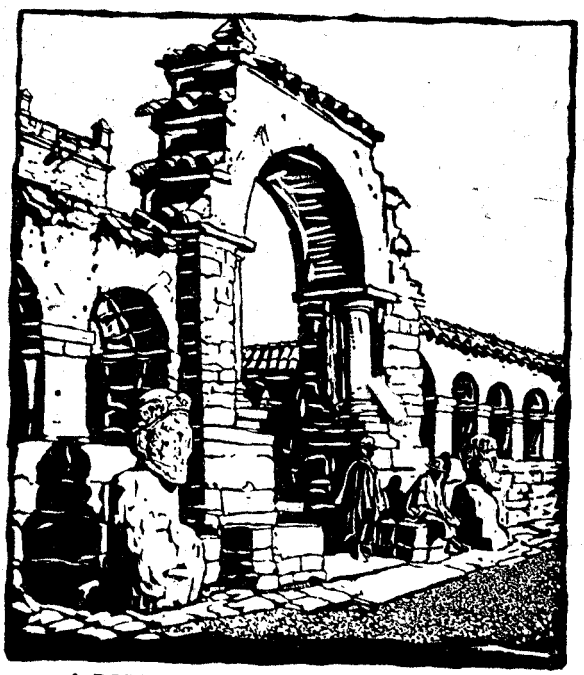
BULLETIN OF THE PAN AMERICAN UNION



A PORTAL IN TIAHUANACU, BOLIVIA

Photo Finlay — page 935

DECEMBER 1933

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BULLETIN

OF THE

PAN AMERICAN UNION

DECEMBER 1933

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THE PAN AMERICAN UNION

WASHINGTON, D.C.

L. S. ROWE
Director General

E. GIL BORGES
Assistant Director

THE PAN AMERICAN UNION, originally known as the International Bureau of the American Republics, was established in the year 1890 in accordance with resolutions passed at the First International Conference of American States, held at Washington in 1889–90, and presided over by James G. Blaine, then United States Secretary of State. Its work was greatly expanded by resolutions of the Second Conference at Mexico in 1901; the Third, at Rio de Janeiro in 1906; the Fourth, at Buenos Aires in 1910; the Fifth, at Santiago, Chile, in 1923; and the Sixth at Habana, Cuba, in 1928. It is an international organization created and maintained by the twenty-one American republics. Its purpose is to develop closer cultural, commercial, and financial relations between the Republics of the American Continent and to promote friendly intercourse, peace, and better understanding. It is supported by annual contributions from all the countries, in amounts proportional to population. Its affairs are administered by a Director General and Assistant Director, elected by and responsible to a Governing Board composed of the Secretary of State of the United States and the representatives in Washington of the other American governments.

The administrative divisions of the Pan American Union are organized so as to carry out the purposes for which it was created. Special divisions have been created on foreign trade, statistics, finance, and agricultural cooperation, all of which maintain close relations with official and unofficial bodies in the countries, members of the Union. Particular attention is devoted to the development of closer intellectual and cultural relations among the nations of the American Continent, and administrative divisions have been created for this purpose.

The Pan American Union serves as the permanent organ of the International Conferences of American States, usually referred to as the Pan American Conferences. In addition to preparing the programs and regulations, the Union gives effect to the conclusions of the Conferences by conducting special inquiries and investigations and by convening or arranging for special or technical conferences in the intervals between the International Conferences.

U.S. GOVERNMENT PRINTING OFFICE: 1933

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Photograph by Underwood & Underwood.

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BULLETIN
OF THE PAN AMERICAN UNION

VOL. LXVII DECEMBER 1933 NO. 12

THE VISIT OF DR. HARMODIO ARIAS PRESIDENT OF PANAMA TO THE UNITED STATES

ON SUNDAY, October 8, 1933, His Excellency the President of Panama, Dr. Harmodio Arias, arrived in New York on the steamer *Quiriguá*, en route to Washington, where he was to be the guest of President Roosevelt for a few days. The distinguished visitor was met at quarantine by Mr. James Clement Dunn, Chief of Protocol of the Department of State, and Mr. George R. Merrell, an officer in the same Department.

On his arrival in Washington late Monday afternoon, President Arias was formally received at the Union Station by the Secretary of State, as representative of the President; the Hon. Jefferson Caffery, Assistant Secretary of State; the Secretary to the President; Capt. Walter Newhall Vernou, the President's Naval Aide; Col. Edwin E. Watson, the President's Military Aide; Mr. Edwin C. Wilson, Chief of the Division of Latin American Affairs of the Department of State; Mr. Charles Lee Cooke, Ceremonial Officer of the Department of State; and Dr. L. S. Rowe, Director General of the Pan American Union. A troop of cavalry and a cordon of marines awaited His Excellency's arrival, and rendered him the appropriate salutes; the United States Marine Band played the national anthem of Panama. President Arias was accompanied by the Secretary of State to the White House, where President Roosevelt awaited his distinguished guest.

Official entertaining in honor of President Arias began the following day with a state dinner given by the President and Mrs. Roosevelt at the White House, and continued with a luncheon given by the Secretary of State at the Hotel Carlton on October 11, and a reception at the Legation of Panama on Columbus Day. On the 11th, Doctor

Arias took leave of his host and departed from the White House for the legation of his country, where he remained until his departure from Washington.

During his visit at the White House, President Arias held conversations with President Roosevelt and with members of the State Department in which questions concerning the relations between the two countries were discussed. At the conclusion of these conferences the following joint statement was issued by the two Presidents:

"We have talked over in the most friendly and cordial manner the field of Panamanian-American relations. The fact that the Canal Zone is set down in the midst of Panama makes us neighbors in the most intimate sense of the word, and it is in the interest of both our countries that we should be 'good neighbors'.

"We are in accord on certain general principles as forming the bases of the relations between Panama and the United States insofar as the Canal Zone is concerned, as follows:

"1. Now that the Panama Canal has been constructed, the provisions of the Treaty of 1903 between the United States and Panama contemplate the use, occupation, and control by the United States of the Canal Zone for the purpose of the maintenance, operation, sanitation, and protection of the Canal.

"2. In view of that purpose the Republic of Panama is recognized as entitled, as a sovereign nation, to take advantage of the commercial opportunities inherent in its geographical situation so far as that may be done without prejudice to the maintenance, operation, sanitation, and protection of the Panama Canal by the United States of America, which is earnestly desirous of the prosperity of the Republic of Panama.

"3. The Government of the United States would sympathetically consider any request which the Government of Panama might make for the solution by arbitration of any important question which might arise between the two Governments and may appear impracticable of decision by direct negotiations, provided that such question is purely economic in its nature and does not affect the maintenance, operation, sanitation, and protection of the Canal.

"With regard to the activities of the United States in the Canal Zone, Panama feels that some of them constitute a competition prejudicial to Panamanian commerce. The United States has agreed to restrict and regulate certain activities; for example, special vigilance will be exercised to prevent contraband trade in articles purchased from the Commissaries; sales of 'tourist' goods from the Zone Commissaries for resale on ships transiting the Canal will be prohibited; sales of other goods to ships from the Canal Zone Commissaries will be regulated with the interests of Panamanian merchants in view.

"The services of the United States hospitals and dispensaries in the Canal Zone will be limited to officers and employees of the United States Government and of the Panama Railroad Company and their families, excepting only in emergency cases; admission to the restaurants, clubhouses, and moving-picture houses in the Zone will be similarly restricted.

"The United States also intends to request of Congress an appropriation to assist in repatriating some of the aliens who went to the Isthmus attracted by the construction work of the Canal and have now come to constitute a serious unemployment problem for Panama.

"The clause binding lessees or contractors of the restaurants to purchase their provisions from or through the Commissaries will be abrogated. The United States Government furthermore is prepared to make the necessary arrangements in order that Panama may establish, at the terminal ports of the Canal, houses and guards to collect duties on importations destined to other portions of Panama and to prevent contraband trade."

President Arias returned to Panama by air, via Mexico and the Central American Republics; in all the countries through which he passed he was received most cordially by Government officials and the people.

SEÑOR DON MANUEL TRUCCO
AMBASSADOR EXTRAORDINARY AND PLENIPOTENTIARY OF CHILE IN THE UNITED STATES.

SEÑOR DON MANUEL TRUCCO AMBASSADOR OF CHILE IN THE UNITED STATES

WHEN His Excellency Señor don Manuel Trucco presented to President Roosevelt, on October 17, 1933, his letters of credence as Ambassador Extraordinary and Plenipotentiary of the Republic of Chile to the United States, he said in the course of his address: "The Government and the people of Chile . . . follow, with profound interest, the courageous efforts of Your Excellency to overcome the acute crisis now afflicting the world, and wish fullest success to the leader whose inspiration transcends national frontiers, since from the recovery of the economic life of the United States they expect to derive the benefits inherent in the daily greater interdependence of peoples."

To that sentiment President Roosevelt replied, "I greatly appreciate the heartening good wishes and interest expressed by Your Excellency on behalf of your country in the efforts which we are making in this country to defeat the forces of depression, as well as your sympathetic understanding of my country's determination to adhere to a policy of neighborliness and mutual helpfulness toward the other American nations."

Señor Trucco was born in the city of Cauquenes in 1874. He attended school there and in Santiago where, at the Instituto Nacional, he specialized both in the humanities and in mathematics. Later he entered the University of Chile, graduating with the degree of civil engineer in 1899. While pursuing his engineering studies, he taught mathematics in the Instituto Nacional.

In 1901 he won an appointment to a professorship in the architectural school, and shortly thereafter became a professor in the school of engineering. A fellowship from the University of Chile enabled him to spend the years 1902–04 in Paris as a student in the École Nationale des Ponts et Chaussées. On his return to Chile he resumed his teaching at the university, where he remained until 1918. During that period he was for 8 years dean of the department of mathematics, and also served as director of the schools of architecture and engineering.

For many years Señor Trucco was an engineer of the Department of Public Works and of the National State Railways, and eventually became Director General of the latter, holding this office from 1918

until his retirement from public service. In 1922 he visited the United States on a technical mission. Señor Trucco was also one of the founders of the Institute of Engineers, and has been a regular contributor to the *Anales*, the official publication of the Institute.

As a member of the Radical Party he was elected Senator of the Republic in 1926, and later vice president and then president of the party. During the administration of Acting President Juan Esteban Montero, Señor Trucco was appointed Minister of the Interior, and on Señor Montero's nomination for the Presidency, he became Acting President, on August 22, 1931, until the latter's inauguration on December 4 of the same year.

Señor Trucco represented Chile in the First South American Railway Congress, which met in Buenos Aires in 1910, and presided over the third congress when it met in Santiago in 1929.

THE TREASURE OF MONTE ALBÁN

EXHIBITION IN THE PAN AMERICAN UNION

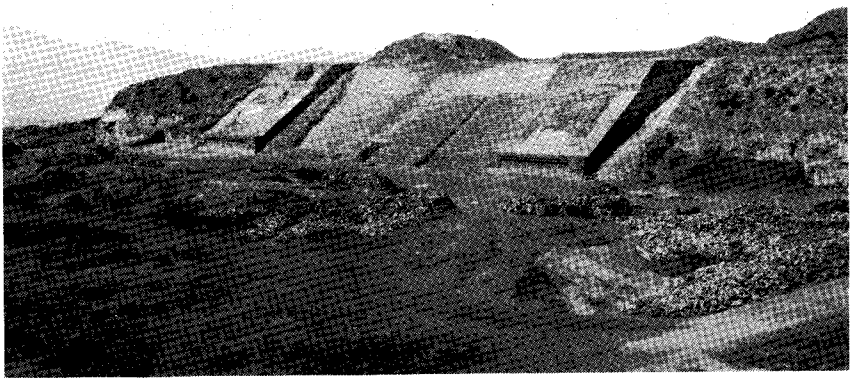
DURING the week of October 30, 1933, the Pan American Union was thronged with visitors; besides the normal number passing its beautiful portals came added thousands especially to see the famous treasure of Monte Albán. Who made these delicately wrought objects of gold? Who polished the rock crystal bowl and jade beads? Who carved in exquisite design these jaguar bones? Surely a people of high culture and artistic sensibility, must be the answer of all who had the privilege of seeing the treasure. Here, under the flags of all the American Republics, were arranged the cases containing the many objects of art whose discovery almost two years ago near Oaxaca in Mexico caught the popular imagination.

The exhibition was brought to Washington at the combined invitation of the Carnegie Institution of Washington and George Washington University, and at the private showing of the treasure a brief explanation of its significance was given to the distinguished guests. Señor Luis Padilla, Chargé d'Affaires of Mexico, presided; seated with him on the platform were Dr. John C. Merriam, president of the Carnegie Institution; Dr. Cloyd H. Marvin, president of George Washington University; Dr. L. S. Rowe, Director General of the Pan American Union; Dr. Daniel F. R. de la Borbolla, a member of the staff of the National Museum of Mexico, in charge of the treasure; and Señores Leduc, González, and Torres, of the staff accompanying the treasure. Dr. de la Borbolla, in addressing the audience that overflowed the Hall of the Americas, said:

Students of American archaeology agree that the scientific material gathered up to the present time gives evidence that man did not originate on this continent, but that the cultures that we today study are indigenous. Mexico is very fortunate in having at least four well-defined aboriginal cultures, the development of which was due to a change in the life of the people from the nomadic state to the agricultural. These four cultures of Mexico seem to be closely interrelated, to have certain cultural factors in common. Two of them are very well known to you: The Maya culture in the southern part of Mexico and the culture of the high plateaus of the central part of Mexico, called Toltec or Aztec.

But there are two other cultures very little known until now. One is the Zapotec, the other the Mixtec. Remains of the Mixtec and Zapotec cultures are found in the southern part of Mexico, in what today is known as the State of Oaxaca. The importance of the study of this culture was realized five years ago when Dr. Alfonso Caso, Director of the National Museum, wrote a book on Zapotec hieroglyphic inscriptions.

The Carnegie Institution of Washington, the Mexican Government, and other scientific institutions have been very much interested and have done a great deal



Courtesy of Dr. Daniel F. R. de la Borbolla.

THE NORTH PLATFORM IN THE UPPER PLAZA OF MONTE ALBÁN.

The great stairway, approximately 130 feet in width, is shown in course of restoration. At a level somewhat below the main plaza is Tomb No. 7, wherein were found the treasures that have since attracted world-wide attention.

of work in the Maya region. The cultures of the high plateaus of Mexico have been partially studied, but up to 1930 very little was known of the Zapotec and the Mixtec. The geographical location of these two cultures and the scientific material which was available up to 1930 gave evidence that the Mixtec and Zapotec cultures were probably the link between the great Maya culture and that of the high Mexican plateaus.

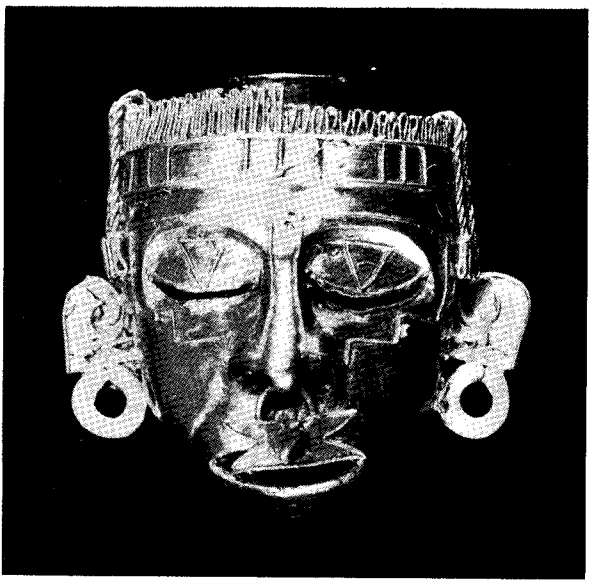
The purpose of the work in Monte Albán was primarily to find hieroglyphic material of the Zapotec people; to find the relations and similarities between the Mixtec and Zapotec cultures; to find the relations and similarities between the cultures of the high plateaus of Mexico and those of the low regions.

Monte Albán is located approximately 200 miles southwest of Mexico City. The archaeological site is on top of a hill five miles south of the modern city of Oaxaca. The work on this site is directed by Dr. Alfonso Caso and members of the staff of the National Museum, and was begun in 1931. The purpose of the exploration in the first season of work was to make a survey of the cemetery, already known to scientists, and to reconstruct two of the most important buildings on Monte Albán. The work began with the exploration and restoration of the main platform in the northern section of the upper part. At the same time a very careful survey of the cemetery was undertaken, and at the beginning of 1932 we were able to explore the first tomb.

It may seem impossible to you that Monte Albán, being a decidedly Zapotec site, should contain among the many tombs that have been explored, one containing objects belonging to the Mixtec culture, as was the case with Tomb No. 7, in which all these relics that we have here today were found. Monte Albán seems to be the boundary between the Zapotec and the Mixtec cultures in the State of Oaxaca. We know that Monte Albán was built by the Zapotec people, but we also know that Monte Albán was invaded several times by the Mixtecs. Even today we find a certain amount of rivalry and feeling between these two groups.

A GOLD MASK.

This small mask, slightly more than 3 inches in height, represents the god Xipetotec, the deity of vegetation and of the jewelers.

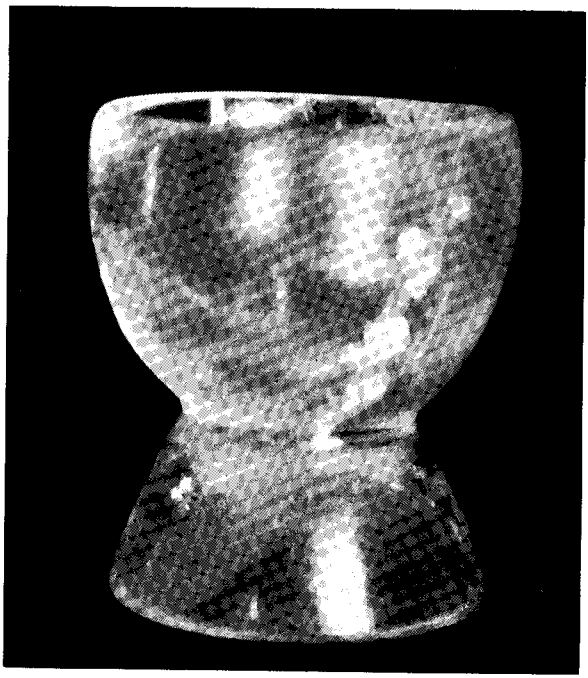


A GOLD BREAST-PLATE.

This pectoral, notable for its fine workmanship as well as for its scientific value, represents a Knight of the Tiger.

Courtesy of Dr. Daniel F. R. de la Borbolla.

Tomb No. 7, where all this collection was found, is a Zapotec tomb. It was built by the Zapotecs, and used by them for a burial. Later on the Mixtecs invaded Monte Albán, took out the Zapotec burial, and placed in it their own. That is the reason why we find these beautiful Mixtec remains in a Zapotec archaeological site. Tomb No. 7 is located on the north slope of the hill of Monte Albán. The tomb is perfectly built with first a roofless vestibule, then a chamber entered from a narrow passage, and finally a larger second chamber. The walls of the tomb were originally covered with Zapotec hieroglyphic writing, fragments of which still remain. These, together with three Zapotec funerary urns and a few crudely made vessels, were the only evidence of the Zapotec burial in the tomb.



Courtesy of Dr. Daniel F. R. de la Borbolla.

A ROCK CRYSTAL GOBLET.

One of the extraordinary objects of the collection is a crystal goblet, about 5½ inches high and 3¼ inches in diameter. It has been estimated that because of the hardness of the material and the primitive methods used in cutting and polishing, the shaping of this goblet may well represent the life work of one or two men.

The explorations on Monte Albán were undertaken under the auspices of the Bureau of Monuments of the Department of Education, with the collaboration of the government of the State of Oaxaca, the Pan American Institute of Geography and History, the National University, and various public-spirited citizens, among whom was, it gives me great pleasure to say here, the late Dwight W. Morrow.

I shall now show you some slides of the tomb and some of the pieces that were found in the Mixtec burial.

In the days that followed, Dr. de la Borbolla and other members of the staff accompanying the exhibit were present to answer the many questions of the ten thousand visitors who passed through the Gallery of Flags.

