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FACTS AND FIGURES ABOUT THE PHILIPPINES



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1920



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THE MONTALBAN GORGE

FOREWORD

CHARLES EMMETT YEATER

Vice-Governor and Secretary of Public Instruction

The participation of the Philippines in the annual press banquet held at the University of Missouri, presents a favorable opportunity to disseminate a better knowledge of the Philippines. A general view of these Islands may be submitted in a few words.

Of greatest human interest naturally are human beings. There are ten million and a half of the Filipino people. Of these, about five hundred thousand, mostly dwellers of the mountains, are in about the same condition as the unsettled tribes of Indians in the western part of the United States were twenty or thirty years ago. The remaining ten millions have a civilization and a knowledge of the correct principles of government superior to any of the Central or South American republics, with but few exceptions. Between the discovery of the Philippines and American occupation the Islanders were for nearly four centuries subject to, and absorbed much of, the Spanish civilization and culture, together with the Christian religion, to which they were converted by the efforts of the Roman Catholic priests, who sacrificed health and life in their noble and zealous work. The Philippine people are characterized by a generosity and hospitality unexcelled by any other people's. They are clever and quick to learn and their mentality is plastic to all the impressions of the Western civilization. They have, too, as every other people, their characteristic faults, largely such as were inculcated by the Spanish contact or are incident to all dwellers in the tropics. On the whole they are a kindly, sympathetic, and markedly temperate people.

The Philippine Islands cover an area about equal to the British Islands or the Islands constituting the Japanese Empire before the war with China. They consist generally of vast alluvial plains, or mountain ranges with an abrupt transition from one to the other. The plains are of the very richest soil and two or three consecutive crops a year are frequently raised. The mountains are covered with a dense, impenetrable growth of forest trees, for vegetation here has no winter sleep but continues to grow every day during the year. The Islands are producing great quantities of rice, corn, tobacco, sugar, hemp, and copra, the dried meat of the coconut. They are capable of producing, and are beginning to produce rubber, coffee and countless other food and medicinal products

and raw materials too numerous to mention. In addition there are many rare tropical woods fitted to make the most beautiful and elegant furniture and finishings, in a variety of natural colors many of which are unknown as yet in any market. Besides, paying mines of gold, copper, and coal are in operation, and there are immense visible iron deposits; but the extent of the natural mineral resources is unrealized, for as yet no thorough survey has been made.

Of the physical aspect of the Islands, there is little knowledge in America. It is a beautiful land. Its deep tropical forests, its broad and level plains, its mountains, its beautiful rivers and the ever changing vista of the restless surrounding sea, its hundreds of evergreen islands, of all sizes and shapes, with white beaches and coral reefs, interest the traveler to an absorbing degree. There is no country in the Orient which displays so many and variegated marks of beauty and grandeur.

But more misunderstood yet is the climate. For travelers, what are called the winter months in the temperate zones are as perfect as can be found anywhere upon the globe, and the temperature is at this season generally from 70° to 74° Fahrenheit. The hot season corresponds in time to our spring months, but the temperature only rarely approximates 100 degrees, and the heat is tempered by the constant sea breeze which blows unremittingly six months from the northeast and six months from the southwest. There are no such hot days and hot nights as are prevalent all over the central Mississippi valley. Generally comfort requires a light covering every night.

With these characteristics the archipelago must in the coming decades attract foreign capital to develop its wonderful natural resources, and it is to be hoped that such financial assistance will come from the United States and thus bind more closely for all time the ties between this land and ours. Then, too, may the day be hastened when the American people will come to know that there is a winter climate here where the old and feeble, and those with whom our severe winters do not agree, can come and enjoy life out of doors with the absolute security that not even a single day of bad weather will keep them within walls.

May the Missouri press meeting of 1920 be the means of disseminating a knowledge of the resources

and of the advantages of these Islands of wonderful tropic beauty fanned by the shifting but constant monsoons and ever surrounded and caressed by the waves of the summer seas, whose people, grateful to us for

our altruistic aid, hold high the torch of liberty in the Orient, and in time will pass on to the teeming and oppressed millions of Asia the blessings of our ordered liberty and free institutions.



FERN GROWING IN A TREE

GEOGRAPHICAL NOTES

The land area of the Philippine Islands lies between 21° 10' and 4° 40' north latitude and between 116° 40' and 126° 34' east longitude. There are 7,083 islands, extending 1,152 statute miles from north to south and 682 from east to west. Of this number 462 have an area of 1 square mile or over; 2,441 are named and 4,642 unnamed. The northernmost is Y'Ami Island, 65 miles from Formosa, the southernmost Saluag, 4° 40' from the equator, and 30 miles east of Borneo. The total area is 114,400 square miles or about 1.6 times that of Missouri, twice the New England States, some 7,000 square miles less than the area of British Isles. Cuba is only about a third as large and the Hawaiian Islands one-seventeenth.

The largest, Luzon, contains 40,814 square miles and Mindanao, the next in size, 36,906. Panay has 4,448; Cebu, 1,695; Palawan, 4,500; Mindoro, 3,794; Bohol, 1,534; Masbate, 1,255. Between and about lie the other groups, including the better known Sulu or Jolo Islands in the south, the Babuyanes and Batanes in the north, the Catanduanes in the east, and Culion in the west.

BAYS AND STRAITS—The Archipelago has a coast line of 11,444 statute miles, which exceeds that of the entire United States. There are 21 fine harbors and 8 landlocked straits, the principal being Manila, Subic, Batangas, Tayabas and Hondagua, Iligan, Illana, Nasipit, Sibuguey, Sarangani bays; the gulfs of Lingayen, Ragay, Lagonoy and Davao, and the San Bernardino, San Juanico, Surigao and Basilan Straits and the Verde Passage. Manila Bay, with an area of 770 square miles, and a circumference of 120, is the finest in the entire Far East. It is a roadstead in all parts of which vessels can anchor but a break-water has been constructed for vessels to shelter behind in bad weather. Manila, Cebu, Iloilo, Zamboanga, and Jolo are the ports of entry.

