each year; that is to say, from March 1 to November 30. Classes are held daily with the exception of holidays and Saturdays, and the minimum length of instruction is one and one-half hours. The courses are under a head teacher and as many assistants as may be necessary to reduce the number of students in any one class to less than twenty-five. The principal subjects of instruction are industrial drawing, applied mathematics (arithmetic and geometry), and, where circumstances permit, physics, chemistry and industrial accounting. In addition, weekly conferences are to be given on subjects relating to industrial hygiene, the technology of the principal industries, economic, political or social, and commercial and industrial geography. Healthy male students of good moral character, not less than 17 years of age, may enter the classes, and female students, not under 15 years of age, having like qualifications are eligible for entry. The Board of Industrial Instruction has been authorized to establish, in accordance with the rules and regulations referred to, up to ten classes in the National Capital and in the interior cities of the Republic.—The report published by the Mortgage Bank of Uruguay, covering its twenty-fifth financial year, shows that its total MORTGAGE LOANS to March 31, 1917, numbered 487 as compared with 458 for the previous 12 months. The loans during the last 12 months consisted of 328 urban mortgages amounting to 1,685,700 pesos, and 159 rural mortgages aggregating 2,394,500 pesos, or a total of 4,080,200 pesos. This is 912,600 pesos less than the amount loaned during the previous 12 months in which the loans amounted to 4,992,800 pesos distributed as follows: Urban property, 1,430,400 pesos, and rural real property, 3,562,400 pesos. According to the report the decrease in the rural loans during the last 12 months is due to the higher prices obtained by producers of agricultural and stock products, thereby enabling farmers to meet their obligations without borrowing.

# VENEZUELA

At an extra session of the National Academy of Medicine, of Venezuela, held in Caracas during the middle of September last, the following distinguished scientists were elected FOREIGN CORRESPONDING MEMBERS: Dr. Angel H. Roffo and Victor Delfino, of Buenos Aires; Dr. Julián Arce, of Lima; Dr. C. W. Stiles and Dr. H. R. Carter, of Washington; Dr. Simón Flexner and Dr. W. C. Gorgas, of New York; Dr. H. B. Ward, of Illinois, and Dr. Juan Guiteras, of Habana.—The receipts of the NATIONAL DRY DOCK of Venezuela for the fiscal year ending June 30, 1917, were 236,115 bolivars (1 bolivar=\$0.193).—In April last the SUSPENSION BRIDGE over the Guarenas River, which unites the towns of Guatira and Guarenas on the Eastern Highway of the Republic, was officially opened to traffic and christened "Miranda Bridge."—The MERCANTILE BANK of the Americas, a New York corporation, has established a branch in Maracaibo. This institution proposes to lend money on export consignments of coffee, cacao, and other staple Venezuelan export products.—Under a recent executive decree there was established in the Treasury Department on September 16, 1917, a BUREAU OF INTERNAL REVENUE, in accordance with the provisions of paragraphs 1 and 2 of article 5 of the law relating to customs.—Steps have been taken to begin the commercial exploitation of the ALOE PLANT, which produces a bitter substance used medicinally as a cathartic, in the neighborhood of Coro, where more than one million plants of this species are available for use.—The Caribbean Petroleum Co., which is engaged in the extraction of crude oil from the oil properties which it owns in the Republic, principally in the State of Zulia, has presented General Juan Vicente Gomez, President-elect of Venezuela, with the first barrel of GASOLINE made at its San Lorenzo refinery, which began operations on August 16, 1917. While the refinery has a capacity for handling 400 tons of crude oil daily, it is believed that 200 tons daily will supply the domestic needs of the country. San Lorenzo is 60 miles from the City of Maracaibo, and is connected by a steam railway 9.3 miles long with Lake Maracaibo. The company has opened on its properties automobile and wagon roads aggregating 90 miles for use in transporting materials. Of the 1,500 men employed in this industry nearly all are Venezuelans.—Press reports state that a Venezuelan mechanic has constructed a machine for HULLING BEANS with a capacity of five sacks per hour, or work equal in quantity to that done by fifteen men.—A commercial and industrial weekly NEWSPAPER entitled "El Impulsador del Trabajo" (The Encourager of Work) has been issued in Caracas under the direction of F. Maza Velázquez.—Venezuela, which is the home of the WHITE HERON, has enacted laws for the protection of egrets, and prohibiting the collection of their feathers, except in heronries at the time of moulting, from July to December. Customs collectors are instructed not to allow the exportation of heron plumes unless they are satisfied that the feathers are molted feathers and not pulled from caught or slaughtered birds. Egret feathers come exclusively from the Orinoco River section of the states of Bolivar and Apure.