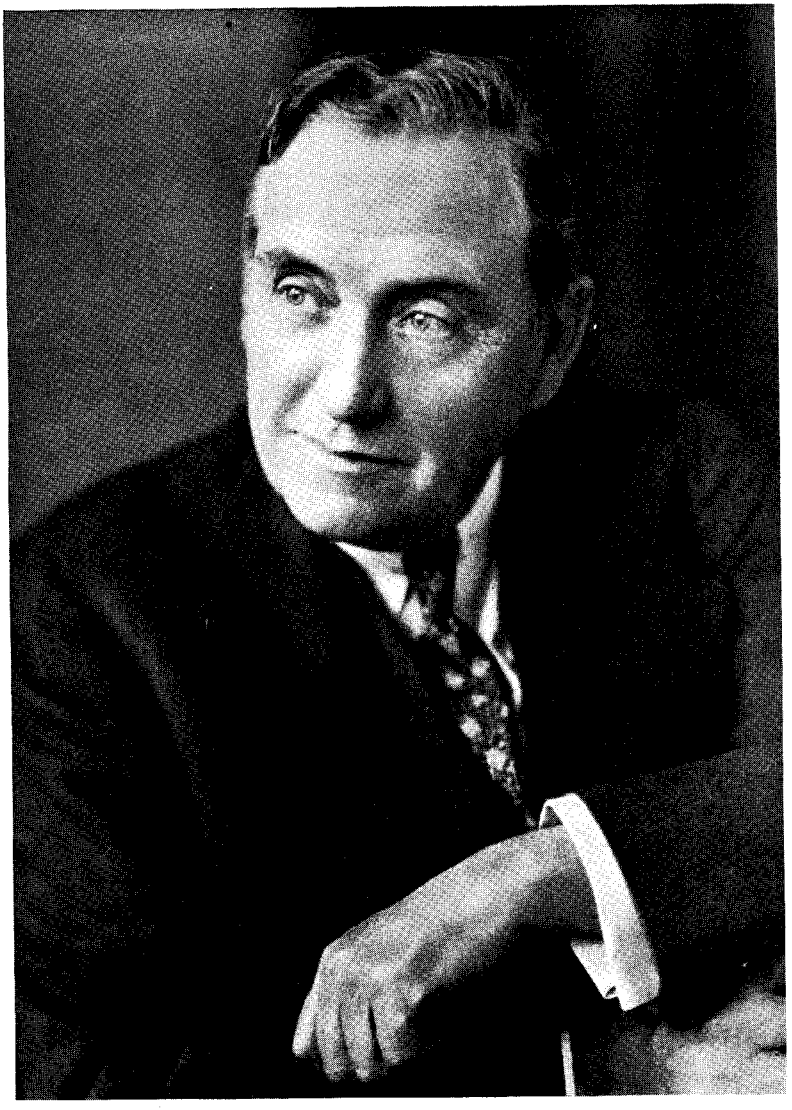
It was in January 1932 that the discovery of these rare objects was made at Monte Albán. The attention of the world was immediately focused on that enigmatic hilltop, and when, a few months later, the rich contents of Tomb No. 7 were displayed in the National Museum in Mexico City, visitors from all parts of Mexico and from foreign countries made pilgrimages to view them.

The Mexican Government, with praiseworthy generosity, gave this year to thousands to whom otherwise the privilege would have been denied, the opportunity to enjoy this valuable testimony to the high development of pre-Colombian civilization, by sending the treasure to the Century of Progress at Chicago. And that still others might also see it, the collection has been exhibited in other parts of the country. After nearly three months in Chicago, it was shown for four days in St. Louis and for three weeks in New York before coming to Washington. In spite of urgent invitations from San Francisco, Dallas, Houston, New Orleans, Philadelphia, Boston, and New York (for a return visit), the treasure left Washington for Mexico to be exhibited for a week at San Antonio before leaving the United States.

Courtesy of Dr. Daniel F. R. de la Borbolla.

CARVED JAGUAR BONES.

It is believed that these elaborately carved jaguar bones were used by priests in auto-sacrificial rites. The original inlays of turquoise which formed the background are, however, no longer in place. The upper of these three bones has, in addition to the eagle heads at each end, the following symbols carved on it, reading from right to left: 1, Crocodile; 2, wind; 3, house; 4, lizard; 5, serpent; 6, death; 7, deer; 8, rabbit; 9 water; 10, dog; 11, monkey; 12, grass; and 13, cane.



Photograph by Harris & Ewing.

FRANKLIN ADAMS.

Mr. Adams, Counselor of the Pan American Union, retires January 1, 1934, after 25 years of service.

A QUARTER CENTURY OF PAN AMERICAN SERVICE

BY the retirement of Mr. Franklin Adams from his position as Counselor of the Pan American Union, this institution loses on January 1, 1934, one of the most valued members of its staff, who through his wide-ranging interests, culture, resourcefulness, geniality, and wit has rendered a unique and devoted service to Pan Americanism.

Mr. Adams, a native of California, first joined the staff of the Pan American Union in 1908 and shortly afterward became chief clerk and editor of the monthly BULLETIN. Under his direction this review, instead of devoting its pages entirely to trade and official reports, enlarged its scope and became more popular in tone. Illustrations were freely used to increase the interest. The English, Spanish, and Portuguese editions of the BULLETIN replaced the single edition containing sections in the several languages. An intensive advertising campaign was carried on in all the American Republics with Mr. Adams' usual enthusiasm, resulting in many new subscriptions.

On December 1, 1919, Mr. Adams left the editor's desk for the position of counselor, the duties of which office he practically created. He had just returned from an extended trip to South America. Untiring have been his efforts to maintain the many friendships made during this and other long journeys, friendships gained through a keen understanding and sincere appreciation of Latin Americans, their history, archeology, art, and progress. In his new capacity his efforts in spreading this understanding and appreciation were again crowned with success. Through his instrumentality over 1,487 women's clubs throughout the United States have taken up the study of different phases of Latin-American culture, ably assisted in their work by colored slides, music, and other educational material lent by the Pan American Union.

Perhaps the work nearest Mr. Adams' heart, however, has been making Latin-American music better known in this country; he has been a real pioneer in this field. The sixty-eight concerts of Pan American music, given at intervals at the Union, are the outcome of his interest in the music of these countries. The growth of these concerts, over a period of nearly ten years, is truly remarkable. From an informal gathering of a few persons in the patio of the Pan

American Union to listen to the broadcasting of Latin-American selections by the Army and Navy Bands, which with the Marine Band have since formed a United Service Orchestra of 110 pieces, the concerts have become a popular feature of the social life of the capital, crowding to capacity the beautiful Hall of the Americas in the winter, or filling the esplanade and Aztec Garden when they are held out-of-doors in the spring or summer. These concerts not only are enjoyed in Washington and throughout the United States but are broadcast by short wave to Latin America. Mr. Adams has been able to acquire some interesting compositions based on indigenous music from these republics, and other modern pieces which had never been performed in this country. Thanks to his efforts, many outstanding musicians of Latin America have taken part in the concerts.

In recognition of his contributions to Pan Americanism, Mr. Adams received from the Government of Cuba the Order of Céspedes, and more recently the Chilean Government conferred on him the Orden al Mérito.

At its meeting on November 1, 1933, the Governing Board of the Pan American Union approved the following resolution expressing appreciation of his years of faithful and fruitful service:

Whereas the Counselor of the Pan American Union, Mr. Franklin Adams, will retire from active service on January 1, and

Whereas during the twenty-five years that he has been connected with the Pan American Union, Mr. Adams has contributed much to the furtherance of the purposes for which the organization was established,

The Governing Board of the Pan American Union—

Resolves to express to Mr. Adams the deep appreciation of the Board on the occasion of his retirement from the Union.

In transmitting this resolution to Mr. Adams, Dr. L. S. Rowe, Director General of the Pan American Union, wrote:

I take pleasure in sending you herewith a copy of the resolution adopted by the Governing Board at the session held yesterday afternoon.

At the same time permit me to express a personal word of appreciation for the admirable services that you have rendered during the many years that you have been connected with the Pan American Union. You have made lasting contributions to the work of the Union and to the Pan American cause in general, and I am certain that the fruits of your efforts will be realized for many years to come.

Notwithstanding your approaching retirement from active service I know that you will continue your interest in the Pan American movement and in the work of the Union, and I sincerely hope that from time to time I may receive the benefit of your advice and suggestions.

I am certain that I voice the sentiment of each and every member of the Governing Board as well as of the entire staff of the Pan American Union, when I express the hope that the years to come may have much happiness in store for you.

THE NEW PERUVIAN PAINTING

By Carlos Raygada

THE traditional cultivation of the decorative arts was a distinguishing feature of the Incan and pre-Incan civilizations. These arts were developed to such a degree that their abundant products, especially ceramics and textiles, successfully bear comparison with the finest works of the ancient Egyptians; consider, among the wealth of examples extant, the remarkable textiles discovered in the most recent excavations of the necropolis at Parakas. And ancient Incan art has aesthetic reverberations in present-day Peruvian painting.

It is a far cry across the centuries. The careful observer will note a disproportionate difference between the almost legendary accomplishments of the Incas and the mediocre works of the viceregal period. The explanation is simple: The conquest marked the end of a great art, which had reached its maximum development and begun to decay; the social phenomenon resulting from the Spanish invasion created new forms of expression which, peculiar to the early years of the mingling of races, could be fixed only after the gropings natural to any nascent art.

Colonial painting was strongly influenced by its surroundings. Although those who practiced it attempted to express contemporary beauty on their canvases and to record the rich and colorful apparel and other picturesque aspects of the formation and evolution of society during the time in which a new nation was beginning to take shape, colonial painting was never Peruvian in a genuine and indigenous sense. It was, rather, an artificial foreign overlay; in other words, it was merely European painting aware of new and attractive exotic models with which to satisfy its insatiable voracity, painting transported across the Atlantic to teach its technical marvels to the Indians subdued by the conquest. New horizons were opened to local craftsmen, to whom the palette and brush were, no doubt, instruments as surprising as the first European violin was to the native players of the traditional *quena*, or Indian flute. The conquistadors thus disclosed to the astonished eyes and ears of our native artists a new world of pictorial and musical beauty, one capable of extensive production. And this happened to those who were, as far as the Spaniards were concerned, the "New World."

In this manner we, the conquered, were in turn the conquerors; in exchange for the gold of the Indies we became the masters of a good share of the more valuable and imperishable wealth of occidental

culture. Thus the Peruvian Indians added European technique to their creative ability and originated new forms of aesthetic expression. Thus a hybrid school of painting was created, and musical and architectural hybrids were developed. As Uriel García remarks in his excellent book *El nuevo Indio:* "The spiritual violin of Stradivarius, the mystic harp of the Psalms of David, were transmuted into village minstrels who, hidden in mesitzo centers, became the media of vernacular creation." In like manner, palettes and brushes, products of European civilization, came also to supply the Indian's need for expression. And such was the power of these implements that, after taking out their South American citizenship papers, they created the Peruvian art that flowered in colonial times and disappeared about the middle of the nineteenth century. This was displaced by the occidentalism of the brilliant Peruvian artists Laso, Merino, Montero, Bacaflor, Hernández, and others, but it reappeared victorious and with well-defined characteristics at the beginning of the second decade of the twentieth century. In its new expression it is known as the Neo-Peruvian School, the authentic reincarnation of the indigenous art of our forefathers. As its head is José Sabogal, vigorous and calm; the school also includes other present day Peruvian painters, whom we shall call, because of their aesthetic tastes and spiritual unrest, the Peruvian artists of the twentieth century.

But before we discuss them, let us study their predecessors, the artists of the nineteenth century, and thus obtain a better estimate of the values represented by the present school. In the first place, it should be clearly understood that there is a vast difference between "Peruvian painting," that is, Neo-Peruvian, which is the subject of this study, and the painting of the universal school done by Peruvian artists. Yet it should be recognized that Neo-Peruvian painting, as is generally true of all nationalist painting, is daily gaining universal characteristics, simply because the sentiments which it tries to emphasize are essential and fundamental, a vital part of any nation and any race. In other words, it is the cry of the earth heard in different lands, the problem, common to all nations, of the assertion of racial personality.

In the field of painting that knows no boundaries, Peru has had and still has artists of great merit and renown. They were the heirs of the creative powers of the Incas on the one hand, and of the pictorial qualities of Spanish painting on the other. Such a fusion of ancestral tendencies could not help finding expression and acquiring vigorous intensity in some few privileged temperaments.

Yet it is curious to note that, in spite of the influence of the land itself, in spite of the natural devotion of the individual to his own surroundings, his racial antecedents, and the history of his own people, the urge of aesthetic emotion should have tended to express itself

THE NATIONAL SCHOOL OF FINE ARTS, LIMA.

This school, established in 1919, has influenced the trend of Peruvian art and contributes much to the advancement of nationalist painting. The building dates from colonial times.

in artistic creativeness dealing not with Peruvian subjects, but rather with foreign motifs. This was the case with our great nineteenth century painters, who showed marked preference for subjects universal in character, considering local or national themes fit only for pastimes.

Ignacio Merino, who was born in Piura in 1817 and died in Paris in 1876, was one of the most notable artists of his time. He was the pupil of such eminent painters as Delaroche and Monvoisin; studying in a period in which romanticism was seeking its inspiration in historical paintings, he identified himself with that school. The fact that his imagination delighted in evoking scenes of European chivalry kept him from being attracted by the past of his own country. He had no special interest in either the Inca Empire or colonial times, yet when he returned to his native land he was fascinated by the charm of his surroundings. He spent much time in making numberless notes, oil sketches, and even finished pictures—never of great importance in his own estimation—of the coquettish charm of the *tapadas*, or veiled ladies, the baroque streets of Lima, and other local sights.

More Peruvian in his tastes was Francisco Laso (1823–1869), a writer and painter; a native of Lima, he was a pupil of Merino and later, in Europe, of Glayre. His masterpiece, which shows unquestionable genius, was his moving conception of Santa Rosa de Lima which, with other paintings by him and by other Peruvian

artists, hangs in the Pinacoteca Merino. The Indians whom Laso painted are greatly idealized and stylized by the natural elegance of his brush; but they prove that themes peculiar to his native land did interest this intelligent, refined, and spiritual artist.

Luis Montero, also a native of Piura (1826–1868), was another pupil of Merino; like Laso and his master, he was captivated by European aesthetics. His masterpiece, however, took its subject from Peruvian history; it represents the funeral of Atahualpa. This huge painting has, through its powerful evocation of a dramatic moment of the conquest, impressed several generations of Peruvians who have seen it in one of the inadequate rooms of the National Museum. The moving death scene of the last of the Incas is depicted on a canvas crowded with historical detail whose realism is not entirely exempt from the theatrical.

"VARÁYOC" (INDIAN MAYOR), BY JOSÉ SABOGAL.

Beside these men whose names are now part of the history of nineteenth century Peruvian painting we should place three great representative figures whose work is linked both with that period and with the present. These include the illustrious Carlos Bacaflor, at present ranked among the greatest of portrait painters, although his work, which enjoys a reputation in the artistic centers of Europe and the United States is almost entirely unknown in Peru; Daniel Hernández, winner of various medals and declared *hors concours* in Paris, at the end of the nineteenth century identified with the artistic life in Paris and Rome, a *genre* painter, landscape artist, portrait painter, and excellent teacher, who founded and directed until his death (October 1932) the National School of Fine Arts in Lima; and finally, the landscape painter Enrique Domingo Barreda, an admirable artist and one of the distinguished figures of contemporary art, whose reputation has been enhanced by the purchase of some of his works by the government of France for the Luxembourg Museum in Paris.

In this rapid survey only the principal Peruvian artists in the universal school of painting have been considered. But there were others, and we have the able expression of the effort and enthusiasm of a

group of praiseworthy artists, some notable for the excellence of the technique which they mastered, others for spiritual qualities, still others for their influence on the general culture of their period: Alberto Lynch, a painter of artistocratic women; Federico del Campo, who loved Venetian canals; Abelardo Álvarez Calderón, a painter of portraits and of fanciful subjects; Luis Astete y Concha, another portrait painter; Teófilo Castillo, painter of colonial scenes and landscapes; and Juan Lepiani, who depicted passages in our national history. Of all these, the only one still living is Alberto Lynch, at present in Europe; he has received many of those honors indicative of the degree of official esteem which an artist has attained in the great cultural centers, but his name and work are almost unknown in Peru. The same thing has happened in the case of del Campo, the painter of Venetian scenes. Álvarez Calderón, Astete, and Castillo were much more deeply rooted in their native land, especially Castillo, who was one of the first to evince any interest in Indians as individuals, in the Peruvian landscape, and in those scenes of colonial life of which he was so fond. Castillo also distinguished himself by his courageous and learned criticism, in which he stressed many points dealing with artistic nationalism, approving or discussing conditions and reputations with passionate vehemence, a fact which did not prevent him from being generous and encouraging. Yet Lepiani, who died only recently in Italy, and who had neither the artistic perception of Álvarez Calderón nor the pictorial sense of Astete, and who never displayed the intellectual dissatisfaction of Castillo, immortalized his name by enshrining it in the soul of the nation with his many historical paintings, especially his impressive scenes from the War of the Pacific, exact in every detail and not without the moving quality of the genre.

Except, then, in the isolated cases of Castillo and Lepiani who, after all, did not make important contributions to Peruvian art—the former because he did not persist long enough to achieve unity of expression, and the latter because he did no more than depict historical anecdotes conventionally drawn and of little aesthetic merit—none of this group of painters had any connection with the nationalist movement. Peruvian art, as such, owes nothing to them—a fact which does not prevent, of course, appreciation of what they accomplished in other fields.

PICTORIAL NATIONALISM: NEO-PERUVIAN PAINTING

If it is indeed true that Peruvianism in painting began, as we have said, with the early sketches of Merino, and continued with the contributions of Laso, it was really only at the beginning of this century that a systematic eagerness to create and sustain a vernacular

"FIESTA HUANCA", A WOOD CUT BY JOSÉ SABOGAL.

art began to take form, especially in music and in painting. It was a twinge of the nationalist conscience, an awakening to the appreciation of the beauties of our own country, taking as the main point of departure the Peruvian sierra; it emanated principally from Cuzco, Arequipa, and Cajamarca, which have given us the most outstanding values of neo-Peruvian painting.

This nationalist current now has a definite orientation and is productive; but in its first years it had the instability usual in all beginnings. And in both branches, it suffered the inevitable consequences of groping, empiricism, and improvisation. While some musicians innocently believed (and even today many still continue to think so) that musical nationalism consists in collecting folklore motifs, such as are found in popular festivals, in order to combine them later in an insipid pseudo harmony with a completely senseless accompaniment, certain "Incan" painters, as innocent as their musical brethren, devoted themselves to the most obvious mimicry of archaeological themes. They religiously copied ornamental motifs from the ceramics made by their forebears of Tahuantinsuyo and applied these copies—not without adulterating them with unconscious aesthetic irresponsibility—to their paintings. The result had no more artistic

value than did the music of their confrères. While the painters, full of vanity, exhibited "a real Nazca decoration", the musicians were playing, with ill-concealed pride, "a pure Aimara motif"—the reality and the purity deserving, of course, only the honor of doubt—both painting and music being destined at best to be cataloged in archaeological archives like documents or *huacos* (ceramics taken from ancient Indian sepulchres).

There were a few who had true vision, a real appreciation of what nationalism in music and in painting really meant. Who was the first to express it, chronologically speaking, cannot be said with any certainty, but it is possible to point out the foremost in resolution and accomplishment, the artist whose valiant and decisive suggestions were full of that vital loyalty which is so becoming in the artist of today. That was José Sabogal, born in 1888 in the Province of Cajabamba, Department of Cajamarca, in the northern mountains of Peru.

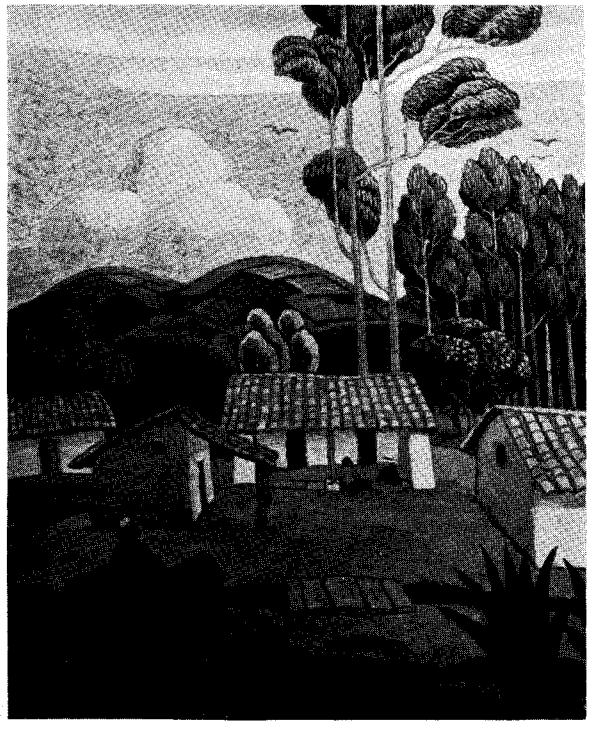
Neither the fascinating warmth and charm of Spanish color, nor the powerful magnet of the cultural traditions of Rome, could alter Sabogal's preference for Peruvian subjects. He traveled through Europe with impunity, and from Europe he took what he wanted, not what Europe imposes on the weak. With the same ease he managed to emerge unscathed from the cosmopolitan mercantilism of Buenos Aires, as he had also escaped from the allure of African landscapes. He went to Mexico and there became a friend of Diego Rivera and José Clemente Orozco, the leading proponents of the revolutionary movement of 1922. Sabogal joined the belligerent element of the art that was emerging triumphant, and experienced the upheavals of a nation which had learned how to rid itself resolutely of all borrowings in order to display what was its own with the indomitable fierceness of native pride. There is no doubt but that it was in Mexico that Sabogal caught his clearest vision of Peru. So he returned home, to his native land. There he found waiting for him sacerdotal *varáyocs* (Indian mayors), timid spinners, dignified *amautas* (spiritual leaders or teachers) and odious *gamonales* (Indian caciques or bosses), the patient and elegant llamas, with great wide-open eyes, the sinuous and silent panther, the hardy, erect cactus—in brief, the sum total of elements and motifs of his own country, which were shaking themselves free from the immutability in which the thousand-year-old stylization of the ancient ceramists had imprisoned them, to surrender to the vigorous fecundity of this re-creator of the beauties of the race.