The interisland waters are rather shallow, averaging between 75 and 500 fathoms.

MOUNTAINS—The extensive mountain system of the Philippines belongs to the succession of volcanic ranges of the Pacific system of the world's surface. The Cordilleras, Urdaneta, Surigao, Caraballos Sur and Caraballos Occidentales, Caraballos del Baler, and Sierra Madre are the principal ranges. There are 20 more or less active volcanoes. Mount Apo (Apo means master) 9,610 feet, in Mindanao; Mayon Volcano, 7,943 feet, in Albay; Taal, 984 feet, in Batangas; Canlaon, 7,995 feet, in Negros; Banajao, or Majayjay, 7,144 are the most famous of these. Other high mountains are Pulog, 9,580 feet; Halcon, 8,481 feet; Malindingang, 8,560 feet; Santo Tomas, 7,400 feet; Data,

Pagsan, Isarog, Pinalobo, Bulusan, Maquiling and Arayat.

RIVERS—Nearly all the principal islands have important river systems. In Luzon are the Rio Grande de Cagayan, 220 miles long, which drains 16,000 square miles of territory; the Rio Grande de Pampanga, emptying into Manila Bay through a dozen mouths; the Agno, the Abra, Bued, and the more familiar Pasig. The Rio Grande de Mindanao, 330 miles long, is the largest in the Islands, and the Agusan, also in Mindanao, the third in size. Mindoro has 60 rivers and Samar, 26. In Panay, are the Jalaur and Panay, and in Negros the Danao and the Lanao. Interisland steamers berth in the Pasig as far as the Bridge of Spain. The larger rivers, in addition to being navigable for steamers and launches of light draft for distances of from 20 to 200 miles, could furnish abundant water power for manufacturing purposes.

LAKES—Mindanao, especially the basin of the Agusan, has a vast number of lakes, among them the famous lakes Lanao, Maimit, and Laguna. Laguna de Bay, near Manila, Lake Naujan in Mindoro, Taal and Bombon lakes in Batangas, and Lake Bito in Leyte are also noted for size and beauty.

FALLS—The Falls of Pagsanhan and the Botocan at Majayjay, in Laguna Province; the Maria Cristina, the Pigduktan, and Kolilokan, in Mindanao, are the largest and most beautiful.

MINERAL SPRINGS—Some 170 or more medico-mineral springs, hot and cold, are known in the Islands, many rivaling the most famous of Europe and America. Near Manila are those of Los Baños, Sibul, Lemery, Tivi, and Marilao.

CLIMATE—Father Algué, the world famous Director of the Weather Bureau, divides the climate into three types, the classification being based on distance above sea level and exposure to ocean breezes.

November, December, January, and February are the temperate months. The mean average temperature at this season is about 77° to 79° Fahrenheit. In April, May, and June, the hot months, the mean average is between 83° and 84°. In the other months it is about 80°. The nights are seldom unpleasantly hot even in the hot season, and a temperature of 100° is a rarity in Manila. The mountain regions of the north are cool as September in the temperate zone. The mean average maximum for Baguio is 80° and the minimum 53°. Far south, nearer the equator, in some localities it is hotter; but Zamboanga and the Provinces of Bukidnon and Lanao boast a most agreeable and healthful climate.

There are two seasons, the rainy and the dry. The

maximum of rains is in July, August, and September and the minimum in February and March.

The lowest average rainfall for the last twelve years for the whole Archipelago was 60.73 inches in the driest region, the highest, 125.68, in the wettest. Manila's average was 75.46.

The following table shows how this compares with the rainfall in American cities:

Station.	Annual Average.
Manila	75.46
Portland, Oregon.....	44.65
San Francisco, California.....	22.66
Yuma, Arizona.....	3.47
Havre, Montana.....	13.32
Denver, Colorado	14.26
El Paso, Texas.....	9.43
Moorhead, Minnesota.....	24.40
Omaha, Nebraska.....	30.22

Galveston, Texas.....	46.53
Marquette, Michigan	32.27
Chicago, Illinois.....	33.52
New Orleans, Louisiana.....	57.55
Northfield, Vermont	33.56
New York, New York	44.20
Jacksonville, Florida.....	52.62

The prevailing winds, except in the typhoon season, are light and refreshing breezes blowing morning and evening.

Between the years 1902 and 1918, only two earthquakes of No. X intensity (the most severe type, as measured by seismographers) occurred in the Philippines. There were four of the No. IX class and four of the VIII-IX. None of these did any appreciable damage to property or caused any loss of life in Manila.



FRUIT BATS

HISTORY

Long before the Philippines was "discovered" by Ferdinand Magellan, this country was already well known in the Orient. A Chinese geographer, Chao Ju Kua, as early as the 13th century made mention of this Archipelago and described its trade relations with the Chinese. Commercial connections also existed between the Philippines and Japan, India, Siam, Cambodia, the Malay Peninsula, Java, Sumatra, Borneo, and the Moluccas.

Before the arrival of the Spaniards, the Filipinos had already attained a considerable degree of culture, which, though bearing the unmistakable impress of Hindu influence, was uniformly Malayan. The islanders then had systems of writing which closely followed the Phoenician alphabetical arrangement. They had calendars and a system of weights and measures. They tilled their lands and maintained village governments. Their laws were mostly based on traditions and customs handed down from generation to generation, although occasionally codes of laws also existed, such as the penal code of Calantiao, written about eighty-eight years before the coming of Magellan.

On March 16, 1521, the Philippine was "discovered" by Magellan in his attempt to reach the Moluccas by a western route. This date is important because it marks the beginning of the Christianization of the Archipelago, and of the introduction into the Islands of western culture.