Thus Sabogal rediscovered the Indian.

If before him other Peruvian painters and a few foreigners had become interested in the Indian as an exotic and decorative phenomenon, no one—not even Laso, with all his ability—had been able really to see him, much less to penetrate his mind and comprehend him with

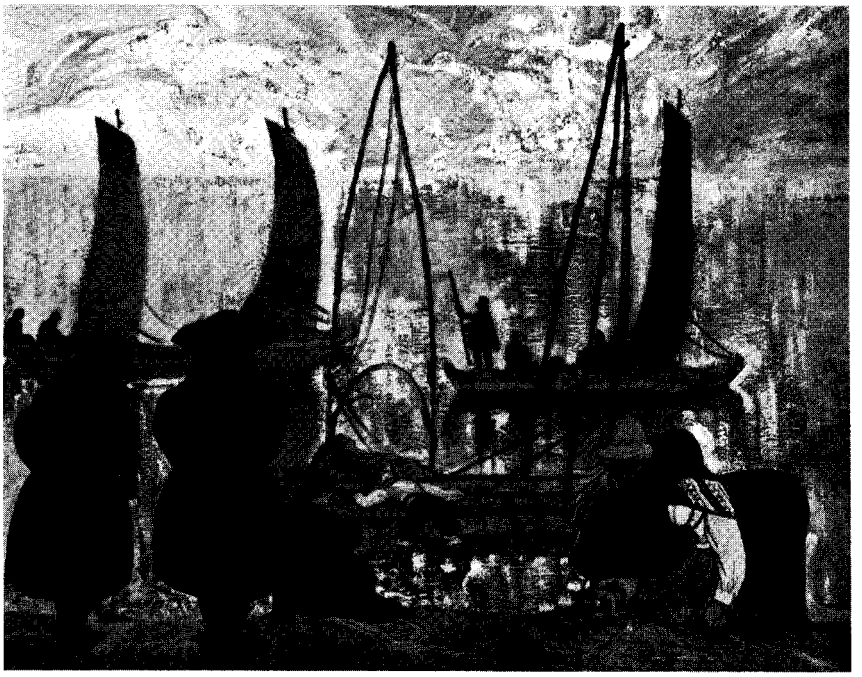
so sure an understanding; no one, in our personal opinion, had made the psychological exploration which Sabogal accomplished so ably.

Since then, it has been possible to speak of a new school of Peruvian painting, because Sabogal discovered, in all its amplitude, a pictorial world whose shores had hardly been glimpsed, indicated the best route for the conquest of that practically unexplored world, and ended by determining a new technique, a distinct manner of seeing the Indian motif and transferring it to canvas or woodblock—in oil painting or xylograph.



"TWILIGHT IN NAMORA, CAJAMARCA", BY CAMILO BLAS.

Of what did these innovations consist? Simply of two interrelated contributions: the presentation of a hitherto undeveloped concept and the application of a technique *ad hoc*. The native rudeness of the Indian could not be expressed with the exquisite brush of a Watteau or with the devotion to detail of an Italian miniaturist; a new method was necessary, one uniting vigor and simplicity without altering the genuine rhythm of such motifs or attenuating their strong chromatic values. Sabogal found a technique without difficulty, but even before that he had also gained, as the basis for his nationalist standard, a special vision of the Indian, of his countryside, customs, and the other elements making up the sum total of his life, of all that which, in short, constitutes the aggregate of beings, objects, and aspects



"EVENING ON LAKE TITICACA", BY JORGE VINATEA REINOSO.

which unite to form the physiognomy of a people. Sabogal, according to his own statement, was the first to be dazzled by the exuberance of themes that his country offered.

And he felt the importance of the moment.

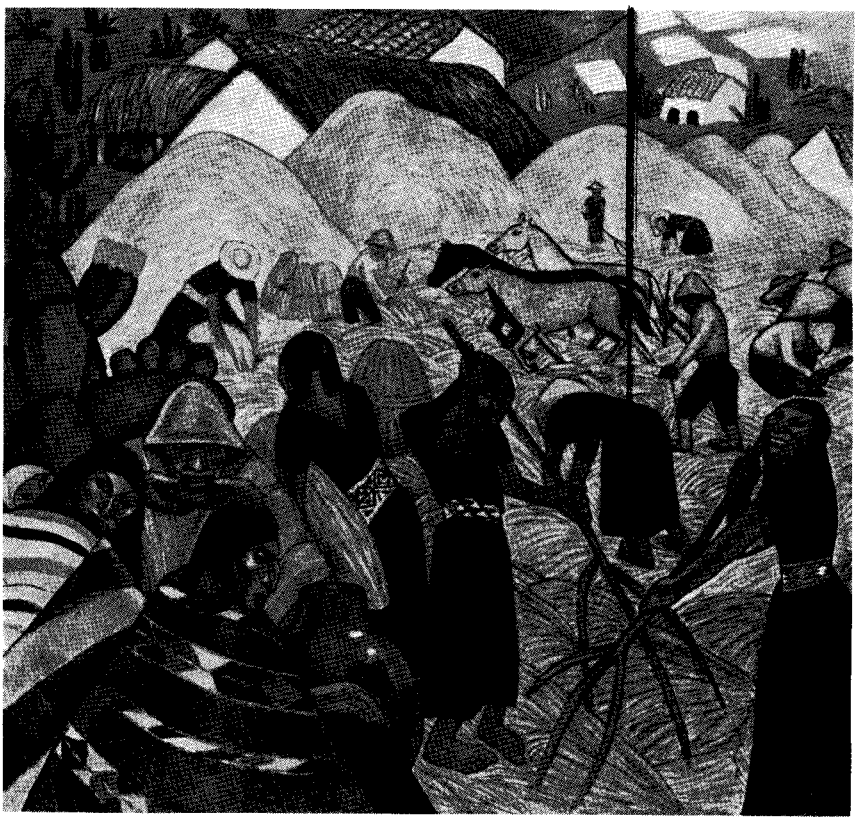
Once he had set to work, he included in his field of vision the vast panorama of the entire country, and succeeded soon in describing it and reflecting it so admirably that the best textbook on geography could not have done it better. "But, first of all, the Peruvianism of Sabogal's art is not due to the immensity of its scope. His Peruvianism is not merely enumerative and superficial, it is essential and penetrating. It exists not only in subject but also in intrinsic value. And the fact is that, of all the attempts made 'in trying to express ourselves', the work of Sabogal is perhaps the most successful and definitive, even taking into account what has been accomplished in literature and in music." (Jorge Basadre, *Perú: Problema y Posibilidad,* Rosay edit., Lima, 1931.)

In Sabogal's art there is a certain primitive melody which might be called his basic rhythm. But it is not the hypocritical primitiveness of the theatrical and absurd Pre-Raphaelites of the twentieth century, but a legitimate one, perfectly in harmony with the vital simplicity of his village models. It is a paradoxical modernistic primitiveness,

including a synthetic and planiform vision of values, relieved principally by the use of color, and giving only secondary importance to the classic preoccupation with line and the kindred interest in academic correctness. In other words, Ingres-like beauty is brusquely replaced by the dynamic dramatic quality of Cézanne-like synthesis. And, apart from form as such, there is a deliberate, almost primary, interest in emphasizing the essential quality of the object, the landscape, or the individual, a quality considered more important than any external value: it is the predominance of the psychological over the physical, the ever present desire to express the soul of things on canvas. It is intelligent painting, full of vital feeling, which sub-

"FLOWER SELLERS OF LIMA", BY JORGE VINATEA REINOSO.

ordinates pure virtuosity to its own needs, which are principally subjective, but without idealization. This is a very important point, for while Laso, the Peruvianist of the nineteenth century, tried to idealize his subjects, stylizing them with exquisite delicacy, Sabogal presents them in all their rude ugliness—an ugliness often full of pride and arrogance, often paradoxically beautiful—with their own crudeness, with their legitimate heaviness, with the vibrating rhythm of a tremendous calm, capable of being lightened only by the exciting sound of the sensual *huayno* or the dionysiac *kashwa*. And, finally, the diametrical difference separating the two schools may be definitively established by comparing the color feeling of each one: while Laso maintained an elegant but profoundly sad sobriety, made up of



"THRESHING", BY JULIA CODESIDO.

harmonious grays and aristocratic ivories, Sabogal, who, like every good painter, is also capable of feeling the music inherent in the infinite gamut of gray, frequently breaks out with vibrant reds and warm sunburnt earths; his raw yellows make violent purples sparkle and his lyric Veronese green shines more vividly in contrast. Laso painted with an art sweetened by the mystic delicacy of the romantic violins of the Europe of his time; Sabogal stains his canvases in his excitement over the acid stridency of the wailing horn, of that ancestral *pututo* (a musical instrument made of horns) whose notes re-echo from the Andes, to the accompaniment of the tragic howling of the centuries-old *tinya* (a primitive tambor). And thus the *tone* and the *rhythm* of that energetic and intoxicating music has its counterpart in the *color* and the *movement* of Sabogal's pictures.

The appointment of Sabogal as a professor in the National School of Fine Arts was quite extraordinary, considering the absolutely Parisian viewpoint of the director, the renowned master Daniel Hernández, who represented the purest classic tradition. It was

somewhat of a shock for the aged teacher, but his penetrating intelligence was stronger than his scholastic prejudice, and Sabogal was soon cordially sharing with that remarkable old gentleman the task of training those who aspired to a mastery of the palette.

Among such youths was Camilo Blas. He was the first to learn to "see" the way. He developed beside Sabogal without imitating him; that is, he kept his own personality and became, ten years later, the painter that he is today. A wise and penetrating observer, he knew how to find a hitherto untrodden path, and harmonized a new form—not without a certain poetic emotion—of stylizing the mountain landscape with an abnormal insight into figures, which he saw through

"EL CAMBIO DE VARA", BY FRANCISCO GONZÁLEZ GAMARRA.

In this canvas the artist has pictured the induction of a new Indian mayor.

an ironic prism, tinged with deliberation and perversity. If we look back once more at the delicate idealizations by Laso, the contrast between his work and the painting of Camilo Blas is much more striking than that offered by the Indianism of Sabogal. Laso was a lyric romantic, Sabogal is a dynamic realist, Camilo, a mischievous humorist. . . . His art may have an antecedent in the Goya-esque Pancho Fierro, a famous intuitive draftsman of the past century, who was a psychologist and even a sociologist in his own way, and who catalogued the types and customs, the vices and virtues, of the society of his time. Camilo has not tried to do anything like that, but his brush cannot help smiling perversely when describing the

interiors of native drinking places or presenting an Andine composition in which there is always a huge-headed burro, or one of those little horses all ribs, belonging unmistakably to the mountains.

But this should not be interpreted as meaning that romanticism had entirely disappeared: here is the work of the unfortunate Jorge Vinatea Reinoso, the landscape painter of golden light, polychrome lakes, and the reflection of truly enchanting evening skies. This painter from Arequipa, prolific and eager, was a true product of the National School of Fine Arts and, in his own way, a follower of the nationalistic pattern—that pattern without pattern—traced by

"MAID OF TOMAIQUICHUA", BY RICARDO FLÓREZ.

Sabogal. Unfortunately death coveted this young man and bore him away at the age of thirty, when he had just begun to charm us with the grace of his magical brush.

Another strong personality caught up in the Peruvianist current was Julia Codesido. She was already a finished painter when Sabogal began his nationalistic movement, but that did not prevent her from changing her style, for she quickly understood the new tendency and immediately joined the ranks of its supporters. There she sought her own path, which led her directly to mural painting, vigorous and powerful, but none the less animated with grace and harmony, and, above all, full of intelligence and a strong regional character.

Among the other painters who together gave value to the Peruvianist movement, Domingo Pantigoso is outstanding because of his chromatic euphony, as shown in beautiful decorative compositions. Pantigoso is a painter with an appreciation of local environment, who knows how to make the most of the vivid colorings to be found among the Indians.

Ricardo Flórez is also a good landscape painter, whose outstanding characteristic is the cultivation of the chromatic luminosity characteristic of French impressionism. His success is due to his sensitiveness as a colorist rather than to his perception of subjective qualities. The charm of this sensitiveness, the predominant quality in the works of Flórez, is increased by the freshness of spirit and that particular sense of purity which the rural landscape, full of peace and fragrance, contributes to painting.

Francisco González Gamarra, a prolific and hardworking artist of Cuzco, was one of the first to cultivate aboriginal motifs, although he did not belong to Sabogal's circle. His repertory shows his preference for the legendary past, where fantasy may have full sway, and for treating a great variety of types and native costume. But where, to our way of thinking, he has had true artistic success, is in his rich collection of patios, fountains, doorways, little streets, churches, interiors, and landscapes of Cuzco and other regions, all reproduced in fresh and spontaneous watercolors, and also in his excellent etchings, in which he reconstructs sumptuous Inca temples and palaces.

Felipe Cossío del Pomar is an intellectual painter, or, if you prefer, an intellectual who paints. His great variety of themes enables him to win success in quite dissimilar fields, but at the cost of an inevitable diffusion of his personality. His characteristic restlessness is also revealed in his output as a writer, which has won for him a well-deserved success. *Pintura Colonial, Arte y Vida de Pablo Gauguin,* and *Con los Buscadores del Camino* are three works of Cossío which, in their respective fields, combine the special merits of soundness of ideas, spiritual insight, amenity, and elegance of style. The fact that the author of this article knows his Indian paintings only from photographs prevents him from forming a judgment which would perforce be based on partial evidence.

Carlos Quíspez Asín, of Lima, began his studies in the School of Fine Arts there, finishing his education in the Academy of San Fernando in Madrid, and then going to Paris, where he wooed the muses of all the "isms" in vogue. At present, as a reaction against the empty scenographic imagism of decadent modernism, Quíspez has become a mural decorator with frank Americanist tendencies; while his attention has been focused chiefly on regional customs, he is, at the same time, a sure and accomplished portrait painter.

* * *

"CUZCO INDIANS", BY F. COSSÍO DEL POMAR.

To complete this panorama, mention should also be made of the youthful group of painters who, from different parts of the country, maintain the nationalistic fervor with increasing intensity. From Arequipa come the landscape artists Carlos Trujillo Olmedo and Casimiro Cuadros, the genre painter Manuel Alzamora, and the portrait painter Víctor Martínez Málaga. Carlos More and Víctor Valdivia Dávila, from Puno, Francisco Olazo and Manuel Figueroa Aznar from Cuzco, Macedonio de la Torre from Trujillo, and Gonzalo Meza Cuadra from Cajabamba, are all landscape painters.

* * *

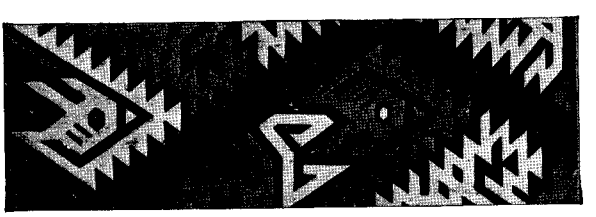
The National School of Fine Arts has played an important role in the evolution of our artistic taste. And it may be said that it has decided the trend, since it is the most influential institution of artistic culture in the entire history of national public instruction. It was founded in 1919, during the second administration of Dr. José Pardo, thanks to the decisive efforts of Enrique Barreda—a painter to whom the country also owes, in large part, the founding of the National Academy of Music—and its accomplishment has been indisputably beneficial. From its conventual halls, the former abode of nuns and prayers, have come artists who today, enrolled in the flourishing

Peruvianist movement, are blazing trails and giving distinction to national art. There Teresa Carvallo, Julia Codesido, Germán Suárez Vértiz, Ricardo Flórez, and Camilo Blas teach drawing and painting; Raúl Pro, sculpture; Dr. Guillermo Salinas Cossío, history of art; Dr. Raúl Rebagliatti, anatomy; and Héctor Velarde, architecture. The administration of the school has just been entrusted to José Sabogal; his appointment was, in the opinion of the cultured, an act of intelligence and justice on the part of the present Government.

* * *

We have tried to describe the present state of Peruvian painting, its foremost representatives, and its most important antecedents which, while precise and exact painting, were not art, in the general sense. That explains the omission in this study of other expressions of the national aesthetic restlessness. Reference should also be made to many artists who, without being painters in the generally accepted sense of the word, cultivate the allied arts. There are more than thirty draftsmen, illustrators, poster-painters, decorators, and cartoonists of ability; among these stand out Málaga Grenet, a true master of the pencil, as adaptable in his skill in varied techniques as delicate in his genius; Reynaldo Luza, portrayer of feminine elegance, well-known in Paris and New York; César Moro, the original decadentist, who occasionally interprets creolism in an exaggerated manner, and many others of merit.

In brief, Peru should be satisfied to have an authentic national school of painting. Although the present state of its achievement is very flattering, the future offers a new world of pictorial beauty, not romantic and over-sweet, fragile and temporary, but firm, definite, profound, and imperishable.



THE UNIVERSITY OF CHILE

SOME NEW FEATURES OF UNIVERSITY LIFE

By ENRIQUE L. MARSHALL

Secretary General of the University of Chile

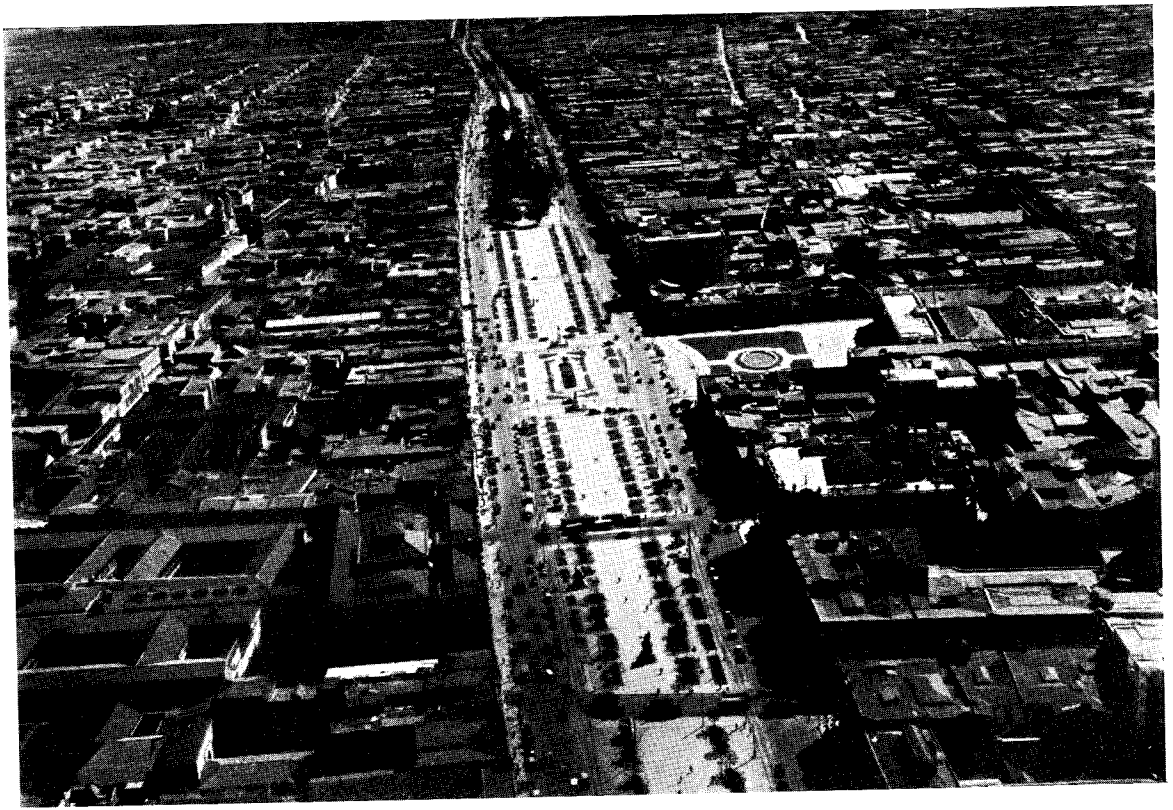
A THOROUGH renovation of ideas as to the obligations of the university to its students and the part which it should play in national life has, in the last three years, put emphasis on functions which, until a short time ago, were given only secondary consideration. In order to direct these new phases of university life, the Department of Student Welfare was created; a new impulse was given to the expansion of cultural and artistic activities by the establishment of a special section; and the university press was established, thus permitting a great increase in the number of scientific publications. At the same time, it was recognized that agricultural studies should be planned with more attention to recent technical advance. To satisfy this need, the Corporation acquired a farm a few miles outside Santiago, where it is at present installing its agricultural training courses. The students in the practice school will therefore be trained in an agricultural environment which will afford them an opportunity of understanding not only the technical aspects of their profession, but also the economic conditions involved in farming. The students of the Schools of Agriculture and Veterinary Science will have at their disposal more adequate facilities for experimentation and professional training than they now enjoy in the limited range heretofore available at the Normal Farm [1] in Santiago.