The colonization of the Philippines by Spain began in 1565, when Lopez de Legaspi founded in Cebu the first Spanish settlement, which he called "San Miguel." Panay, the second Spanish settlement, was soon after established on Panay Island. And on June 3, 1571, the third Spanish settlement was founded in Manila. Thereafter Spanish influence and power were felt in various points of the Archipelago.

The history of the Philippines from the beginning of Spanish rule to the middle of the 19th century was a long tale of cruel wars and uprisings. The Portuguese disputed Spain's right to the Islands and between the years 1566 and 1570 made three attempts to dislodge therefrom their antagonists. The Dutch during the first half of the 17th century repeatedly appeared in Philippine waters and made attacks on the Spaniards. The Chinese residents added to these difficulties by revolting from time to time. But by far the greatest and most persistent raisers of troubles were the Filipinos themselves, who repeatedly revolted. Between the years 1645 and 1665 alone there occurred in the Islands five uprisings against the Spanish government. Other revolts, no less serious,

took place in the 18th and 19th centuries. The rebellion of Dagohoy, for example, took place at this time, spreading throughout practically the whole Island of Bohol and continuing for a period of eighty years.

The dawn of the 19th century, however, brought significant changes that had far reaching results. During the periods 1810 to 1813, 1820 to 1823, and 1830 to 1837, as a result of the nationalistic and liberal struggles Spain was going through, the Cortes was revived and representatives from different parts of the monarchy—the colonies included—were given seats therein. This naturally ushered in a period of constitutional and representative government for the Philippines. Moreover, by 1830, the Spanish commercial policy of trade exclusiveness for the colonies may be said to have come to an end in the Philippines. A few years later, Manila was thrown open to foreign trade and a freer and more liberal economic system adopted. In this way, the foundation for later political and economic growth and progress was laid.

Though education under Spanish rule was never thorough and popular, there nevertheless existed, from the beginning of Spanish domination scores of schools and colleges which were mostly conducted by the religious orders. These schools and colleges offered various courses and graduated numerous priests, lawyers, physicians, pharmacists and teachers. The increase in the number of these professional graduates made possible the rise of an intellectual class in the seventies and eighties. To this group of men, Burgos and M. Paterno, leaders of the liberal manifestation of 1870, and Dr. Rizal and M. H. del Pilar, prominent propagandists, belonged.

The last decades of Spanish rule were marked by several reforms, but these reforms were altogether too conservative and came too late. The progress from below was going on much faster than the reforms from above. Consequently there was much discontent and the Filipinos in August 1896, rose in revolt and sought to declare themselves independent of Spain. The rebellion was halted by the signing of the Pact of Biacnabato, December 1897, only to be resumed early the year following. The Americans appeared on the scene May 1, 1898, and on August 13, Manila surrendered to the American commander after simultaneous attacks by the American and Filipino forces.

Meanwhile a Filipino government had been established. This government, till late in 1899, was in control of the Archipelago with the exception of Manila Cavite, and a few other places where Spanish garrison still maintained themselves.



OLD FLIGHT OF STEPS IN TAAL

American civil government was established over the Philippines in 1901. Under this government the Philippines have made rapid strides along the road of progress. But the most significant movement is perhaps the development of Philippine home rule. For

it should be known that today, with few exceptions, notably those of the American Chief Executive and the American Vice-Governor, who is also Secretary of Public Instruction, the Philippine government is run by the Filipinos themselves.



A GROUP OF LEADERS—CITY FILIPINO Y. M. C. A.

PEOPLE

By the use of the word "tribes" in speaking of the natives of the different sections of the Philippines, the erroneous impression has become current that the Filipino people lacks homogeneity, whereas, as a matter of fact any one who has been in the Philippines at all will readily admit that the Ilocano, Pangasinan, Pampango, Tagalog, Bicol and Visayan are one and the same in every respect. Nor is this similarity found among these classes of Filipinos only, but to an equal degree, modified only by difference of costume, civilization and religion, among the so-called Moros, Igorotes and other non-Christian and pagan inhabitants of the Philippines as well. As a matter of fact those of the more backward Filipinos who have attained occidental

some reason for believing that they migrated into the islands at two different times. But in all probability they came from the same general region and have a common ancestry.

"There are many different languages or dialects in the Philippines but all are closely related one to another, the pronunciation and mode of speech vary but little from one section of the Philippines to another and the majority of the words are common to two or more of the Philippine languages. These languages, whether spoken by pagan, Moro or Christian, belong to the great Malayo-Polynesian family, branches of which are found in Sumatra, the Hawaiian Islands, Madagascar and on many islands between."



THE LUNETTA, MANILA

education and adopted the western manner of dressing can not be told apart from their more civilized brethren by Filipinos themselves. And the distinction would of course be harder for a foreigner to make, for in fact, no such distinction really exists. In the Philippine Legislature are found representatives from the northernmost regions of the Philippines to the domains in the most southern extremity, and from all the provinces and municipalities extending from east to west throughout the entire length and breadth of the Archipelago. Among these representatives there exists the same oneness of purpose, thought and action as is found among the members of the Legislative Assembly of any state of the union.

Dr. Merton Miller, former Chief Ethnologist, Philippine Bureau of Science had this to say about the Filipinos:

"From the extreme northern end of the archipelago to its southernmost limits, with the exception of the few scattered Negritos, the people of the Philippines, pagan, Moro and Christian are one racially. There is

The early immigrants into the Philippines were the Indonesians and the Malays and the blend of these two races characterizes the people of the Philippines today. This admixture of the Indonesians and the Malays has become so thorough and widespread that, as stated above, it is extremely difficult to distinguish the people of one group from those of another.