While busy with these innovations in university life, the authorities are trying to find some way of ending the friction between professors and students which has constantly recurred during the last thirty years and has been intensified since the revolution of July 1931.

So it is evident that, although the greatest problem of the university has not yet been solved, the authorities have made an effort, in spite of the great difficulties of this trying period, to broaden university life in the directions indicated. A brief summary of the aims and results of these efforts follows.

No tuition charge was made until a few years ago, and the officials considered that the university had fulfilled its mission if, through the different schools, it imparted knowledge and prepared for professional life. This idea has been completely abandoned. The university

[1] A tract with about a hundred acres under cultivation situated inside the city limits.



Courtesy of "Chile."

THE AVENIDA DE LAS DELICIAS, SANTIAGO, CHILE.

Along this splendid boulevard which traverses the city for a distance of 3 miles or more are some of Santiago's finest buildings, including the National University.

THE UNIVERSITY OF CHILE, SANTIAGO.

requires a matriculation fee from its students, although it exempts a varying percentage of those of limited means who are especially gifted. On the other hand, the Department of Student Welfare gives grants of money to honor students; offers dental, medical, and surgical services free of charge or at a very low rate in either its dental clinics or the hospital connected with the university; promotes sports and athletics; subsidizes both organizations of intellectual and artistic interests and purely social ones; and helps to support several school lunchrooms. Lately it has begun the regular publication of lectures given by some of the professors in their courses; it is studying the organization of a self-help bureau for students; and it is preparing to apply the new medical service regulations, based on the principles of preventive medicine, which will go into effect in 1934.

The tremendous importance of the services of the Student Welfare Department may be better appreciated if it is realized that the larger part of the student body of the university, numbering about five thousand, comes from families of limited means, and that more than fifty percent of them are young men and women from the Provinces who have made great sacrifices to come to Santiago. The living conditions of many are far from satisfactory; as time goes on it will be necessary to face squarely the question of dormitories for students.

The university has always played a quiet but fruitful role, laying equal stress on advanced studies, scientific research, and the diffusion of culture; but until recent years it had not tried to promote the systematic extension of knowledge beyond the rather narrow limits of the regular courses. The Division of Cultural and Artistic Extension,

which carried out a full program of lectures, courses, and symphony concerts during the first semester of 1931, has succeeded in securing as lecturers the cream of the faculty, some intellectuals not connected with the university, and European professors who come annually to Buenos Aires on academic missions. Since then, however, political upheavals and student agitation have prevented the offering of another program as complete and varied, but the success obtained two years ago proved beyond question the value of the organization. The decline of the Chilean peso and the difficulty of obtaining foreign exchange have made it extremely difficult to obtain lecturers from other countries.

During October 1933 the Symphony Orchestra of the Bach Society, under the auspices of the Division of Cultural and Artistic Extension, toured southern Chile to demonstrate new musical tendencies to the Provinces.

The establishment of the university press has done much to stimulate scientific works by Chilean scholars. Ever since its foundation in 1842, the university has published regularly the *Boletín de Informaciones Administrativas* and *Los Anales*, in whose tables of contents are to be found accounts of the most important scientific research done in Chile by professors or other men of science during the last ninety years. From time to time, as its scanty resources have permitted, the university has published various works of outstanding merit.

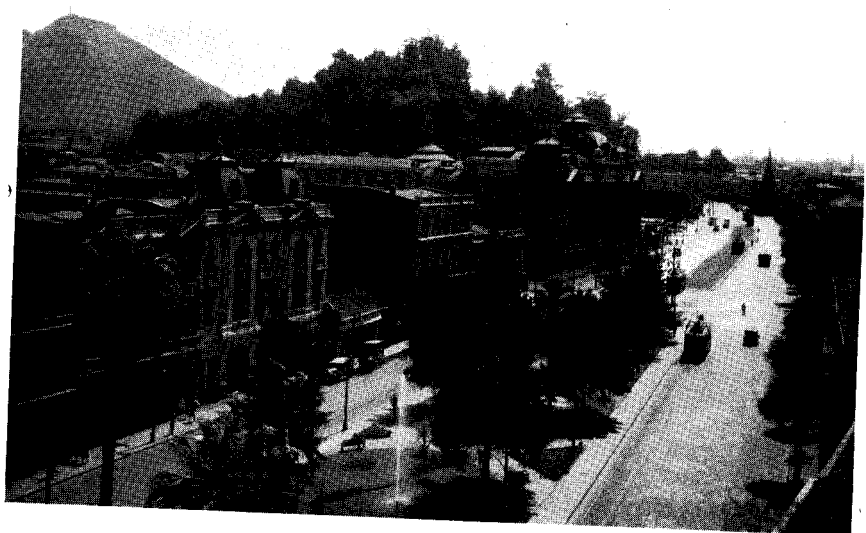
Recently, as a consequence of the fact that the university has acquired its own press, two noteworthy projects have been formulated.

Los Anales has been revised; now, instead of publishing technical studies intended for specialists only, it includes in its table of contents articles or studies dealing with all kinds of subjects written to appeal to any cultured reader. Bibliographic and bio-bibliographic sections have been added, as well as one summarizing the cultural and scientific activities of the schools and other institutes or scientific bodies of which the university is composed.

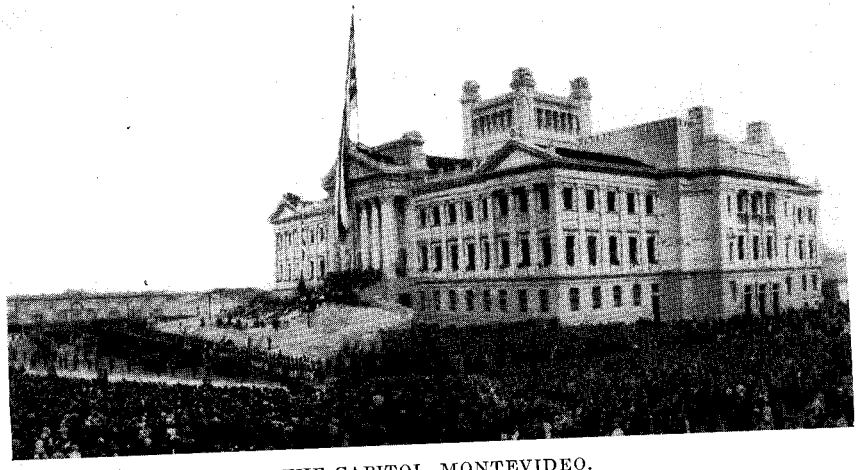
The works excluded from the review are grouped according to subject and published in independent supplements; these are the inception of future annals, to be issued by the different schools. The School of Biology and Medical Sciences expects shortly to begin the publication of its own.

Moreover, the university publishes at its own expense every scientific work written in Chile which a committee of professors of the school teaching that subject considers worthy of such distinction. Thus books are made available which, because of their specialized character, would not readily find a publisher in countries like Chile, where the population is small and the number of readers of such works naturally limited.

It has seemed opportune to give publicity to these projects, whose complete realization still remains a goal for the future, for they prove how, in spite of political disturbances and student agitation, the professors who in their capacity as rectors or members of the university council have assumed its administration in this period of restlessness and confusion have not failed in their duty of gradually increasing its usefulness. While the debate on university reform is going on in the attempt to find the best solution of the problem whose periodical crises have for some years marred the tranquillity of academic life, the authorities are trying to strengthen definitely and dispassionately the social, cultural, and scientific activities which are the essence of the Corporation.



SANTA LUCIA HILL, SANTIAGO

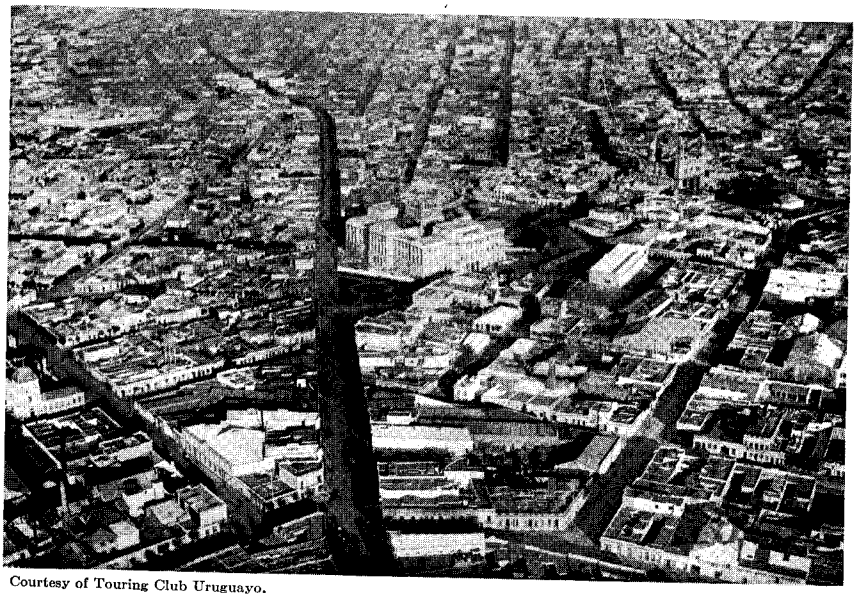


THE CAPITOL, MONTEVIDEO.

The handsome capitol will be the scene of the meeting of the Seventh International Conference of American States.

PART OF THE BUSINESS SECTION.

This air view shows a part of one of the numerous plazas as well as some of the buildings of the skyscraper type which have been erected in recent years.



Courtesy of Touring Club Uruguayo.

MONTEVIDEO FROM THE AIR.

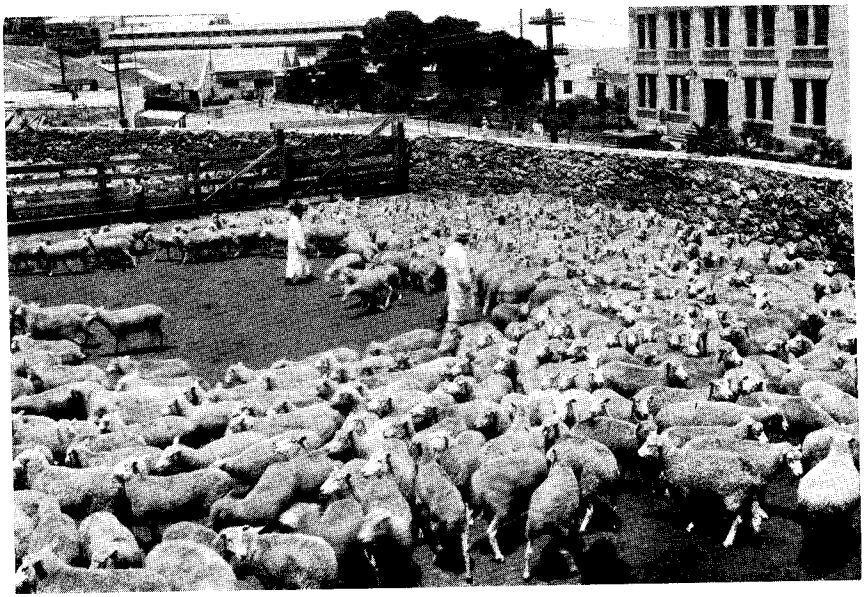
The history of Montevideo since its founding in 1726 has been closely linked with that of the country. Today the Uruguyan capital is a modern and progressive metropolis of 658,000 inhabitants. Upper: A portion of the harbor. Through this port pass at least three-fourths of the commerce of the nation. Lower: The southwest section of the city. Extending upward from the center foreground is the wide Avenida Agraciada, and in the center the capitol.

MONUMENT TO GENERAL JOSÉ ARTIGAS.

The hero of the nation's struggle for liberty, which was achieved in 1825, is honored by a heroic monument in Plaza Independencia.

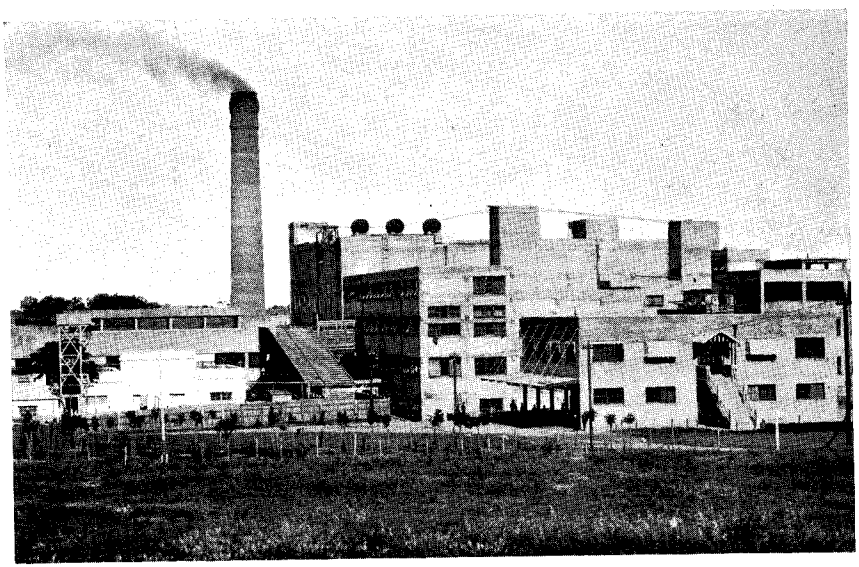
TWO OF MONTEVIDEO'S HOTELS.

Adjoining Montevideo and connected with it by a splendid waterfront driveway, the Rambla Wilson, are several beautiful seaside resorts of great popularity during the summer months. Upper: The Parque Hotel, municipally owned and operated, at Ramírez Beach. Lower: The Hotel Carrasco on the beach of the same name.



SHEEP AT A SLAUGHTER HOUSE IN MONTEVIDEO.

Uruguay is essentially a pastoral country, sheep and their products being the chief exports.



A MEAT-PACKING PLANT NEAR MONTEVIDEO.

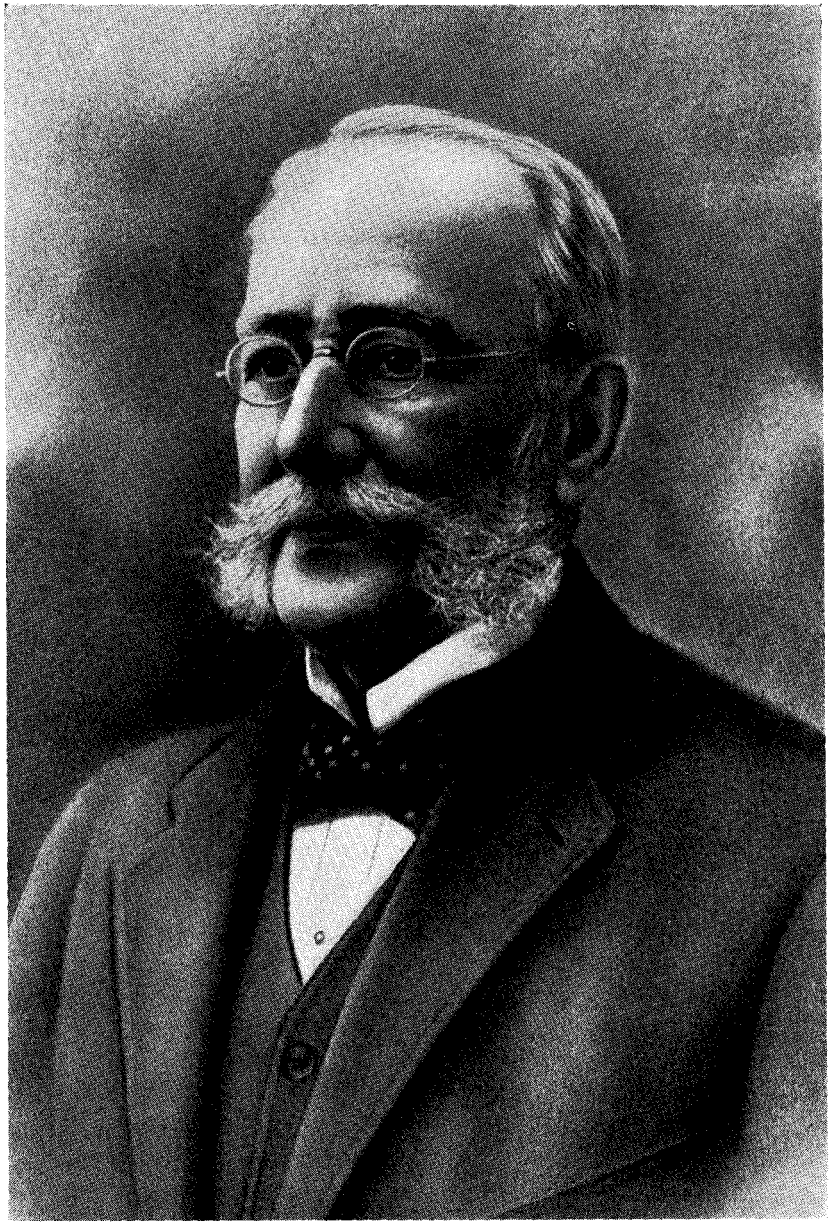
The principal industries of Uruguay are those related to livestock. Meats and extracts alone figured in the exports of 1932 to the extent of more than 18,000,000 pesos.

A ROAD IN URUGUAY.

Good roads leading from the capital make other sections of the country easily accessible by automobile.

DOCKS AT MONTEVIDEO.

More than thirty millions of dollars have been expended in late years to improve the port and facilitate the handling of cargo.



Courtesy of the Pan American Sanitary Bureau.

CARLOS J. FINLAY.

December 3, 1933, marks the first centenary of the birth of the eminent Cuban physician and scientist to whom the world is indebted for the correct theory of the transmission of yellow fever.

FINLAY, SANITARY PIONEER AND BENEFACTOR OF MANKIND

DECEMBER 3, 1833—AUGUST 20, 1915

By ARÍSTIDES A. MOLL, Ph.D.
Scientific Editor, Pun *American* Sanitary Bureau

NO more typical Cuban city may be found than the old Puerto Príncipe, now called Camagüey, set in a land of plenty with green canefields, fat cattle, and virgin forests. It has produced men of note, such as the two most famous Agramontes, Ignacio, the hero, and Rristides, the scientist. The same city prides itself on being also the place where Juan Carlos[1] Finlay Barrés was born on a ddy, December 3, 1833, writ large in the annals of American medicine. As the surnames suggest, through his veins ran the same two bloods, Scotch and French, blended in another prominent son of the West Indies, no less a person than Alexander Hamilton, and in many another great American. Guiteras, the loyal disciple from whose sketch so many of these data are borrowed, has stressed the bappy combination of the best qualities of the two races in the most noted of Cuban investigators: the persistence, common sense, logical mind, and fondness for abstractions of Hunter's countrymen, and the lively imagination, pleasing ways and politeness of Pasteur's fellow citizens, plus that longing for glory which, ludicrous in mediocrities, lends new brilliance to real greatness, This fails to take into account certain virtues held in common by both nationalities, among them an adventurous spirit and inquiring bent, and some gifts often shown by men of mark everywhere: unselfishness, passion for study, devotion to mankind, high ideals, kindness, and the religion of duty.

In gloomy days indeed Finlay came into this world. A few years before, one of the most frightful scourges of mankind, Asiatic cholera, had made its appearance first in Europe and then in America, without sparing the West Indies in its career of desolation. A pandemic of influenza marched in its wake.

However, the plague from the Ganges remained a mere bird of passage. On the other hand, the New World tropics had long nursed another disease, equally disastrous. One country after another and generation after generation had seen yellow fever make short work of

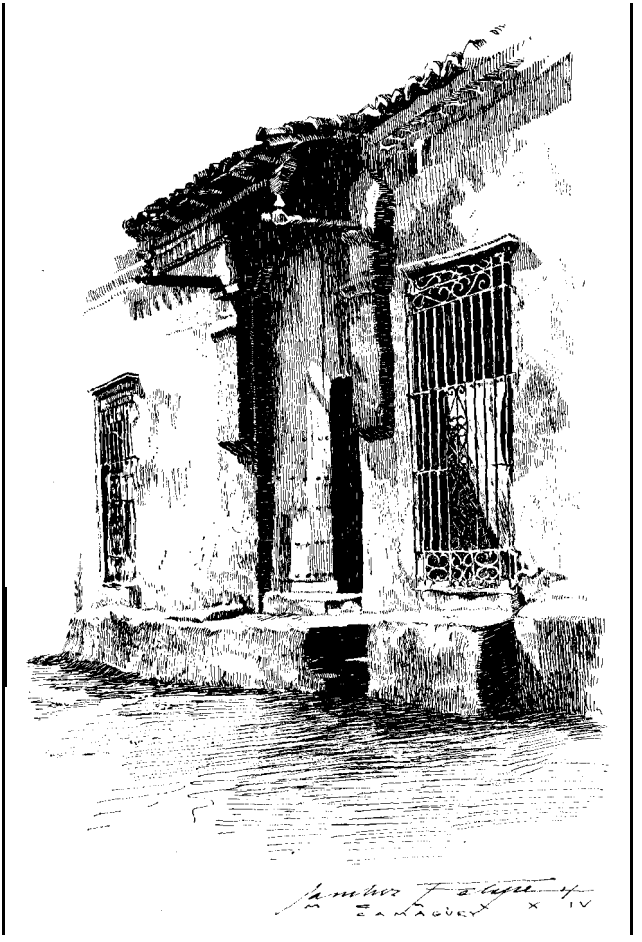
[1] After a certain period iu his life his signature always appears as Carlos Finley, later changed to Carlos J. Finlay, when his son, the present Secretary of Health of Cuba, began to practice medicine.

both distance and people. We may accept either Finlay's interpretntion that the dread *vdmito negro*, as Spaniards used to call the disease, had been present in America since before the discovery, or Carter's correction dating its probable occurrence from not earlier than the eighteenth century and, with a sort of poetical justice, connecting it with the abominable slave trade (smallpox was also introduced into Mexico in Cortés' time by a negro servant). The fact is that practically every land on the western continent saw this menace hovering over its head. Both the Pacific and the Atlantic coasts down to Chile and Argentina felt its grim prossure; this pestilence climbed not only as bigh as São Paulo, but eventually the very sides of the Andes. In Haiti it fod on the French troops and incidentally helped to bring about freedom. In the United States, where it first appenrcd in 1693, it became the terror of the South until the beginning of the twentieth century, reaching on the North as far as Boston and on the West the Mississippi Valley and boyond. In Philadelphia in the oft-described 1793 epidemic and in Galveston in 1867 it decimated the population, while in Nuevo Laredo in Mexico (1903) it attacked half of the people; in Rio de Janeiro it added thousands and thousands to the death rolls; in New Orleans it took 8,000 lives in 1853, and a single epidemic, that of 1877-78, left behind 16,000, dead and 58,000 convalescents, the cost to the country exceeding $100,000,000.

Charles O'Malley in Lover's popular novel was told by Major Monson, "What with the seductions of the coffee plantations, the sugarcane, the monsoons, the brown skins, the rainy season and the yellow fever, most of us settled there. It is very hard to leave the West Indies." Strangely enough, yellow fever may have been the best defense of the Spanish possessions in the New World, as is proved by the results of British expeditions of 1741 against Cartagena and of 1762 against Havana.

Neither could Europe keep its ports altogether free from the disease which, boring its way inland into Spain, caused about 200,000 deaths in half a century and 20,000 in Barcelona in 1822-24. With a death rate varying from 15 to 85 percent, yellow fever was the most serious problem facing the builders of the Panama Canal. When Aspinwall, the contractor for the first railroad, was asked how many lives the work had *cost*, he answered, "One man for each tic, practically all from yellow fever", and of the 86,000 employees of the French company, 52,000 suffered from black vomit and 22,000 died from this disease or malaria,. In 1 Iavana yellow fever had never been quite extinct for 130 years until 1900, destroying 36,000 persons from 1853 to 1900, including 12,000 persons in the one decade 1870 to 1879. It was the specter whose ugly head rose threateningly before the American troops on the very morn of their victory in 1898, even prostrating one third of the Governor Gcncral's staff. Against this plague neither medicine nor empiricism had so far found either remedy or palliation.

Finlay the West Indian, born one hundred years ago, in the very year when Chile and Mexico reorganized their medical schools ; when Unanue, one of the fathers of American medicine, died unaware that he left behind such a worthy successor; when Beaumont carried out his classical experiments on gastric digestion and Charles Darwin was in South America laying the foundations for his epoch-making work; that Cuban was, with genial intuition, to find the solution of the



A HOUSE IN CAMAGÜEY, CUBA.

This is typical of the colonial houses of the natal city of Carlos J. Finlay. The house where he was born stood on the plaza named for the American journalist Charles A. Dana, a Cuban sympathizer and friend of Martí.

perplexing riddle. Just two centuries before, the creator of industrial medicino had been born; three centuries before, the first nocropsy in the Now World had been performed (on a, double monster) in Snnto Domingo.

It is always interesting to stop to consider the training of men of genius. In Finlay's childhood, an aunt came from Edinburgh to teach him his letters; when cloven, the boy was sont to Havre. There

he remained until **1846,** when a nervous trouble compelled his return home and left in his speech traces never to disappear. In 1848 a new trip for study was made to Europe, ending, after visits to England and Germany, with enrollment in a Rouen school until **1851.** Then another disease, this time typhoid, forced him again to go back to Cuba. The next stopping place was to be Philadelphia, where he graduated from the Jefferson Medical College in **1855.** The school was already famous as the *alma mater of* Sims, the surgeon, Brown-Sequard, the endocrinologist, and the two Mitchells, both Finlay's teachers: John Kearsley, among the first in sponsoring the theory of the microbic origin of disease, and his son S. Weir, who reached fame both as a neurologist and as a writer of fiction.

The Finlay family seems to have always had a weak spot for travel and roaming. After two journeys to Lima the newly fledged practitioner finally settled in Havana. Hero ho finally registered his diploma in **1857,** and with the exception of a temporary change to Matanzas and a few short excursions abroad, including his memorable appearance n Washington in 1881, here he stayed, making his home and practicing his profession with somo leaning to ophthalmology.

Ganivet, the Spanish writer, has said that what mnttcrs is to keep the fire burning. In Finlay's mind live coals were never missing. The questions to the fore in his times found him neither indifferent nor deaf, as shown by the bibliography of his works so meritoriously got up by Dr. J. Leroy. There we find noted his discussions of the Cuban climate, acclimatization of Europeans, communicability of tuberculosis, and at a later date, his excursions into philology and mathematics, his thoughts on cosmogony, and finally his effective advice on the prevention of tetanus neonatorum. The onsets of cholera in 1865-68 had served to bring into the open his progressiveness, for he explained the water-borne character of the disease and even in 1865 spoke of pre-existing germs.

In 1898, when the epic struggle for Cuban freedom entered its last phase, the aged patriot promptly offered his services, and yielding to his urgent requests, an old friend, Dr. Sternberg, at the time Surgeon General of the United States Army, assigned him to duty with the American troops besieging Santiago.

All these enterprises are, however, mere asides. Toward the latter part of 1858, when barely 25, and not long out of college, Finlay tackled what was to become his life work, to the benefit of the whole world: the study of yellow fever. He first undertook a research into the alkalinity of the air at Havana, with the naturally disappointing results set forth in his papers of 1865, 1872, 1873, and 1879. In this latter year an American commission created to investigate the cause of yellow fever reached Cuba. It may be guessed that one of the very first to offer **his** cooperation was the native physician who had

been battling for several years with the same problem. The commission had finally to confess defeat. Its searching analysis of the various prevailing theories as to the cause of the disease may perhaps have helped to lead Finlay into new pathways. It also contributed to his suspecting the mosquito, because of his having read in van Tieghem's textbook on botany a reference to the role of the barberry shrub in conveying the fungus causing wheat rust. This radical change in his ideas soon found expression in the declarations before the **1881** Washington conference as to the spread of yellow fever: ". . . three conditions are necessary . . .: **1,** the presence of a previous case within certain limits of time; 2, the presence of a person apt to contract the disease; 3, the presence of an agent entirely independent of both the disease and the patient, in order to convey the disease to a healthy individual." In a distant part of the world that very year another physician was explaining how to obtain pure cultures of pathogenic organisms.

Typical of the man arc the modesty and simplicity surrodnding this momentous statement. In **1882,** the year when Koch discovered the tubcrcle bacillus, Finlay astonished the Havana Academy of Medical, Physical, and Natural Sciences with a specific indictment of the mosquito, his Scotch caution showing in the insertion of the word "liypotlietically". The paper was placed on the table, with no discussion, those present probably deeming it the work of a crank. Here begins the most glorious period of our hero's life: two decades in which, without allowing himself to be discouraged by the half-veiled scorn or jeers of his contemporaries, ho held aloft the doctrine the final proof of which had to wait until the occurrence of an historical conflict.

No comparison may be made with men such as Oliver Wendell Holmes or Cober or Cortezo or King who, perhaps through having too many irons in the fire, after putting forth novel conceptions such as those of the contagiousness of puerperal fever and the role of lice in typhus and of the mosquito in malaria, left to others the task of continuing the work. A parallel might more properly be indulged in with Auenbrugger, whose invention of percussion was rescued from oblivion by Corvisart 37 years afterward; with Mendel, whose discovery of hereditary traits found no recognition until more than three decades later, when restated by Do Vries; and to a lesser extent with Servet, whose account of the circulation of the blood **(1553)** remained buried for several centuries in a theological treatise, Harvey in the meantime (1.628) demonstrating independently and forever its true nature.

It is to bc regretted that Finlay, to a great extent because of unfavorable times and environment, should not have been able to carry to its logical conclusion the work he had so clearly sketched. A great

deal of what others did later he had already tried from the very start, including experimental bites of mosquitoes, even on himself, and also serotherapy.

It is a pity to have to touch on the fact on this occasion, but how ignore it? Attempts have been made to detract from Finlay's glory by bringing into the picture the names of those who either alluded before him to mosquitoes in connection with yellow fever or afterward so completely verified his theory. (Rush in 1793 attributed yellow fever to miasmas from swamps, neglected ditches, etc., and the Philadelphia Academy of Medicine in 1797 called the Governor's attention to the subject,. The abundance of mosquitoes in yellow fever years had been noticed by Rush himself in 1797; by Vaughan in Wilmington in **1802** ; by Crawford in **1805** ; by Wightman in 1833 in St. Augustine; and in 1853 by Wood in Centerville, Beyrenheydt in Biloxi, Miss., Dowler in New Orleans, and Barton in Clinton, La. Blair in British Guiana [1852] stated that the mode of spread of yellow fever suggested insect life, and Greenville Dowell in 1876 reported that the cause was animalicular or fungotic or of the same nature as the Egyptian locusts, stressing the similar effect of heat and cold on yellow fever and mosquitoes and gnats.) It is a fact that Nott had connected (1848) the mosquito and the "Siamese disease", but also speaking of probable insect or animalicule origin, and his indefinite general charges cover various other conditions, including cholera. Beauperthuy, another alleged pioneer (1853), while more concrete, follows a system resembling Nott's, and even though referring to a mosquito with striped legs-it may not oven be the *Aedes aegypti*—it is to exonerate it, and so far is he from understanding the true role of the insect that he makes it go to the swamps in search of the infection.

Coming **now** to those who, treading in Finlay's steps, gained deserved credit, their generous acknowledgment of his priority has long been on record:

W. Reed, J. Carroll, A. Agramonte, and *J.* W. *Lazear*, Preliminary Note, 1900; "Having fsiled to isolate *B. icteroides* either frorn the blood during life or from the blood and organs of cadavers, two courses of procedure in our further investigations appeared to be deserving of attention, viz., **first,** a careful study of the intestinal flora in yellow fever . . . or, secondly, to give our attention to the theory of the propagation of yellow fever by means of the mosquito-a theory first advanced and ingeniously discussed by Dr. Carlos Finlay, of Havana, in 1881. We were influenced to take up the second line of investigation by reason of the well-known facts connected with the epidemiology of this disease, and of course by the brilliant work of Ross and the Italian observers in connection with the theory of the propagation of malaria by the mosquito. We were also much impressed by the valuable observa-

tions made at Orwood and Taylor, Miss., during the year 1898, by Surg. Henry R. Carter, United States Marine Hospital Service."

Maj. ***Walter Reed,*** Address, 1901: "To Dr. Cnrlos J. Finlay, of Havana, must be given, however, full credit for the theory of the propagation of yellow fever by means of the mosquito, which he proposed in a paper read before the Royal Academy in that city at its session on the 14th day of August 1881. From that date to the present time, Finlay has made a number of valuable contributions to the origin and mode of trunsmission and the prevention of yellow fever."

Maj. V. Havard, surgeon, United States Army, chief surgeon, Havana: Report of February 8, 1901: "The announcement long ago

THE DEPARTMENT OF HEALTH AND CHARITY, HABANA.

Occupying the center of the patio is a bust of Finley, the benefactor of mankind, who for 20 years fought to convince the world that yellow fever is transmitted by the bite of a mosquito.

made by Dr. Carlos Finlay, of Havana, thut mosquitoes were the agents of transmission in yellow fever has been verified and scientifically demonstrated by Mnj. Walter Reed, surgeon, United States Army, and his colleagues, in the most conclusive manner."

Maj. ***W.*** *C. Gorgas,* surgeon, chief sanitary officer, Havana, report of March 29, 1902, to Brig. Gen. L. Wood: "The Army Board of which Major Reed was President, having demonstrated in 1900 the mosquito theory of Dr. Finlay. . ."

Maj. ***W.*** C. *Gorgas,* surgeon, chief sanitary officer, report of July 12, 1902, to Brig. Gen. L. Wood: "They took up the theory advanced by Dr. Cnrlos Pinluy, of Havana, in the year 1880 (sic), that the Stegornyia mosquito was the sole means of the transmission of yellow

fever. Dr. Finlay had maintained this theory for some 20 years, and had done considerable experimental work in this direction."

Who then could deny the paternity of the idea? Who dispute the credit, if not denied, at least minimized, when the very enormity of the success amazed the former adversaries or unbelievers? Among them we find some of the very men who did not hesitate in assigning to Manson the lion's share in the remarkable determination by Ross of the role of the mosquito in malaria. Had the 1900 commission confirmed, not Finlay's doctrine but the other subject investigated, namely, Sanarelli's assertions, would any one attribute to its members the glory of having discovered the yellow fever bacillus? Had tho theory turned out to be wrong, would any ownership have been claimed by those verifying it at the last minute and as a final resource? Has Columbus's fame suffered from having a storm cast the Vikings ahead of him on the American mainland; from having most decided misconceptions as to his discovery, and having only on his third trip, almost as if by chance, landed on the *tierra firme* which was to bear an adventurer's name?

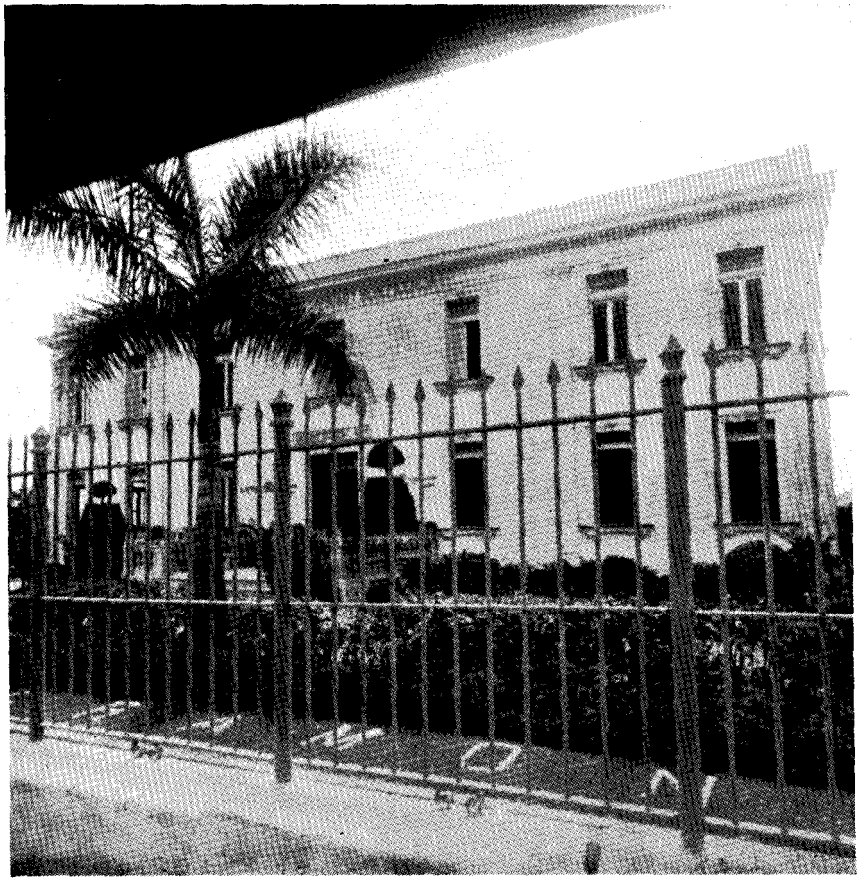
So certain did Finlay feel that the commission was only going to verify his theory that he put into their hands all his data and notes.' From his own laboratory came the eggs used by the commission in hatching the mosquitoes for its experiments, and these, by a strange coincidence, took place in Los Quemados, the hamlet where Finlay himself had carried out his original studies 20 years before.

Let those doubting that the work done after Finlay was mainly confirmation and amplification--most brilliant indeed-recall that Ross, the Finlay of malaria, after preparing for his task and having at his disposal Manson's advice and Laveran's findings which permitted him to look for definite organisms in the body of the mosquito, spent 3 long years before being able to utter the joyful eureka of the scientist who has reached the goal. (Agramonte has told us how, the first experiments of the commission proving a total failure, the theory was going to be discredited again; then Carroll fell sick unexpectedly on August 30, 1900. The same insect was used to infect the next Army volunteer. By another trick of fate, the decisive experiments occurred during the absence of the chief of the commission, in the United States.)

Both fairness and candor compel one to add that the masterly clear-cut report of the 1900 Commission proved the decisive factor in bringing about general acceptation; so far lacking, of the Finlay doctrine, especially after its further confimation by the commissions sent by the Pasteur Institute to Rio (1901) the Liverpool School of Tropical Medicine to Par& (1901), and the United States Public Health and Marine Hospital Service to Veracruz (1902–03), and by such workers as Guiteras in Havana and Ribas in São Paulo. The 1900 Com-

mission carried out its work with mosquitoes hatched from the eggs furnished by Finlay, following his methods of experimentation in *vivo*, but improving on them by taking into consideration Carter's observations as to the length of time separating primary (infecting) and secondary cases of yellow fever. In addition to other volunteers, two members of the Commission offered themselves to the bites of mosquitoes. Of 11 nonimmune persons, bitten by contaminated mosquitoes, the first 9 showed no signs of disease, while the two volunteers (one of them a member of the Commission, Dr. Carroll) bitten subsequently (Aug. 27 and 31), developed the disease. Carroll's infection was brought about by a mosquito which had been fed on 4 cases (2 severe and 2 mild) of yellow fever, and on 1 of the severe cases just 12 days previously. The other patient was bitten by four contaminated mosquitoes, one of them the one which had infected Carroll. Of the 9 negative cases 6 were bitten by mosquitoes feeding on patients from the fifth to the seventh day of the disease, and in the remaining 3 the interval between contamination and biting the volunteer was only from 2 to 6 days. From the work of the Commission the following definite data emerged: That yellow fever cannot be transmitted by contact or association either with persons or articles infected, that insofar as then known, the disease is solely transmitted by the mosquito now called *Aedes aegypti* (other potential vectors were discovered afterwards) which must have bitten a yellow fever patient in the first 3 days of the disease, that it takes the virus about 10 days to develop in the mosquito, and that typical yellow fever develops in nonimmune persons on the fourth or fifth day after being bitten by infected mosquitoes. The campaign against yellow fever was thereafter placed on a solid basis, thus furnishing one of the happiest instances of international cooperation in a field of utmost importance to mankind.

If E'inlay himself could not complete his task, the blame must be largely assigned to inadequate resources and unfavorable environment, and also, even disregarding the question of official support, to the lack of two most precious weapons available to the 1900 Commission: a knowledge of metoxeny (the change of host of certain parasites discovered by Rbilgaard in 1790 and extended by Kiichenmeister in 1851) and of Carter's extrinsic incubation period theory (1898) already observed in West Africa by Ferguson in 1839 and then neglected. The latter fact may have been overlooked by Finlay through his living in a country where yellow fever was endemic and not merely epidemic. These two findings supplemented his own, suggesting the best time to get the patient's blood and to make a mosquito bite with more probabilities of securing an infection. It was not Moses alone who, after leading his people to the Promised Land, could not set foot in it.



THE FINLAY INSTITUTE IN HAVANA.

The Finlay laboratory, under the direction of the Department of Health and Charity, is devoted to research and instruction in public health.

Finlay felt so sure of his facts that he was aiming at preventive inoculation rather than further verification, and in 1900 his series already included 102 cases. His experimental failures derived at least partly from his chivalry. After having promised his volunteers that the inoculations would be essentially harmless, he could not bring himself to try more drastic methods. (It is not so well known that the first experimental inoculations in yollow fever were made in Philadelphia in 1802 by a medical student, Stubbins Firth, on himself and on animals.)

No matter from what angle the subject is studied, the fact remains that Finlay's views proved true; that his pioneer direct experiments, beautifully planned, failed only in details (had he only been able to exchange a few words with Carter in those days!); that the insect he

singled out was the vector of yellow fever; that the antimosquito work so masterfully put into execution by Gorgas had been anticipated by him; that he was the first to point out a specific mosquito, among hundreds, as the carrier of a specific disease, thus becoming, with Manson, the pioneer in the significant conception which rounded out Pasteur's microbic doctrine with the entomologic factor, and redeemed for civilization areas long the prey of disease and death. How truly could Gorgas say in 1915, "No country owes a greater debt of gratitude to Dr. Finlay than does the United States. Dr. Finlay was the first explorer in the field of research relating to the transmission of yellow fever. * * * The United States would have lost thousands of its citizens and hundreds of millions in wealth during the **past 20** years if Havana continued as a focus of yellow fever. It was Dr. Finlay's brilliant and logical reasoning that first suggested that the *stegomyia* mosquito was the transmitter."