The people of the Philippines are still commonly grouped under the heading Christian and non-Christian. Classifying the Igorotes as mountaineers and the Moros as southerners would really be better. The census of 1918 shows there were 9,495,272 Christian people and 855,368 non-Christians in the Philippines, making a total population of 10,350,640. It will thus be seen that the non-Christian people of the Philippines represent but 8.2 per cent of the total population. In this 8.2 per cent are included all the Moros, Igorotes and the most backward peoples of the Philippines who have been so widely advertised and not infrequently grossly misrepresented.

GOVERNMENT

The corporate governmental entities through which the functions of government are exercised throughout the Philippine Islands are the Insular Government, the provincial and municipal governments and the chartered cities.

INSULAR GOVERNMENT—The Insular Government, as in the case of the Federal Government of the United States, is divided into the Executive, the Legislative and the Judiciary branches. At the head of the Executive branch is the Governor-General of the Philippine Islands, who is appointed by the President of the United States, by and with the advice and consent of the Senate. He is assisted by the Department Secretaries in the performance of his duties. All the Department Secretaries, with the exception of the Secretary of Public Instruction, who is ex-officio Vice-Governor at the same time and is appointed by the President of the United States, are Filipinos and appointed by the Governor-General. The other officials of the Philippine Government appointed by the President of the United States are the Insular Auditor, the Deputy Insular Auditor and the nine Justices of the Supreme Court.

The executive departments of the Philippine Government and the bureaus, offices and boards pertaining to each are given below:

GOVERNOR-GENERAL

- Bureau of Audits
- Bureau of Civil Service

All other offices and branches of the service not assigned by law to any Department

DEPARTMENT OF THE INTERIOR

- Bureau of Non-Christian Tribes
- Philippine General Hospital
- Board of Pharmaceutical Examiners
- Board of Medical Examiners
- Board of Dental Examiners
- Board of Optical Examiners
- Board of Examination for Nurses
- Board of Dental Hygiene
- Executive Bureau
- Philippine Constabulary
- Bureau of Dependent Children

DEPARTMENT OF PUBLIC INSTRUCTION

- Bureau of Education
- Philippine Health Service
- Bureau of Quarantine Service

DEPARTMENT OF FINANCE

- Bureau of Customs
- Bureau of Internal Revenue
- Bureau of the Treasury
- Bureau of Printing

DEPARTMENT OF FINANCE—Continued.

General supervision over banks, banking transactions, coinage, currency, and except as otherwise specially provided over all funds the investments of which may be authorized by law.

DEPARTMENT OF JUSTICE

- Bureau of Justice
- Courts of First Instance and Inferior Courts
- Philippine Library and Museum
- Bureau of Prisons
- Public Utility Commission

DEPARTMENT OF AGRICULTURE AND NATURAL RESOURCES

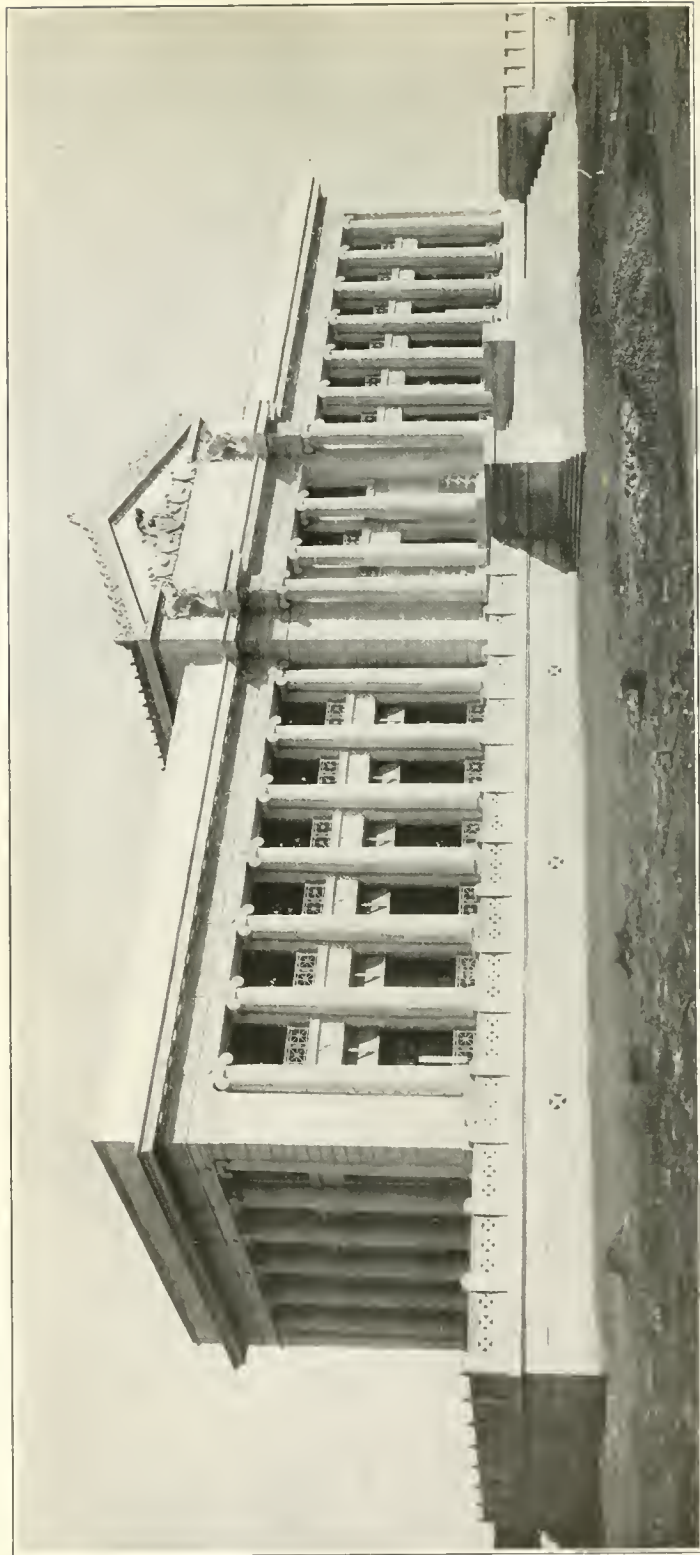
- Bureau of Agriculture
- Bureau of Forestry
- Bureau of Lands
- Matters pertaining to colonies and plantations on public lands
- Bureau of Science
- Weather Bureau
- Matters concerning hunting, fisheries, sponges and other sea products