It was a Baltimore physician, Dr. John Ruhräh, who suggested in 1928 that American physicians should see to having Finlay's birthplace marked with a suitable memorial tablet.

It seems impossible to imagine the success of the 1900 yellow fever commission but on the basis of the Finlay doctrine. It is easy to conceive Finlay's vindication had an open-minded governor, when faced by an epidemic, made the decision to try a campaign against mosquitoes. Those fond of dilating on the "ifs" of history might do worse than speculate on the fact that had Finlay's ideas found acceptation when first advanced, Spain might have been able to keep Cuba and Puerto Rico, and the French had a fair chance to build the Panama Canal.

No man is a prophet in his own country, we are told. Finlay belied this saying, and national and foreign honors brightened his old age: he was chief of the public health service of his native country; president of the American Public Health Association; honorary doctor of two Philadelphia medical schools; an officer in the Legion of Honor; recipient of the Mary Kingsley medal of the Liverpool school of tropical medicine, and, last but not least, of the generous tribute of American republics, and finally, there was the posthumous naming after him of institutes, laboratories, orders, and even a subgenus of mosquitoes. These honors reached a climax in the resolution of the Fourth Pan American Medical Congress in Dallas, in 1932, declaring Finlay's birthday the day of American medicine.

The Sixth International Conference of American States, held in Habana in 1928, placed itself on record as follows: "Whereas Dr. Carlos J. Finlay, of Habana, was the first to announce, supported with experimental evidence, the scientific doctrine of the transmission of disease from man to man through an intermediary agent, thus laying the foundation for the prophylaxis of yellow fever; therefore, it is

agreed that his discovery be acknowledged and the credit he deserves for that epochal achievement be proclaimed, as a tribute of admiration from this conference"

There are men whose disappearance is remembered by their fellow creatures after 1, 5, 10 years; some are still recalled after 50 years; a select group demand centennials, and small indeed is the number of those allowed millennials. I feel no hesitation in stating that, ten centuries from now, the American nations will still render full homage to Finlay if they know how to commemorate, together with their heroes and poets, their scientists, in other words, all their sons who best served them. These are sad days for celebrations. A troubled humanity, pressed by the cares of the moment, can barely stop to glance at the past. In the medical field alone, the anniversaries of Koch and Ramazzini in Europe, and of Unanue and now of Finlay in America, are instances to the point. (Later information impels the writer to modify this statement considerably, as meetings in honor of Finlay will be held by the medical profession in the capitals of most American countries, including Washington, D.C., as well as in Madrid and Paris. The Government of Colombia is having his bust placed in its National Health Department building, and the city of Paris is going to name one of her streets after him.)

Bright indeed Finlay's glory; it is, however, all inclusive, as it embraces equally his forerunners, contemporaries, and successors in the work: first of all Beauperthuy, who, while studying the treatment of leprosy, died in the Demerara penitentiary; Delgado, the ideal collaborator; Lazear who, still a young man, paid with his life for tho stupendous victory; Carroll, who also contracted the disease; Reed, whose achievement yields only to Finlay's; Agramonte; and with them. Guiteras, the faithful follower with his acute mind and pleasant style; the members of the subsequent European and American Commissions; Carter, grand old man of the fight against mosquito-borne diseases; Utiguanssú, who, without having heard of Finlay, expressed similar ideas shortly afterwards; and the whole legion who put to such practical use Finlay's principles: Gorgas, the leader of successful mass sanitation; the two Brazilians Ribas and Cruz; the Mexican Liceaga; and all those still tirelessly pushing the campaign which will eventually rid the world of one of its most dreadful scourges.

A pathfinder and a thinker, decipherer of vast problems, opening new routes in both medicine and public health, Finlay stands out for his perseverance, his faith and his goodness. Great among the great, Gniteras called him; great indeed for his courage, his foresight, his equanimity, and his modesty, and even for the attacks of those critics who tried to tear away some of his deathless laurels, as green now as ever.

MAKING A TEXTILE COLLECTION

By Lilly de Jongh Osborne

Member of the Society of Geography and History of Guatemala and Corresponding Member of the Academy of Fine Arts of San Fernando, Madrid

Mrs. Osborne's collection of Guatemalan textiles will be on view for two months beginning December 12 at the University Musem, University of Pennsylvania, Philadelphia. It wil ibe shown in conjunction with an exhibition of Maya archaeology, especially of the results of the three years' work of the Eldridge R. Johnson Middle American Expedition excavating at Piedras Negras, Guatemala. It is hoped to describe these monumental sculptures in the January issue of the Bulletin.—Editor.

TWENTY years ago I started my textile collection with the idea of having it contain as many as possible of the various textiles worn by the Indians in Guatemala. Little did I dream that the undertaking would be so difficult or so much fun, or that I should learn so much in my search for more elusive specimens. It has not been an easy matter. Every Indian village has its own distinctive costume for men, for women, and for children, while different social levels also are indicated by different clothes; often a very slight deviation in color or design indicates the borderline between one tribe and another.

There are supposedly twenty-two different languages and dialects spoken in the Republic of Guatemala, very few of the Indians speaking *Castilla* as they call the official Spanish language. Most of the Indians live in remote villages in the high mountain ranges, where trails are the only roads; they are slow to take strangers into their confidence, and do everything possible to hide from intruders their well-preserved rites and ceremonies and even their methods of living and dressing. It is amazing how picturesque and strange are some of their customs, many of which antedate the coming of the white man to America. The making of my collection has brought me into contact with the wearers of many of my choice costumes. The collection, though large, is far from complete, and as I go along gathering material for it, I realize how little is really known of what we call the Guatemalan Indian of today, and how difficult it is to learn more.

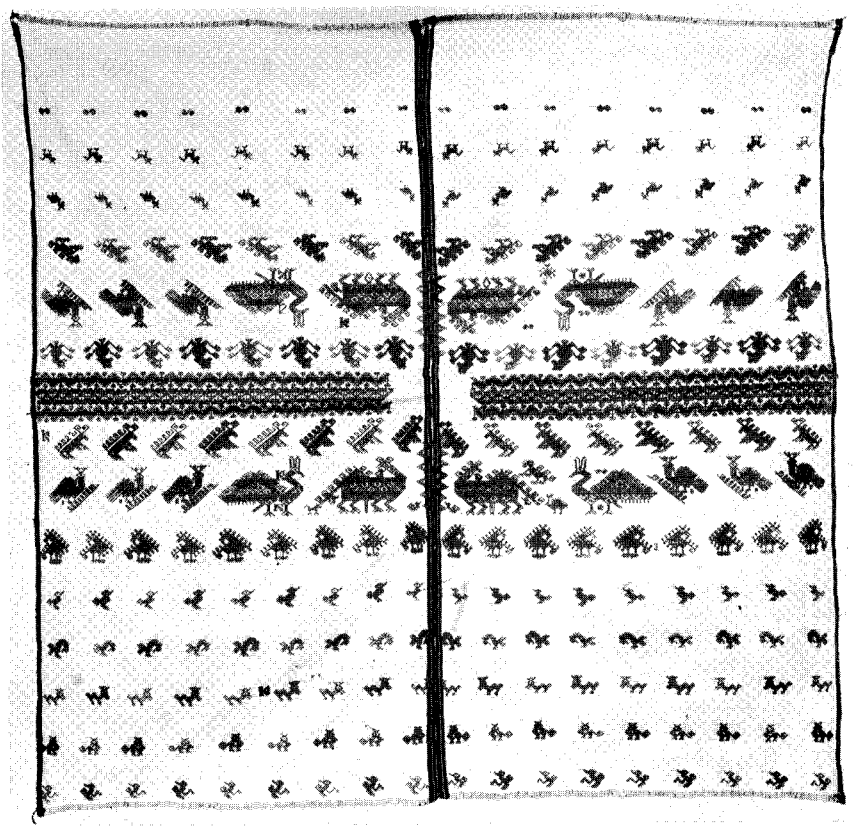
The Indians live according to traditions which have been handed down for generations. Their needs are simple: a few tortillas, frijoles, and black coffee (the staple articles of diet), a thatch-roofed hut—clinging precariously to a mountainside, hidden in the forest, or on the outskirts of a larger village—and a small patch of ground for planting corn will make an Indian quite happy and contented. Their bright and picturesque clothing makes a colorful spot on the landscape, and as one gets better acquainted with them, individuals

stand out clearly and a few of their traditions may be learned. Marriage rites full of poetry, funeral ceremonies unknown to the outside world, even the traditions of their daily occupations of weaving and planting, all have a charm hard to resist, and may finally be learned by a friendly individual who persists in being a human question mark; once the Indian has gained confidence in the person trying to be friendly, he may overlook the incomprehensible desire to obtain clothes not from one tribe alone, which would be in keeping with tradition, but from every tribe. All this makes the chase for textiles very exciting as well as productive of the knowledge of humanity as represented by the Guatemalan Indian of the present.

I began by buying a few pieces from the Indians near Guatemala City, who think more of money than of pride; usually the Indians weave only what is necessary for their own immediate needs, and such articles are not for sale. Some villages have a country-wide reputation for trade pieces, but these are not what a collector dreams of.

When I bought a large *huipil* (the blouse of the women's costume) woven with a white background and with large red and purple beasts strutting across the surface, I felt as if my collection was really under way. The purple cotton is rare, for the color comes from a mollusk found on the coasts of Costa Rica and Nicaragua, and the material has to be dyed with a substance taken when the moon is full, as at other times it is of inferior quality. As the purple cotton is therefore very expensive, it is used only on marriage *huipiles* or veils, or other special garments. This particular *huipil* belonged to a woman from San Pedro Sacatepéquez; she had labored on it for months, making enticing monkeys scratching their backs in such a natural way as to make one feel quite itchy, beautiful proud hens carefully concealing small ones under their wings, and wee ducks looking somewhat flustered at having one more foot than is usually their lot. It really is one of the showpieces of my collection. It was made to be worn with a skirt section tightly wound around the waist, but the skirt, of blue and white cloth, with a wooly black and white belt to hold the costume together, I did not acquire until long afterward.

My next important acquisition was a lovely prayer veil, the kind worn for attending church and major festivals and also, in this same tribe, to be married in. It is not a veil at all, as we understand the word, but a huge *huipil* covered with a great many antediluvian animals in red and purple. It took me years to get it from an old woman whose daughter, after coming to town to work, decided in favor of modern clothes and abandoned her tribal ones, just as she had abandoned tribal customs on leaving home. The old woman finally allowed me to buy the prayer *huipil* from her, with the strict injunction not to let it go out of my particular tribe, a promise most readily given, as you may well imagine. This *huipil* had last been used



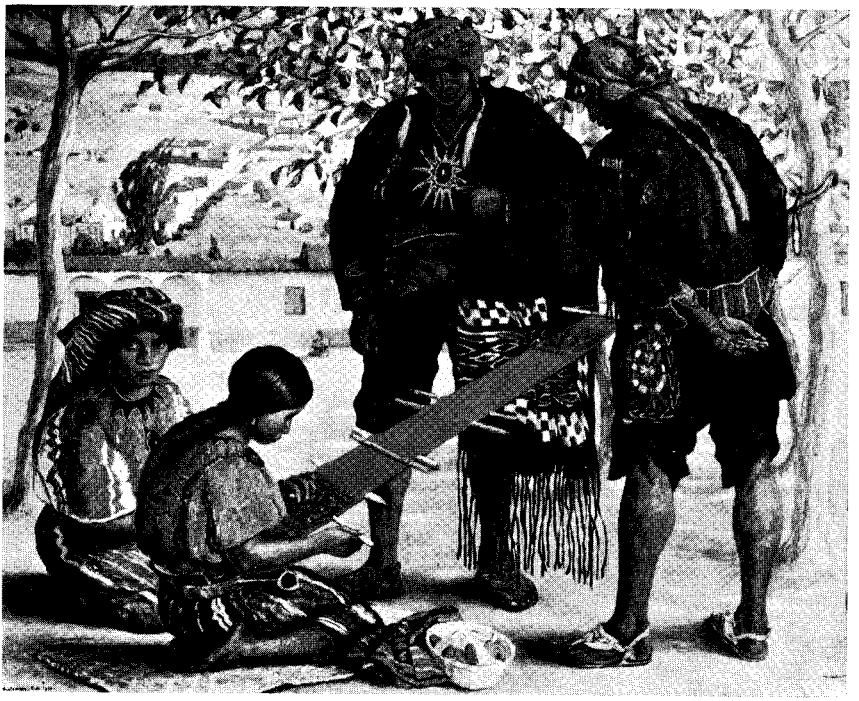
Courtesy of the University Museum, University of Pennsylvania.

A HUIPIL FROM SAN PEDRO SACATEPÉQUEZ.

Various birds and animals, in red and purple, are arrayed across a white background.

on All Saints and All Souls Days, when the dear old soul had gone to the cemetery with tall candles which she and her friends watched with prayer all night, while the men of the tribe slept out in the public square.

We grew well acquainted in the months which it took to bargain for this *huipil*. She would sit on my doorstep and tell me about her children and their refusal to follow tribal laws; her daughters were indolent and lazy, preferring to buy cheap bright materials from the stores rather than to weave their own clothes; they even thought nothing of marrying men from other villages, although such marriages made them outcasts from their own. We grew so well acquainted that she even promised to let me have her loom when she died and followed her ancestors to the grave. This loom, worn and old, had served her since childhood, but her daughter had no more use for it. It was made out of a few sticks well chosen for their particular



AN INDIAN WEAVER.

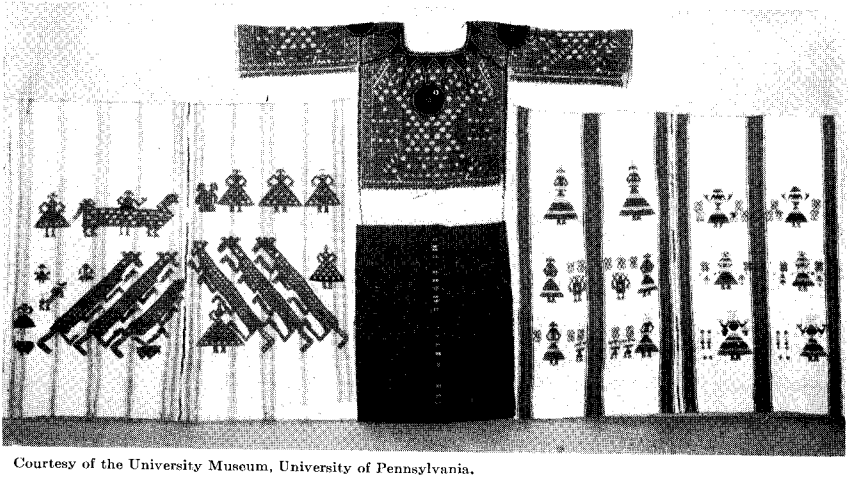
The Guatemalan artist Humberto Garavito portrays a weaver using a small hand loom.

purpose, and on it she did most beautiful work, weaving the designs taught her by her mother who, in turn, had learned them from hers. She had spent many hours of her life sitting on a clean mat with the loom suspended from the rafters of her hut, the other end of the warp fastened around her waist, and weaving clothes for herself, her husband, and her family with the cotton she had spun from the cotton pods growing on a nearby tree. When I look at my loom, I always think of María, whose gentle spirit seems to hover over it, trying to tell me how much she regretted never being able to finish the piece started on it.

The main street in Mixco is lavishly decorated, the side streets are cut off with branches, pine boughs are on the ground. A procession of Indian women advances along it on their way to church, to have an infant of their tribe baptized. The godmother, in her best clothes, has a child tied on her back; the baby wears a cap which I simply must have. It is too good to be true, having choice designs worked on a red background. Of course I can do nothing at such a moment, when the procession is slowly passing down the street. The closing off of the side streets symbolizes the new Christian's adherence to

the straight and narrow path, while the strewing of flowers is a sign of the flowery and pleasant path he will have through life. . . . Yes, I got the cap eventually.

In another part of town I spy a large crowd, in the center of which a Mexican is busily displaying from his large pack belts in gay colors, all embroidered with the same design. They seem to have a fascination for the Mixco Indian women, who are examining them and buying as fast as he can take their money. I too get one, of course, and with it the information that the women of Mixco have for years bought the belts for their costumes from these traders, who bring them from Oaxaca in Mexico. The belts have on them the figures of the feather dance, which is a traditional one in this region. Cogitating on the



Courtesy of the University Museum, University of Pennsylvania.

A GROUP OF TEXTILES FROM SANTO TOMÁS CHICHICASTENANGO.

In the center are a *huipil* which belonged to a middle-class woman and a man's *tzute*, a cloth frequently used for carrying tortillas. At each side is a napkin.

reason why Mixco women wear belts from southern Mexico, I think back a good many years and bring to memory the background of the Indians of Mixco, who are not of the Sacatepéquez people although they live among them. They are Pocomán Indians, who in the dim past belonged to a Mexican family of Indians, an amazing bit to fit into the picture puzzle called the Guatemala Indian.

A market day in Tecpán is worth the long dusty drive to this old place, only a stone's throw from where the Cakchiqueles had their stronghold when the Spaniards came with Pedro de Alvarado at their head to conquer Guatemala in 1524. Tecpán lies like a jewel against a background of high mountains with even higher volcanoes outlined against the blue sky. An old fountain in the square furnishes the water for the Indians who gather here on market day to buy and barter

their various wares. They come from far and wide, the highland people meeting the lowland for an interchange of onions, dried fish, chiles, fruits and vegetables of all kinds, and last but not least, yards and yards of woolen materials, all hand woven and colored with vegetable dyes.

I wander around the market place for hours, every moment a sadder one. The Indians refuse emphatically to part with their clothes; while this is natural, it is disastrous for the fate of my collection. I see so many I simply must have. My eye follows longingly a fat matron with a huge *huipil* made out of a yellow, or rather brownish, cotton which is not dyed; the *huipil* is embroidered in colors bright as the jewels which her ancestors the Cakchiqueles wore in their crown when seated on the throne in Iximché, their capital.

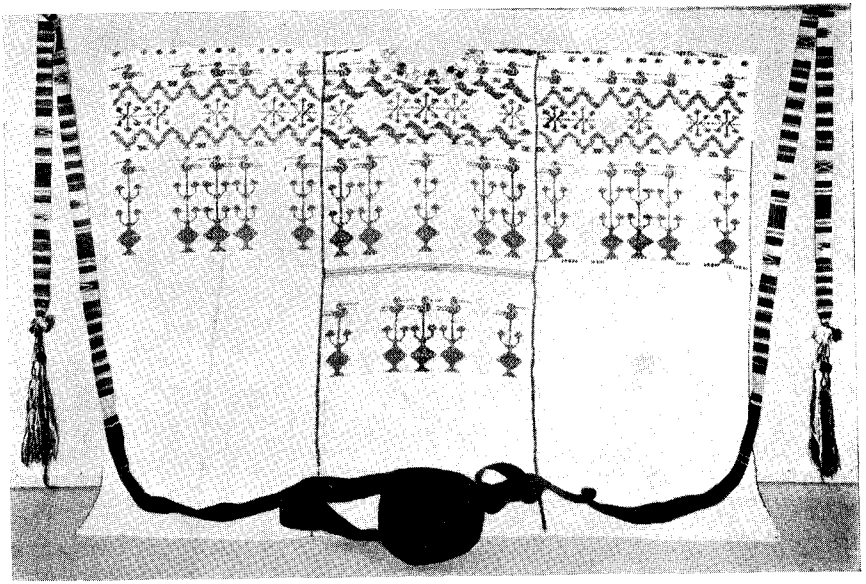
I go into the old church, where I admire the wooden roof painted with the figures of double-headed eagles dating from the time of Charles V, but not even this reminder of Spanish art can compensate me for the loss of a man's suit of handwoven black wool which I have just seen. The man wore the dark suit over white undergarments which showed through large slits in the trousers and sleeves; rows of buttons decorated the slits for no apparent purpose, and a gay red belt tied up the whole suit most snugly.

In desperation I leave town and find a group of Indians having their luncheon. Out of a bundle one produces some tortillas, and to my delight I see that the *tzute* or cloth in which they are wrapped, though dirty, has many double-headed eagles embroidered on it. Its owner sells eggs at a price, so I buy eggs lavishly, and explain to him at great length and with many gestures that eggs cannot be easily transported to my distant home unless I have something to wrap them in. The *tzute* will be just the thing, though it is old and used, and I hope against hope that he will not direct me to the large pile of baskets for sale only a few feet away. The youth, eager to finish his luncheon and be rid of his insistent customer, sells me the *tzute*, eagles, dirt, and all, and my collection is the richer for its beauty.

Well content with my prize, I meander down a shadowy lane, and see before me a whole family of Indians. Father is leading a fat pig by a string tied to one leg, mother has a baby on her back, and several children and dogs trudge along wearily after their day at the market. Mother Indian wears an enchanting garment worthy of further acquaintance, as is father's red coat, which has a whole flock of birds embroidered on it. My collector's spirit is aroused, and I hurry up in my friendliest manner. But to no avail, for the whole family, after one glance at my khaki breeches, take to their heels. My hopes are dashed to the ground as the whole tribe disappears through a hut into a cornfield.

But I am consoled by the appearance of a pretty Comalapa girl who is quite willing to part with her *huipil.* She goes into a doorway to take it off for me, going home in the plain white one which she always carries in her basket. I am the richer by one of the lovely red woolly *huipiles* which have such fascinating dogs prancing across their surface, and consider the day not a total loss.

A telegram announcing the arrival of *mozos*—men with packs—who are bringing material for my collection, has kept me at the door at intervals all morning. Finally, about five o'clock, I see four be-



Courtesy of the University Museum, University of Pennsylvania.

A CEREMONIAL HUIPIL AND A HEAD-RIBBON.

On the white lace-like background of this *huipil* from Quezaltenango appear conventional designs in gold and lavender.

draggled and footsore Indians coming to my door. Only one of the four can speak a little Spanish. I escort them and their *cacaxtes* (boxlike affairs made of wood in which they carry their cargo on their backs) to my back yard. There they produce several bundles well wrapped in waterproof material, and two turkeys, very much alive after their four days' journey inside the *cacaxte.* The latter are especially welcome, as Thanksgiving and Christmas are not far off, and are a friendly gift indeed from the kindly padre who lives high up in the mountains and has thousands of Indians under his spiritual wing. My Indian cook tells me that it is of no use to offer my guests food, as they will eat only their own, making their fire in the yard to

heat their tortillas and coffee. At four in the morning the Indians, who slept rolled up in their blankets like giant cocoons on the flagstones of the patio, are awake and heating their coffee; I am careful to send them off according to the instructions in the padre's letter, giving them sugar and coffee and good advice, and directing them homewards, making the farewell signal as they file out of the house. As the spokesman passes me he stops and makes me a deep reverence with arms crossed over his chest; then, still bending low in front of me, he presents me with a bunch of—no, not flowers, but onions and garlic, a parting gift to show their appreciation of my hospitality. I am deeply touched, knowing how undemonstrative the Indian is, and feel as though I had conquered kingdoms as I watch them disappear down the silent street, bound for their distant mountain home. They will reach their destination, if they are fortunate and weather permits, in four or five days; if the rivers are high and have to be crossed by swimming, with the burdens on their heads, they will take longer. On another occasion the telegram announcing their arrival did not reach me until seven days after they had left, for it had rained the whole way; the trails over the 10,000-foot divides were none too good and the rivers had become roaring torrents. The caves or thatch-roofed shelters in which they take refuge as they cross the high mountains are not very dry and warm.

I thought of all this as I looked at the contents of the parcel which they had brought. It was a precious Maxeño suit, of the kind worn by men of royal descent. It had the sun boldly embroidered on the front of the coat; its thick woolly surface was well covered with colored silk embroidery, and at the sides was long fringe. The trousers were short and open at the sides, the red sash had gorgeous purple and red embroidery all over it, and the head cloth was decorated with long silk tassels. It was indeed a suit worthy of a member of that noble race.

The Indians of Santo Tomás Chichicastenango, or Max as they are usually called, are the remnants of the true Quiché race. They were living at Utatlán when the Spaniards arrived, and after they were conquered they moved to where they now live. Descendents of kings, they are still a proud race and adhere strictly to their old rites and customs. Their clothes have something very Spanish mixed with the Indian; perhaps they imitated the clothes of their captors, or perhaps the Spaniards made them copy the foreign goods so that the textiles would be better suited for export to Spain.

I had hoped to find in the parcel a mauve and white *tzute*, such as the witch doctors use, but they are not easy to get. These men are held in so much reverence by the people of their tribe that they cannot be approached easily.

Several years ago I arrived at Chichicastenango at fiesta time. No more lovely sight can be seen anywhere in the world than the plaza at such a time, for there the Indians gather from all villages far and near. Those of the Max tribe come there from great distances for the great fiesta of December 21, the most important one of the year in the town. Dressed in their gala clothes, the Indians gather in the great square to barter and to sell; from the nearby churches hourly processions go forth through the streets; in the corner of a former convent a barber is busily plying his trade.

As I stroll along the streets this fiesta time, I despair of ever having a presentable collection, for there are so many wonderful costumes

A MAXEÑO MAN'S SUIT.

Such clothes of wool, embroidered with silk, are worn only by men descended from the royalty of the Max tribe. This suit came from Santo Tomás Chichicastenango.

Courtesy of the University Museum, University of Pennsylvania.

whose owners are not at all pleased at my wanting them. But I acquire a *rodillera,* a beautiful black and red woolen ruglike affair which the Indians use to protect their backs from their loads and which is a specialty in this region. I get, too, after much pleading, a brown *huipil* woven from natural brown cotton and embroidered profusely in red silk; it has one of the black silk disks to which an old silver coin is attached. That is a sign of great rank; the more common ones nowadays have substituted for the silver coins plain snaps made in the United States.

It is at this fiesta time that all the babies are christened together. Godmothers in huge white embroidered *huipiles* hide the babies from

staring eyes, carrying them to church carefully under the ample folds. They are followed by most of the family, and if it is a boy baby, the proud father and grandfather are beaming with pride. Nothing will do but that I have a "godmother *huipil*", and the very loveliest among them has just passed me. I discover that it has been handed down for generations until it came into the possession of a woman who rents this sort of garment for godmothers *de luxe*, and who, of course, refuses sternly every offer I make. While I admire a particularly lovely Quiché baby, a direct descendent of the kings of Quiché, I lose sight of my particular godmother. I hurriedly find and follow the trail of the *huipil* of my ambition. The wearer walks a mile, I do likewise. As my endurance gives out, I find a convenient horse saddled and tied to a post in front of a hut. Thanks to the horse, I overtake the lady of the *huipil*, but my tactics are, apparently, not those of a good general. She dodges into a hedge which my horse shies at, and I am left sans horse, sans *huipil*, and sans breath to shout to the interpreter who is bringing up the rear. The owner of the horse suddenly appears to claim his property, but as he speaks *Castilla*, I explain the situation and urge him to use his influence to get me the *huipil*, telling him the amount of money I am willing to pay for it, and explaining how with that sum the entire family will be able to celebrate on an unprecedented scale the whole fiesta season. All this produces no immediate effect, but hours later, as I stand in the Plaza, my particular godmother arrives and stealthily slips the treasure into my hand, and I reciprocate with the money.

Early morning frost is on the ground in beautiful Quezaltenango, a city situated 7,000 feet above sea level; there, thanks to the wonderful climate, all the rosy-cheeked Indians are sturdy, belonging to one of the finest races in the country. The early morning hours see endless processions of Indians marching in to market, bringing fruit and vegetables from the near-by villages. They are a veritable feast to the eye of the collector. The Almolonga Indians come up a hill wearing their gay red and white clothes gorgeously embroidered in many colored silks. The men's shirts are a mass of decoration, both back and front, in red and yellow silks. Such a garment I should cherish to wear only for "Sunday-go-to-meeting best", but they think nothing of carrying a great load of charcoal on their backs in this gorgeous array.

Almolonga is situated on the side of a hill. I have to climb like a goat up and down narrow paths to get anywhere, but the trouble is worth while. I buy a lovely *cochaj*, a cloth in red and white thickly embroidered in silks and used by the women to protect their backs from their loads. It is truly a museum piece, and I am able to obtain it only because I looked up a former servant of mine who

belonged to this village. While her mother entertained me with a tale of her son and his search for a bride, the servant bought several things for me, so I return to Quezaltenango well satisfied with my morning.

In Quezaltenango I start out in search of a Quiché prayer veil. It is a long lacelike affair with a round hole surrounded with embroidery where the face appears; the rest envelops the person from head to foot in a misty cloud of white with yellow and purple embroidery. I find one, and also acquire a crepelike white wedding veil, of the kind

Photograph by Federico Meinecke.

RAIMUNDO AND ROSARIO.

The traders of San Cristóbal Totonicapán from whom the author secured numerous textiles for her collection.

so dear to the heart of the older Indians; these veils were worn before the younger generation grew so fond of heavily embroidered affairs.

When Rosario and Raimundo arrive, it is an event for me, as these two traders from San Cristóbal Totonicapán have been my good friends for years. I am proud of my friendship with them, for no finer type can be found than these two lowly Indians, hardworking and faithful, who always bring me, for my collection, some choice piece which they have come across in their peregrinations to different villages. Their own materials, woven in their one-room house, are superb, but I have already examples of all their different weaves, and purely trade pieces do not interest me. Their wares are magnificent, despite the unattractive bundles in which they are wrapped and

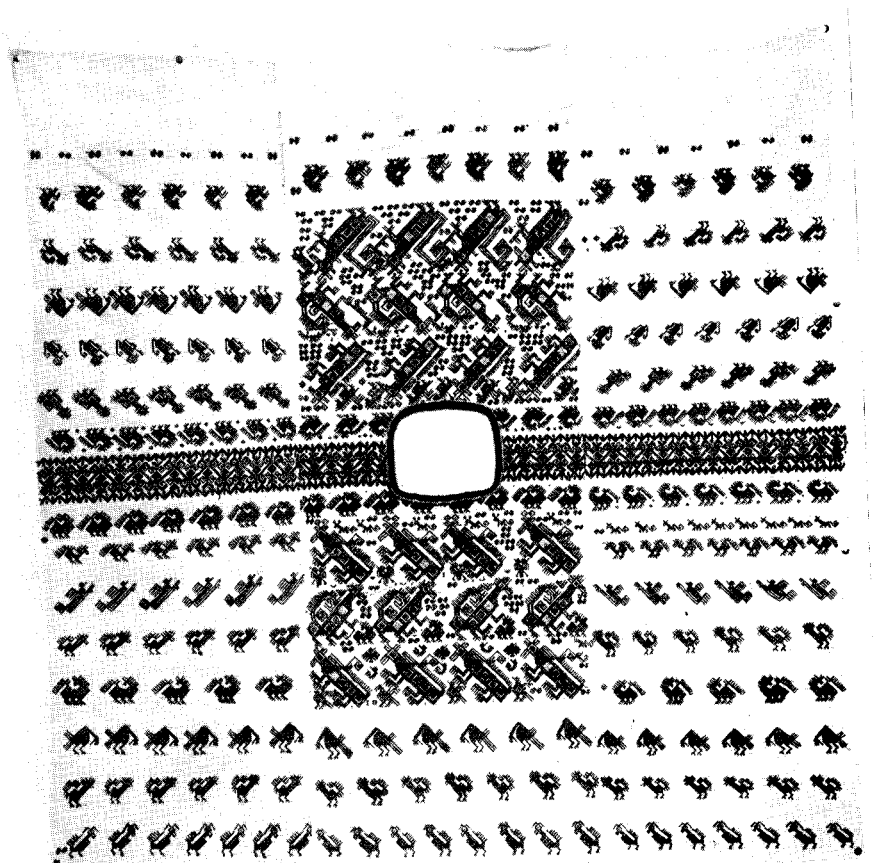
which, when opened, reveal a stream of shimmering textiles sorely tempting to a slender purse. This time they have brought me a wonderful head band or ribbon woven with many symbolic figures and finished with a huge silver and silk tassel. It was made to be worn by a bride of their people, the huge tassels indicating that it is for a woman of very high caste indeed, while every bird and symbol could be translated into lore as old as the tribe itself, were one conversant with the legends of these people.

Once, years ago, I visited the highland home of these friends, where I received a most cordial reception. While I inspected their looms, which occupied the largest part of their single-roomed house, Rosario went out into the yard and came back shortly with a steaming cup of tea. Once she had heard me say in my distant house in Guatemala City that I liked my tea every afternoon, and she was doing her hospitable best to please me. The carved gourd the tea was served in was artistic enough to make any beverage it contained tempting.

Raimundo entertained me by discussing the various dyes and their uses; most of them are made from plants. The dark blue comes from a well-mashed grass; the purple, when not from the mollusk, is made out of blackberry juice; the wild tomato, or sometimes the blood of an animal, will be used for a brilliant red, and so on down the long list of dyes made from berries, roots, and bark of trees. Every village has its own pet dyes, and guards well the secret of their making. But today, alas, foreign dyes are taking the place of the older ones, making the textiles less attractive and the colors by no means as fast as were the older ones.

As I left Raimundo's domicile, I stopped to watch an old dame marking the design for a *huipil* of the kind which are embroidered after they have been woven. She might have been a picture out of a very old book as she sat and carefully drew in the design with a chicken feather dipped in mashed grass. When we returned after a few days, the *huipil* was finished and became mine, an invaluable garment, for it is so long that it serves the double purpose of petticoat and *huipil,* and is so thick and warm that it is at the same time a wrap for cool weather.

The skirts worn by the women are not as attractive as the *huipiles.* The cloth is made on larger foot looms, and the designs are woven in. They always carry out the tribal colors, as also do the belts which hold up the skirts. Men also have colorful clothes, although many have discarded their tribal ones and retain only the belts with their symbols. Such a one I got at Concepción from the *alcalde;* it was done in reds and yellows, with a wide lace finishing off the ends.



Courtesy of the University Museum, University of Pennsylvania.

A CEREMONIAL HUIPIL.

This elaborate *huipil* with its numerous red and purple animals was used as a prayer veil by an Indian of San Pedro Sacatepéquez.

For years my household supply of rice, coffee, beans, potatoes, and frijoles has arrived once a month in a huge load on the back of a faithful Indian, Francisco. His faith in our entire family is childlike. When he had celebrated the holiday of his patron saint only too well, and my supply of staples threatened, I would send by his boys large doses of castor oil which worked wonders; he seldom failed to appear soon thereafter, claiming perhaps a headache, which I immediately cured with aspirin, hoping that my work as a prescribing doctor would not entirely extinguish our monthly provisions. Francisco's wife and daughters are good weavers and have contributed a great deal to my collection, though the best piece I have from their village was the handkerchief Francisco used one day when threatened with what I diagnosed as the flu. The kerchief was red with fantastic animals embroidered all over its surface.

Hence my advice to prospective collectors never to be without aspirin or castor oil, for aspirin brought me another choice piece. An old patriarch of his tribe lay as one dead. Considering it a case of fever, I brought out my aspirin which the daughters took with many misgivings and gave to him. I likewise felt misgivings, but the old man felt better for my dose, and I was the richer for a man's suit from the San Martín Chile Verde tribe—it had a long black wool overtunic with fringe at the ends, a red embroidered sash, and a red head dress which makes the wearer look like a dweller in Tibet.

It is cold in the highlands, especially at night, so the Momostenango blankets are much appreciated in those regions; hardly an Indian on any of the trails but has one of them strapped to his load to roll himself in when he goes to sleep. It is a never-to-be-forgotten sight to arrive at Momostenango on market day. In the big square hundreds of blankets are ready for sale, as well as wool, looms, and even the nettles for carding the wool. Many of the finished blankets are spread out in the church square to be dried by the sun after having been wet while being woven with the sulphurous waters of the nearby river; this gives them a special quality, making them waterproof and seemingly everlasting. The dyes used in them, as well as in the woolen materials that are a specialty of this region, are made right on the spot, and are so good that these blankets are fast acquiring an international reputation. Those of lamb's wool are especially choice.

It took years of patience to get a *charchal* or coin necklace, to add to my collection. They are highly prized by the Indian women, and cannot be bought at any price except when their owners change over to modern clothes. It was in Momostenango that I was led on the trail of a beautiful one, which has several old silver crosses and many old coins in its make-up. Although not a textile, it is a part of a collection of this sort, as no self-respecting Indian would be without one if her tribe required that she wear it; she would suffer poverty rather than part with this inherited treasure.

Huehuetenango has many delectable costumes, but none quite so fascinating as the *huipiles* from San Mateo Ixtatán, which are decorated with designs in yellow like the rays of the sun. These *huipiles* are exceptionally thick, often having as many as eight yards of hand woven cloth in their make-up.

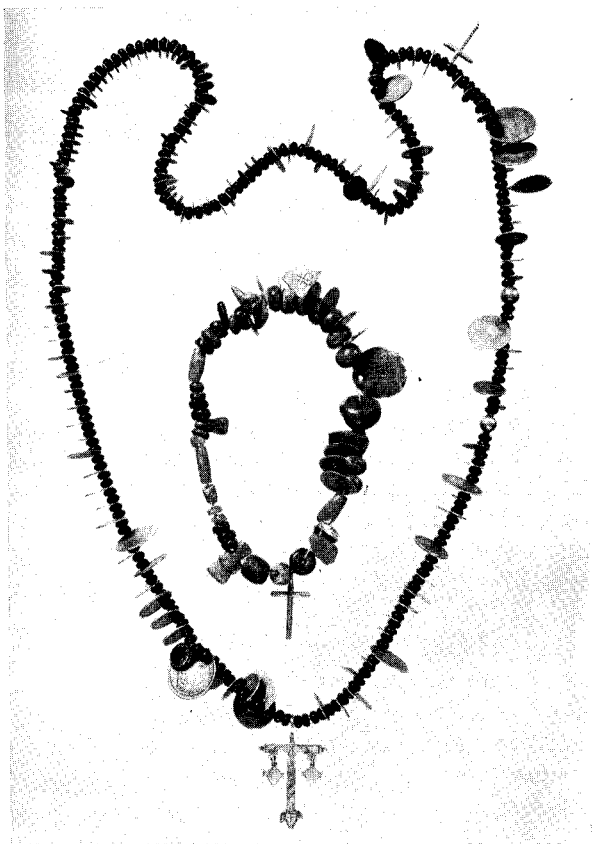
Holy week is usually a good time to go hunting for textiles, as every one takes a holiday and dresses in his best for the festivities. From the villages around Lake Atitlán came many treasures, including a beautiful green embroidered belt, yards and yards long, worn by one

of the dancers of the *Son*. This dance is accompanied by the strange music of their native instruments, such as the *chirimía*, *tun*, and *marimba*.

It is hard to drag one's self away from Lake Atitlán, a region too beautiful for description, where an azure sky is forever reflected in the deep waters of this lovely lake, and the high volcanoes watch over

NECKLACES OF OLD SILVER COINS AND CROSSES.

The larger necklace, which belonged to a woman of Cobán, Alta Verapaz, is of a type highly prized by many of the Guatemalan tribes. The smaller, with beads and figurine pendants of jade, belonged to a witch doctor of Chichicastenango, Department of Quiché.



Courtesy of the University Museum, University of Pennsylvania.

the multitude of villages clinging precariously to the hillsides, while their inhabitants look like gay birds as they make their way along the many trails bordering the lake. But I had seen a coat up in Sololá which I had to pursue. It had many pockets in its thick woolly make-up, each pocket carefully outlined with black wool tape. Every pocket adds to the value, as that is the way these coats are valued—so many more pockets, so much greater price.

A treasured Nahulá textile was hard to get, for those stolid Indians strongly object to having their clothes owned by strangers, just as they are averse to having any stranger stay within their village over night. In a nearby village I got a textile with a blue ground on which were embroidered many colored sunsets, the striking and colorful effect somewhat spoiled by an ordinary foreign ribbon around the neck. In this village they have some curious but sound laws. For instance, a murderer is not put into prison to be a burden on the community; he is declared an outcast. Nobody will speak to him, and he is carefully watched to see that he carries out the tribal law, which requires that he till and plant the corn fields belonging to the widow of the slain man, or otherwise support her, until the youngest child is at least sixteen years old.

My best string bag, the one with brown and white stripes made by a man who used two sticks like knitting needles, I managed to buy from the guardian of the jail.

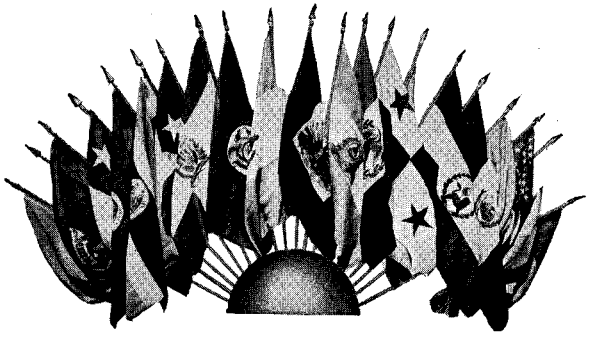
In far-away Cobán the Indians often have fair hair, which looks odd above their tribal clothes. Some of the most beautiful pieces of my collection came from this region: a splendid *huipil* in white and red, closely embroidered; a very fine white woven one with an intricate design, a sheer affair well suited to the warm climate of the country. Until recently no self-respecting woman would wear anything but pure white, but that has been changed, as has the pretty style of wearing the vivid red *Serpiente de Coral*, or coral snake, of many strands of wool woven in the long hair of all the matrons.

I could give many more instances where I have run across lore and legend in search of material for my collection, as well as amusing personal experiences which I treasure in my memory. But disappointment has also been my lot. It has not been possible to get a suit made of fibers and trimmed with macaw and parrot feathers, such as the Lacandón Indians wear. My cup was full to overflowing when I acquired a suit of the Todos Santos village men's clothes. They rather look as if they had been modeled after a pirate's suit, yet their wide collars and flapping trousers do not seem to diminish to any degree the dignity of these tall austere mountain men who dwell in a nook of the highest mountains in the country, and who still regulate their lives according to dates set by the *Tzolkin*, or old ceremonial calendar of 265 days to the year.