DEPARTMENT OF COMMERCE AND COMMUNICATIONS

- Bureau of Public Works
- Bureau of Posts
- Bureau of Supply
- Bureau of Labor
- Bureau of Coast and Geodetic Survey
- Bureau of Commerce and Industry

The Executive Bureau and the Bureau of Non-Christian Tribes, both of which are in the Department of the Interior, exercise supervision over the provincial and municipal governments. The Executive Bureau has charge of the so-called regular provinces and the Bureau of Non-Christian Tribes of those inhabited by the backward inhabitants of the Philippines including the Moros in Mindanao and the Igorotes of the mountain regions of Luzon. The functions of these two bureaus are practically identical, the difference lying only in the degree of civilization of the inhabitants over whom they have supervision.

PROVINCIAL GOVERNMENT—The Philippine Archipelago is divided into 46 provinces, 34 of which are designated as regular provinces and the remaining 12 as special provinces. The chief executive of a regular province is the provincial governor, who is an elective official. He, together with two other elective members, form the provincial board which constitutes the legislative branch of the provincial government. In the special provinces, with the exception of Mindoro, Palawan and Batanes, the provincial governors are appointive officials.



PANGASINAN CAPITOL BUILDING, PANGASINAN PROVINCE

MUNICIPAL GOVERNMENT—As the name indicates, this branch of the Government has charge of the municipalities or towns. The chief executive of a municipality is called the municipal president. The municipal council, which is the legislative branch of the municipal government, consists of from 8 to 18 councilors, depending on the size of the municipality. There is a vice-president who substitutes for the president during his absence or disability and who is ex-officio member of the council.

CHARTERED CITIES—There are only two chartered cities in the Philippines: namely, Manila and Baguio.

THE LEGISLATIVE BRANCH—The Philippine Legislature is made up of the Senate and the House of Representatives. Of the 24 senators only two—those from the 12th district, which is composed of the Mountain Province, the city of Baguio, the Province of Nueva Vizcaya and the Department of Mindanao and Sulu—are appointed by the Governor-General; all the others are elected by popular vote; as are also the 91 representatives, excepting the nine who represent the Mountain Province, the Province of Nueva Vizcaya and Department of Mindanao and Sulu.

JUDICIARY—The administration of justice in the Philippines is entrusted to the Supreme Court, the Courts of First Instance, the municipal court of the city of Manila, and the courts of the justices of the peace. The Supreme Court, as its name indicates, is the highest entity in the judiciary system. As such it has an appellate jurisdiction in all actions and special proceedings brought to it from the Courts of First Instance and from other tribunals, from whose decisions the law specially permits appeal to the Supreme Court.

The Supreme Court is made up of nine justices; namely, the Chief Justice and eight associate justices. As a body it sits in banc to transact business. It also sits in divisions for the same purpose, and when it so sits four justices constitute a quorum; hence two divisions may sit at the same time. Decisions of the Supreme Court of the Philippine Islands may be appealed to the United States Supreme Court in certain cases.

INFERIOR COURTS—There is a Court of First Instance in every province and a justice of the peace court in nearly every municipality.



GOVERNMENT PIER, JOLO

EDUCATION

EDUCATION IN THE PRE-AMERICAN REGIME—

The Filipino people enjoy the distinction of having the oldest university under the American flag. The University of Santo Tomas, situated in Manila, was established in 1611. The first Philippine university

the Philippine archipelago became the possession of the United States. Almost literally before the roar of Dewey's guns ceased, the American soldiers started to show that they could teach as well as fight. One of the first things attended to even under the military



TONDO INTERMEDIATE SCHOOL GARDEN. 1918-1919

therefore antedates Harvard, the oldest institution of learning in the United States, by fully a quarter of a century.

Secondary institutions were established early during the Spanish rule. A general system of primary instruction, however, was not established in the Philippine Islands under the Spanish occupation until the issuance of the Royal Decree of 1863. It will thus be seen that Philippine education under Spain began from the top and worked downward.

EDUCATION UNDER AMERICAN OCCUPATION—

As a result of the war between America and Spain

régime was the establishment of schools. When the civil government was inaugurated, an act was passed establishing the Bureau of Education, which now constitutes one of the bureaus under the Department of Public Instruction, and continues to have charge of the public educational system of the Philippine Islands.

The Islands are divided into forty-nine school divisions, each division generally coinciding with the boundaries of a province, except the city of Manila, and four Insular schools: The Philippine Normal School, the Philippine School of Arts and Trades, the Philippine Nautical School, and the Central Luzon

Agricultural School, each of which is considered as a distinct division. A division is under the immediate charge of a superintendent who is the representative of the Director of Education. The Division Superintendent in the province is generally assisted by a provincial industrial supervisor and an academic supervisor. Each provincial division is divided into different districts consisting of one or more municipalities and several barrios or villages, each under the charge of a supervising teacher.

ences and conventions are held during the long vacation wherein teachers, supervisory officers, and division superintendents have active participation and render great assistance in the determination of policies and in outlining the work for the ensuing year. Furthermore, they are called upon from time to time for criticisms, suggestions, and advice upon various vital problems affecting the work of the Bureau of Education.