Health, or rather the lack of it, made us live for a while in the hot lowlands, but it was not time wasted. I rode many hours on muleback along the highways and byways in search of material. I

met much to my taste, despite the fact that it is not good form to wear many clothes in that ardent clime. The men wear only dirty white trousers rolled to their knees, with an entrancing *tzute* well embroidered hanging from their necks. The women's headbands and the cloths in which they carry tortillas are well worth a search; their skirts are beautifully designed and woven, and not difficult to get.

I am glad that I got together my collection while the old order still existed, for true tribal designs on the textiles are rapidly disappearing or becoming mixed with those of other tribes. One and all, the items in my precious collection are veritable works of art. The subtle blending of colors and the romance woven into every piece give to the making of such a collection a zest which quite compensates for the time and energy spent on it.



PAN AMERICAN UNION NOTES

THE GOVERNING BOARD

Seventh International Conference of American States.—This conference, for which the program, as published in the July 1933 issue of the BULLETIN, was prepared by the Governing Board, convenes in Montevideo on December 3, upon the invitation of the Government of Uruguay. At this time the complete list of delegates is not available.

Election of officers.—The first session of the Governing Board for the year 1933–34 was held on November 1. The Vice Chairman, Dr. Adrián Recinos, the Minister of Guatemala, moved in complimentary phrases that the Secretary of State of the United States, the Hon. Cordell Hull, be reelected Chairman of the Board. The motion having been unanimously passed, the Chairman expressed his warm thanks for the honor conferred upon him and commented at some length upon subjects of interest to the work of the Pan American Union. The Minister of Uruguay, as the dean of the Board, responded in English to the remarks of the Chairman, and then in Spanish nominated the Minister of Venezuela, Dr. Pedro M. Arcaya, as Vice Chairman. After his unanimous election, the new Vice Chairman cordially thanked his colleagues for the honor paid him.

COLUMBUS MEMORIAL LIBRARY

Brazilian prize novels.—The *Academia Brasileira* has announced its prize novels for 1933. The first prize was awarded to Senhor José Geraldo Vieira for *A mulher que fugiu de Sodoma;* the second to Senhor Wanderley for *Sol Criminosa;* and the third to Senhor Ribeiro Couto for *Cabocla.* Senhor Martins de Oliveira received the first prize in the short story class for *No País das carnaúbas.* Other awards were made for the best poetry and drama.

"Colombia, the treasure land."—The Pan American Union has for distribution a limited number of an illustrated pamphlet of 55 pages, bearing the above title and published recently by the Consulate Gen-

eral of Colombia in New York City. These will be sent upon request as long as the supply lasts.

Decorative map of Mexico City.—The library has received a brilliantly decorative historical map of Mexico City, published in 1932 by the Compañía Luz y Fuerza Motriz, S. A. and Compañía de Tranvías de México, S. A. It is entitled *Mapa de la Ciudad de México y alrededores hoy y ayer,* and is the work of Emily Edwards.

National Library of Venezuela.—Last year the National Library of Venezuela at Caracas had 43,081 readers, which is an increase of 1,662 over 1931. Dr. José E. Machado, the librarian, reports that the circulating library is very popular.

Activities of the Columbus Memorial Library.—The Library announces the publication of number 8 of its bibliographic series entitled *Obras existentes en la Biblioteca Colón de la Unión Panamericana sobre organización de bibliotecas y sistemas de clasificación,* comprising 13 mimeographed leaves. Seventy-two works are listed with the table of contents of each item. At the end is an appendix containing a list of library periodicals.

During the past month the library received 508 requests for information. This unusually large number seems to be attributable to the greater interest being shown by universities and some women's organizations in Latin American affairs.

Annual report.—The report of the librarian of the Columbus Memorial Library for the fiscal year 1932–33, as submitted to the Director General of the Pan American Union, shows that its staff has been called upon with increasing frequency to assist in an advisory capacity individuals and institutions; to give its aid regarding technical phases of library work, and to indicate sources of information on various subjects in Latin America and the United States. Another service rendered was the tracing and purchasing of books for persons in Latin America who would have great difficulty in finding the publications they desired in the United States were they not given assistance by the Library.

The several publications comprising the bibliographic series, which are compiled and edited in the Library, have been well received. This series will be continued during the coming year.

A statistical survey by mail of all libraries in Latin America was begun in an effort to provide accurate data from which to prepare a table showing the extent of library development there.

The collection in the Library increased by 2,638 volumes and pamphlets, making a total of 80,301 and necessitating the addition of 274 lineal feet of shelving. The Library receives 1,188 newspapers and magazines. Current indexing and cataloguing provided 11,911 additional cards for the catalog. Twenty-seven maps and 2 atlases were added to the collection, making the totals 1,989 and 150 respectively. A new 15-tray steel map case will facilitate the use of the

maps as well as protect them. During the year several shipments, totaling 116 publications, were sent in exchange to various libraries in the countries members of the Pan American Union.

Photographs—The Pan American Union's photograph collection has recently been enriched by the addition of 381 prints. These photographs include city and country scenes in Argentina, Brazil, Colombia, Costa Rica, Mexico, Uruguay and Venezuela, in addition to prints of works of art which have been exhibited in the United States and portraits of prominent men.

Acquisitions.—Among the 266 volumes received during the past month is a collection of works by Antoine Michel, of Haiti, which includes *La xiv*e*. legislature,* in four volumes, the first volume of *La mission du G.al Hédouville a Saint-Domingue,* and *Avènement du Général Fabre Nicolas Geffrard à la Présidence d'Haïti.*

The following titles have been selected from the remainder:

Estado actual de los métodos de la historia literaria, traducción de diversos estudios de Paul Van Tieghem, Benedetto Croce, Bernard Faÿ, Miguel Dragoniresçu, Lorenz Eckhoff, Josef Nadler, Jean Hankiss, Luigi Russo, Levin L. Schücking, Georges Ascoli, Wl. Folkierski, etc. [compilado por] Raúl Silva Castro. Santiago, Prensas de la Universidad de Chile, 1933. 171 p. 23½ cm.

La Araucana, [por] Alonso de Ercilla y Zúñiga. Edición hecha por la Universidad de Chile, con motivo de la celebración del cuarto centenario de Alonso de Ercilla. Santiago, Editorial Nascimento, 1933. 2 v. 20 cm.

Jurisprudencia caballeresca argentina, [por] César Viale. Nueva edición corregida y aumentada. Buenos Aires, 1928. 526 p. 20 cm.

Ideas sobre la posición actual de la pedagogía, [por] Fernando Chaves. Quito, Talleres gráficos nacionales, 1933. 200 p. 17½ cm. (Publicaciones del Ministerio de educación pública.)

La instrucción pública en la Nueva España en el siglo xvi, estudio presentado para obtener el grado de maestro en ciencias históricas, por Tomás Zepeda Rincón . . . México, 1933. 138 p. 22 cm.

Los centenarios de 1933: Doctor Luis Cordero, Don Luis Zaldumbide, Doctor Antonio Flores Jijón, Doctor José Modesto Espinoza, [por] Dr. Carlos A. Rolando. Guayaquil, Imprenta i talleres municipales [1933]. 79 p. ports. 19½ cm.

Tratado de direito internacional público, por Hildebrando Accioly. Rio de Janeiro, Imprensa nacional, 1933. Tomo 1: 549 p. 24½ cm.

Homenajes a Eloy Alfaro. La Habana, Tipos. Molina y cía., 1933. 151 p. 18 cm.

Preceptiva literaria para estudios de secundaria y normal, por Enrique Muñoz Meany . . . Primera edición. Guatemala, [Tipografía nacional] 1933. 560 p. 27 cm.

Las culturas protohistóricas del este argentino y Uruguay, por Antonio Serrano . . . Paraná, Talleres gráficos Casa Predassi, 1933. 39 p. plates. 26½ cm. (Memorias del Museo de Paraná; [Museo escolar central de la provincia] n.º 7, arqueología.)

El método Decroly en el segundo año de la escuela primaria, por Jesús Salinas . . . [La Paz] Editorial López Santiváñez [1933]. 244 p. 26 cm.

Visiones de la gran aldea; Buenos Aires hace sesenta años, [por] Ismael Bucich Escobar (Martín Correa). 1.ª serie, 1869–1870. Buenos Aires, Imp. Ferrari hnos., 1932. 269 p. 24½ cm.

Antología de la literatura española desde los orígenes hasta principios del siglo xix, por M. Romera-Navarro. Boston, D. C. Heath y compañía [c1933]. 427 p. 23 cm.

A collection of the diplomatic and consular laws and regulations of various countries, edited by A. H. Feller . . . and Manley O. Hudson . . . Washington, Carnegie endowment for international peace, 1933. 2 v. 25 cm.

Didáctica de la escuela nueva, [por] Alfredo Miguel Aguayo. Habana, Cultural, s.a., 1932. 388 p. 24½ cm.

New magazines and those received for the first time during the past month are as follows:

El Salvador en Europa; revista consular. Amberes, Bélgica, 1933. Año 1, n.° 1, marzo, 1933. 52 p. illus., ports. 27½ x 22 cm. Monthly. Address: Cónsul general de El Salvador en Belgica, Amberes, Belgica.

Revista del trabajo; órgano oficial de la Inspección general del trabajo. Santiago de Chile, 1933. Año III, núm. 5, mayo de 1933. 95 p. illus. 26 x 19 cm. Monthly. Address: Ministerio del trabajo, Santiago de Chile.

Revista de estudios penitenciarios. Santiago de Chile, 1933. Año I, núm. 1, junio de 1933. 52 p. 27 x 19 cm. Bi-monthly. Address: Dirección general de prisiones, Santiago de Chile.

Técnica; magazine de la industria, del comercio y de informaciones científicas. Santiago de Chile, 1933. Año I, n.° 1, 14 de junio de 1933. 64 p. illus. 26½ x 18½ cm. Semi-monthly. Address: Casilla 63 D, Santiago de Chile.

Acción social. Santiago de Chile, 1933. Año II, n.° 14, marzo de 1933. 79 p. 27 x 18½ cm. Monthly. Address: Caja de seguro obligatorio, Casilla 7-D, Santiago de Chile.

D N C; revista do Departamento nacional do café. Rio de Janeiro, 1933. Año I, n.° 1, julho de 1933. 84 p. illus., fold. col. plate., tables (part. fold.) diagrs. 24 x 19 cm. Monthly. Address: Departamento nacional do café, Edificio de "A Noite", 7° andar, Rio de Janeiro, Brasil.

El mundo gráfico; magazine popular científico, estudios, viajes y exploraciones. México, D.F., 1933. vol. II, núm. 3, septiembre, 1933. 286 p. illus. 25½ x 17½ cm. Monthly. Editor: Ing. Rafael Aguilar Olmos. Address: Apartado postal 429, México, D.F.

Boletín del Ministerio de salubridad y de agricultura y cría. Caracas, Venezuela, 1933. Año I, n.° 1, 24 de julio de 1933. 84 p. illus. 23½ x 16½ cm. Monthly. Address: Ministerio de salubridad y de agricultura y cría, Caracas, Venezuela.

Las provincias; revista gráfica revolucionaria. México, D.F., 1933. Año II, n.° 14, septiembre de 1933. [64] p. illus., ports. 28 x 19½ cm. Monthly. Editor: Ing. Juan de Dios Batiz. Address: Apartado no. 2772, Mexico, D.F.

La semana gráfica; revista nacional ilustrada. La Paz, 1933. Año I, n.° 47, 16 de septiembre de 1933. [29] p. illus., ports., map. 35½ x 25 cm. Weekly. Editor: Francisco Villarejos. Address: Casilla correo n.° 400, La Paz, Bolivia.

Archivos uruguayos de medicina, cirugía y especialidades; órgano oficial de la federación de las sociedades médico-científicas del Uruguay. Montevideo, 1933. [p. [177]–336.] illus. 24 x 17 cm.

Boletim do Centro do professorado paulista. São Paulo, Brasil, 1933. Año IV, núm. 4, julho de 1933. 16 p. port. 32½ x 24 cm. Monthly. Editor: Prof. M. Moura Santos. Address: Caixa postal n. 183, São Paulo, Brasil.

Estudios, the monthly educational review published in Panama by Octavio Méndez Pereira, resumed publication with the issue for September, 1933, año 8, n.° 1, after having suspended publication since January, 1931.

During the past month the Library received notice that the following magazines had suspended publication with the issues noted:

Bolivia comercial, La Paz, Bolivia, August 15, 1933.

Bolivia económica e industrial, La Paz, Bolivia, December 1932–February, 1933.

Granja modelo de Puno, Chuquibambilla, Puno, Peru, June 1932.

NECROLOGY

DR. MARIANO VÁSQUEZ.—After a long and painful illness the distinguished HONDURAN jurist, Dr. Mariano Vásquez, died in Tegucigalpa on August 30, 1933. Doctor Vásquez had played an important role in national and international affairs. As Deputy to the National Congress, Governor and chief of the military forces of La Paz, Minister of Foreign Relations, Minister of Public Instruction, and Minister of Government, he gave proof of his devotion to his country's welfare. As delegate to the Central American Conference in San José and to the Sixth International Conference of American States in Habana, and as representative of Honduras on the Guatemalan-Honduran Boundary Commission in Washington and before the Special Boundary Tribunal created by the commission, he won added prestige. The Republic of Honduras observed three days of national mourning and, after Doctor Vásquez had lain in state in the Assembly Hall of Congress, buried him with the honors befitting his rank.

DR. AUGUSTO ORREGO LUCO.—With the death of Dr. Augusto Orrego on August 26, 1933, Chile has lost a citizen distinguished in many fields of endeavor. As a physician, Dr. Orrego Luco enjoyed wide repute, being especially noted for his studies of mental disorders. After his graduation from the Medical School in 1873, and for nearly 35 years thereafter, he was identified with the teaching and practice of medicine. He was also well known as an author and journalist; he founded, edited, or contributed to magazines and newspapers for many years, and at one time was president of the Chilean Press Association. Doctor Orrego Luco's career as a statesman dated from his youth. He was first elected Deputy to the National Congress in 1876, and ten years later he was chosen President of the Chamber of Deputies. His first cabinet position was that of Minister of the Interior, in 1897; he was Minister of Public Instruction in 1898 and again in 1915. Recognition abroad included membership in the Academy of Science of Paris and corresponding membership in the Royal Academy of Madrid.

PAN AMERICA IN BRIEF

STATISTICAL INFORMATION FROM OFFICIAL SOURCES

Country	Population	Monetary Unit	Par Value U. S. Gold
ARGENTINA	11,658,717	Peso (gold) [1]	$0.965
BOLIVIA	2,911,283	Boliviano	0.365
BRAZIL	42,500,000	Milreis (gold) [2]	0.546
CHILE	4,344,524	Peso	0.121
COLOMBIA	7,851,000	Peso	0.973
COSTA RICA	516,031	Colon [3]	0.250
CUBA	3,962,344	Peso	1.000
DOMINICAN REPUBLIC	1,022,485	Peso	1.000
ECUADOR	2,500,000	Sucre	0.200
EL SALVADOR	1,459,578	Colon	0.500
GUATEMALA	2,004,900	Quetzal	1.000
HAITI	2,030,000	Gourde	0.200
HONDURAS	859,761	Lempira	0.500
MEXICO	16,527,766	Peso	0.498
NICARAGUA	638,119	Cordoba	1.000
PANAMA	467,459	Balboa	1.000
PARAGUAY	1,000,000	Peso (gold) [4]	0.965
PERU	6,147,000	Sol	0.280
UNITED STATES	[5]139,647,000	Dollar	1.000
URUGUAY	1,903,083	Peso	1.034
VENEZUELA	3,026,878	Bolivar	0.193

[1] Par value of paper peso is $0.424 U. S.
[2] Par value of paper milreis is $0.119 U. S.
[3] Theoretical par value of colon is $0.465 U.S., but since 1924 colon has been stabilized at four to the dollar.
[4] Paraguayan peso was linked to the Argentine peso in 1923 at the ratio of 18.75 Paraguayan pesos to one Argentine paper peso, or 42.61 Paraguayan pesos to one Argentine gold peso.
[5] United States and possessions.

WEIGHTS AND MEASURES

Metric measures most commonly appearing in market and statistical reports of Latin American countries with equivalents in units of United States customary measures.

LENGTH

Centimeter	0.39 inch
Meter	3.28 feet
Kilometer	0.62 mile

LIQUID MEASURE

Liter	1.06 quarts
Hectoliter	26.42 gallons

WEIGHT—AVOIRDUPOIS

Gram	15.43 grains
Kilogram	2.2 pounds
Quintal	220.46 pounds
Ton	2,204.6 pounds

SURFACE MEASURE

Square meter	10.76 sq. feet
Hectare	2.47 acres
Square kilometer	0.38 sq. mile

DRY MEASURE

Liter	0.91 quart
Hectoliter	2.84 bushels

WEIGHT—TROY

Gram	15.43 grains
Kilogram	32.15 ounces
Kilogram	2.68 pounds

Hudson Bay
Seattle
Spokane
Tacoma
Butte
Helena
Fargo
Duluth
L. Superior
Portland
Boise
Deadwood
Minneapolis
St. Paul
Pierre
Milwaukee
Madison
Lansing
Detroit
Augusta
Portland
Concord
Boston
Providence
Albany
Buffalo
Hartford
Cleveland
Eureka
Laramie
Cheyenne
Omaha
Ogden
Des Moines
Chicago
Toledo
Columbus
Pittsburg
Newark
Salt Lake City
Sacramento
Carson
Lincoln
Denver
Topeka
Pueblo
Kansas City
Indianapolis
St. Louis
Cincinnati
Baltimore
New York
Philadelphia
Washington
Richmond
Stockton
San Francisco
Fresno
Durango
Trinidad
Santa Fe
UNITED STATES
Louisville
Nashville
Norfolk
Raleigh
Chattanooga
Atlanta
Memphis
Little Rock
C. HATTERAS
Phoenix
Los Angeles
San Diego
Colorado
El Paso
Dallas
Red R.
Arkansas R.
Mississippi
Birmingham
Montgomery
Wilmington
Charleston
Savannah
Jacksonville
Tallahassee
Nogales
C. Juarez
Hermosillo
Austin
Houston
Jackson
Mobile
Pensacola
New Orleans
Port Arthur
Tampa
Galveston
San Antonio
Laredo
Chihuahua
Guaymas
G. of California
MEXICO
Gulf of Mexico
ATLANTIC
BERMUDA IS.
BAHAMA IS.
SAN SALVADOR
OCEAN
Torreon
Monterey
Matamoros
Key West
Havana
Matanzas
CUBA
Santiago
La Paz
Mazatlan
San Blas
Zacatecas
Tampico
Merida
Guadalajara
Mexico
Puebla
Oaxaca
Vera Cruz
Campeche
Manzanillo
Acapulco
Beliz
Port au Prince
DOMINICAN REPUBLIC
Santo Domingo
HAITI
San Juan
PORTO RICO
WEST
INDIES
JAMAICA
Kingston
GUADELOUPE
MARTINIQUE
BARBADOS
Salina Cruz
GUATEMALA
HONDURAS
Tegucigalpa
Caribbean Sea
Guatemala
San Salvador
NICARAGUA
CENTRAL
AMERICA
Managua
COSTA RICA
San Jose
Panama
Colon
Maracaibo
Barranquilla
Cartagena
Puerto Cabello
La Guaira
Valencia
Caracas
TRINIDAD
Orinoco R.
C. Bolivar
VENEZUELA
Georgetown
Paramaribo
Cayenne
GUIANA
Buenaventura
Medellin
Bogota
COLOMBIA
Popayan
GALAPAGOS IS.
Quito
Guayaquil
ECUADOR
Rio Negro
Manaos
Obidos
Santarem
Para
MARAJO ISL.
St. Louis de Maranhao
Parnahiba
Ceara
Paita
Piura
Iquitos
Amazon
River
Natal
Trujillo
Porto Velho
Madeira Falls
SOUTH
Pernambuco (Recife)
Cerro de Pasco
Oroya
Lima
Callao
Cuzco
PERU
BRAZIL
Bahia (S. Salvador)
PACIFIC
Arequipa
Mollendo
La Paz
BOLIVIA
Cuyaba
Goyaz
Arica
Oruro
Sucre
Potosi
AMERICA
Corumba
Diamantina
Iquique
Ouro Preto
Victoria
Sao Paulo
Rio de Janeiro
Antofagasta
Jujuy
Asuncion
Curitiba
Santos
Taltal
ST. FELIX
Copiapo
Tucuman
Corrientes
Coquimbo
San Juan
Parana
Porto Alegre
JUAN FERNANDEZ ISL.
Valparaiso
Mendoza
Cordoba
Santiago
San Luis
Rosario
Rio Grande do Sul
URUGUAY
Talcahuano
Concepcion
Buenos Aires
La Plata
Montevideo
Plata R.
Neuquen
C. CORRIENTES
Valdivia
Corral
Bahia Blanca
Pto Montt
Gulf of San Matias
Rawson
OCEAN
Rivadavia
Gulf of Penas
San Julian
Santa Cruz
Pto Gallegos
Strait of Magellan
MALVINAS IS.
Punta Arenas
TIERRA DEL FUEGO
SOUTH GEORGIA
CAPE HORN