RESULT—The present Philippine educational sys-



PRIMARY SCHOOL PUPILS OF THE PUBLIC SCHOOLS OF THE PHILIPPINE ISLANDS RECEIVE DAILY PHYSICAL TRAINING IN THE FORM OF GROUP GAMES, FOLK DANCES, AND CALISTHENIC EXERCISES

Under the Division Superintendents also come the 50 provincial high schools. There are also 20 provincial trade schools and 14 provincial shops, the principals of which are responsible directly either to the principal of the provincial school or to the Division Superintendent of Schools.

While the Philippine educational system is a centralized one, the Bureau of Education is in reality a democratic institution. The responsibility for the conduct of the complete system rests upon the directorate but the Director calls upon the men in the field for suggestions and advice. Annually a series of confer-

tem has undergone a process of evolution. First, there was the organization stage, when the pioneers of education labored to lay the foundation for a well organized system more or less patterned after the American system. The academic work, which is the traditional feature of all school work, was almost the only thing in the curriculum. Then the Bureau labored to make industrial work a part and parcel of the program. This was followed by the movement to make physical education a vital part of the course. And now the aim is to maintain a proper balance in the academic, industrial, physical and social work.

There are seven elementary grades—four primary and three intermediate. The secondary courses take four years. There has been built up an English-speaking Filipino teaching staff—a distinctive achievement reflecting credit on Filipinos and Americans alike.

Graded vocational instruction occupies an important place in the school curriculum. Approximately 17 per cent of the total time in the primary grades and about 17 per cent of the total time in the general intermediate course is devoted to this

for handiwork articles; that trade school production yearly is over \$100,000 and that the yearly agricultural production of the schools is over \$281,000.

The Philippines being essentially an agricultural country, agricultural education is given considerable attention. The Bureau of Education at present maintains 13 large agricultural schools, 15 farm schools, and 162 settlement farm schools. The agricultural schools range in area from about 125 to about 2,000 acres, the farm schools from about 40 to about 125 acres, the settlement farm schools from about 30 to



BASKET BALL GAME (GIRLS). CAPIZ VS. ILOILO, INTER-VISAYAN ATHLETIC MEET, JANUARY 1-4, 1913

form of instruction. The special intermediate vocational courses include farming and trades for boys and housekeeping and household arts for girls.

The chief aims of industrial instruction may be briefly stated in these words: first, industrial intelligence; second, industrial skill; and third, industrial sympathy. The educational and economic values of industrial education are kept in view. It may be of interest to record that the Bureau of Education annually receives orders amounting to \$150,000 a year from various firms abroad, especially from America,

about 100 acres. In addition to these, the Bureau of Education has an extensive program of school and home gardening and maintains numerous agricultural clubs for boys and girls. Under the stress of the world-wide economic crises brought about by the World War, the General Office appealed to the field for increased production, and in response to this appeal, the schools now have over 4,000 school gardens and over 100,000 home gardens. Annually there are held over 20,000 Garden Days where there are over 143,000 pupils' exhibits and about 40,000 farmers' exhibits.

The system of physical education here compares favorably with the best in any other system of the world. The temptation of developing only a few "stars" has been valiantly resisted and the athletic slogan of "Athletics for Everybody" has been stressed instead. As a result of this policy over 96 per cent of the pupils enrolled in the elementary and secondary schools take active participation in the program of athletics and games during the year.

In the seven years' course the studies are principally in language, reading, good manners and right conduct, arithmetic, civics, hygiene and sanitation, writing, drawing, music, and Philippine history and government, in addition to a definite vocational training and organized play and athletics. The ordinary four-year secondary course offered in most of the high schools is patterned after the ordinary high school course in the United States with the exception that Philippine history and government and economic conditions in the Philippines are included to make it more nearly suited to the social and economic conditions which obtain in the Islands. Besides the regular secondary course, specialized secondary courses such as the nor-

PRIMARY

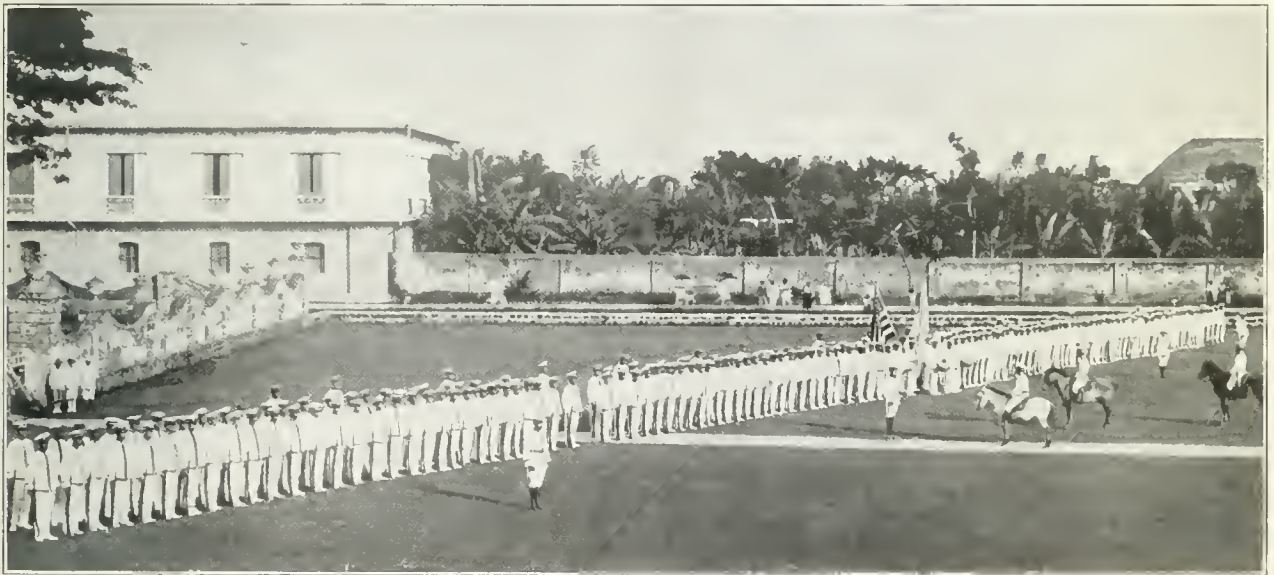
Grade	Male	Female	Total
Grade I	160,835	129,169	290,004
Grade II	80,809	58,208	139,017
Grade III	62,032	40,117	102,149
Grade IV	44,163	26,007	70,170
Total	347,839	253,501	601,340

INTERMEDIATE

Grade V	27,177	14,453	41,630
Grade VI	16,940	8,212	25,152
Grade VII	10,965	5,270	16,235
Total	55,082	27,935	83,017

SECONDARY

First year	5,934	2,242	8,176
Second year	3,074	961	4,035
Third year	1,750	422	2,172
Fourth year	1,267	317	1,584
Total	12,025	3,942	15,967
Grand total	414,946	285,378	700,324



COLEGIO SEMINARIO, NAGA, CAMARINES
MILITARY INSTRUCTION HAS BEEN INTRODUCED IN MOST OF THE LARGE BOYS' SCHOOLS

mal, commercial, trade, agricultural, and domestic science are offered. Over 700,000 children annually are enrolled in the public schools, which have English as the basis of public school instruction from the first grade to the fourth year inclusive. The following shows the monthly enrolment for the different grades and years as of August 1919:

AIMS AND PURPOSES—Those charged with the direction, administration, and supervision of the Philippine educational system are guided by the idea that the supreme aim of education is to secure for humanity as a whole and for every nation and for every individual the highest and fullest measure of freedom, happiness, and efficiency possible.

SITES AND BUILDINGS—For years considerable efforts have been put forth in the acquisition of standard school sites and the construction of standard school buildings, the sites to contain at least 2½ acres for a central and 1½ acres for a barrio school. The standard for a provincial school plant is set at 25 acres, and that for settlement farm schools and agricultural schools is much larger.

At present there are 865 satisfactory school buildings of permanent construction and 2,170 schools housed in buildings of semi-permanent and temporary types.

TEXTBOOKS—One of the distinctive features of

made for the support of public education in the Philippines:

Insular fund	\$3,033,638.66
Provincial fund	215,509.10
Municipal fund	1,807,257.35
Voluntary contributions	308,699.88
Total	\$5,365,104.99

The cost of education per capita on the basis of 10,500,000 inhabitants (1918 census) was \$0.51. The cost of education per pupil on the basis of attendance (700,324 pupils) was \$7.66.

It is significant that the first bill passed by the



CENTRO ESCOLAR DE SEÑORITAS
THE LARGEST GIRLS' SCHOOL IN THE PHILIPPINE ISLANDS, CONDUCTED BY A FILIPINA, MISS LIBRADA AVELINO
ENROLMENT: 1919-1920, 1,025 PUPILS

the educational work in the Philippines has been the evolution of elementary texts especially adapted to the needs, demands, and interests of the Filipinos. Text-books not especially prepared in the Philippines are principally in the upper secondary grades which do not require Philippine presentation. The texts are constantly undergoing a process of revision and the Bureau of Education seeks to secure from time to time books best adapted to the individual and social needs and conditions of the Filipinos.

FINANCES—There seems to be an impression among those not fully conversant with Philippine affairs, that the United States Government extends financial support to the Philippine public schools. As a matter of fact no financial aid of any kind is received from the United States Government. The schools are supported entirely by the people of the Philippine Islands through a well regulated system of taxation. The appropriations come from the Insular, provincial and municipal governments assisted by contributions in the form of cash donations, free labor, and gifts of land and buildings.

In 1918 the following expenditures were actually

elective Philippine Assembly consisting entirely of Filipinos was a law providing for the support of public education. It is also significant that it was under the government almost entirely controlled by Filipinos that legislation was passed appropriating \$15,000,000 in addition to the usual yearly appropriation of the Bureau of Education.

PRIVATE SCHOOLS—The private schools of the Philippines form a very important part of its educational system. There are now 300 accredited private schools with a total enrolment of 38,544 and a teaching force of 1,600.

In 1910 the Government took steps toward standardizing the private schools. New courses of study were adopted, new text-books and up-to-date methods of teaching introduced, English was enforced as the official language, and in general the work was made to correlate and harmonize with the work of the public schools, whereupon all schools complying with the requirements of the Government were accorded the same standing as the Government schools.

The girls' private schools have always been noted for the excellence of their needlework. Sewing and

needlework are obligatory in all private schools for girls, and domestic science is now taught in addition.

In keeping with the introduction of athletics in all the grades of the public schools, the private schools have embraced the general movement for better physique among school children, whereas ten years ago practically no athletics were indulged in in these schools. In most of the schools for larger boys military training has been introduced.

To summarize, the following table is reproduced to show that whereas, in 1908, there was one recognized private primary school, one intermediate, one high school and one college in the Islands, in 1919 there were 157 primary schools, 90 intermediate, 35 high schools and 18 colleges.

Year	Primary	Inter- mediate	High School	College
1908	1	1	1	1
1910	7	7	7	5
1911	10	10	9	7
1912	15	15	13	9
1913	30	29	22	12
1914	35	34	23	13
1915	46	43	29	13
1916	77	57	33	14
1917	110	69	33	15
1918	135	79	34	17
1919	157	90	35	18
	157	90	35	18

UNIVERSITIES—The University of the Philippines corresponds to a state university, and gives courses in liberal arts, sciences, education, medicine and surgery, dentistry, pharmacy, agriculture, veterinary medicine, engineering, law, forestry, music and the fine arts. Collegiate degrees are conferred upon the graduates in all the courses named with the exception of the last two, for which diplomas of proficiency are issued to graduates. The enrolment for the school year 1919-20 is 3,427. The number of graduates during the last 5 years totaled 1,322. The University has now 31 buildings of permanent materials. There are no dormitory facilities provided except at the College of Agriculture in Los Baños, where students are housed in cottages.

The Santo Tomas University, which has the distinction of being the oldest institution of high learning under the American flag, having been founded a quarter of a century before Harvard, is a church institution of the Catholic denomination. It gives courses in law, medicine, pharmacy, civil engineering, philosophy and letters, and theology. For the school year 1919-20 there are 701 students enrolled. The total number of graduates during the last five years was 347 and the number of buildings is 5, including one dormitory.

AGRICULTURE

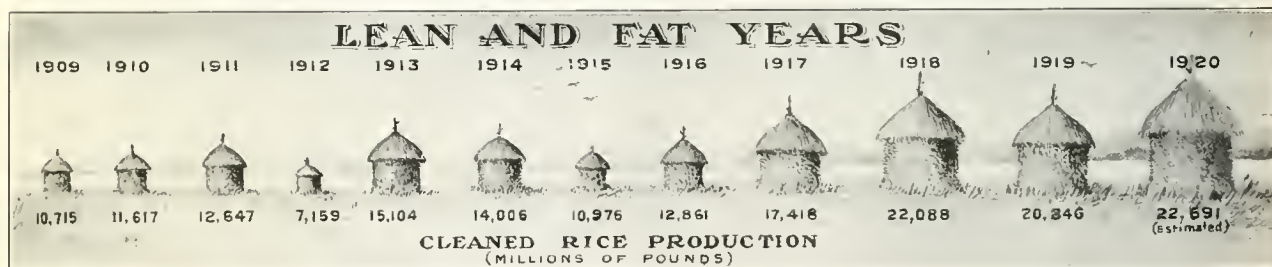
PRINCIPAL EXPORT CROPS—Abaca (Manila hemp), coconut products, sugar and tobacco lead the list of the export products of the Philippines. The following table taken from the report of the Collector of Customs for 1918 shows their values:

Article,	Value.
Abaca (Manila hemp).....	\$58,980,984.50
Coconut products.....	36,851,300.50
Sugar	15,804,390.00
Tobacco products.....	10,575,313.00
Maguoy	1,868,054.00
Cordage	866,989.00
Fruits, fresh	39,200.50
Rubber, crude.....	37,605.00
Ilang-ilang oil.....	32,797.50

RICE—As in the other countries of the Far East, rice is almost exclusively the staple foodstuff of the people, although it should be remembered that in some provinces corn constitutes an important part of the daily diet. But although the production of this cereal has been increasing steadily and remarkably since 1910, as may be seen from the following graphic chart, the Philippines has to draw upon other countries, especially Indo-China, for part of its rice supply.

Philippines in some form for centuries, for, in general, it may be said that the certainty of a rice harvest depends upon irrigation to supplement the natural rainfall. When the rainfall is copious and well distributed during the rice growing season, there is little demand for artificial irrigation, but in the event of a drought or irregular rainfall irrigation is to be resorted to insure a normal rice crop. With irrigation it is also possible to grow two crops of rice a year, whereas without it the planting of one is often hazardous. Prior to 1908 not much attention was given to the development of irrigation systems so that the only irrigation works constructed were by private and communal enterprise. These old systems, which are of more or less magnitude, are found in different parts of the Islands, the most notable being the extensive systems with permanent dams, tunnels and ditches constructed by the friars and the remarkable side hill terraces built by the mountain people in the subprovince of Ifugao.

Investigations and studies of irrigation possibilities have now advanced sufficiently to warrant the Bureau of Public Works recommending a ten-year program



The food shortage everywhere as a result of the recent war showed the absolute necessity of increasing rice production at least to the point of meeting local demand therefor. The Government is now bending every effort towards solving this problem. All the money that can be judiciously spent, considering the technical personnel available, is appropriated for the construction of irrigation systems, so essential, in fact indispensable, in the successful growing of rice. Efforts are also being concentrated on the improvement of the present varieties and the elimination of those known to be of low yield. With the introduction of improved farm machinery and implements, the time is not far off when the Philippines will be able to grow the rice that its growing population requires.

IRRIGATION—Irrigation has been practiced in the

for the construction of 40 irrigation systems in 20 of the principal rice producing provinces to water an area of approximately 750,000 acres. It is estimated that these 40 systems will cost about \$25,000,000. With these systems completed and operating, there will be no further need of important rice from other countries. If it is considered that the value of rice importations during the past 10 years have averaged over \$6,000,000, it is readily apparent that the investment of \$25,000,000 in irrigation systems is highly advisable.

ABACA (Manila hemp)—The Philippines is the only source in the world of this increasingly important fiber. It stands second in importance among the agricultural products of the Archipelago and occupies first place among its exports.



MASONRY DAM ON FRIAR LANDS, CAVITE PROVINCE

The other commercial fibers grown in the Philippines are sisal and maguey.

COCONUTS—The Philippines is the third most important producer of coconuts in the world, being excelled only by the Dutch East Indies and the Federated Malay States. It is estimated that there are approximately 829,000 acres planted to coconuts in the Philippines, containing some 67,120,000 trees, which in 1918 produced 382,120 short tons valued at \$28,267,000. The coconut is now used in many different ways for food and for industrial purposes and their number is increasing. The coconut oil industry in the Philippines, which until the war was of no great commercial importance, has developed into one of the most important industries during the last five years. In 1918 the value of coconut oil exported from the Philippines was \$18,552,249 as compared with the value of the coconut oil exported in 1914 of \$1,996,648.

If the fact is taken into account that there are yet millions of acres of good coconut lands undeveloped it can readily be seen that the Philippines in time may wrest the honors as the leading coconut producer from the Dutch Indies and the Federated Malay States.

SUGAR—Cane sugar products rank third among the Islands' agricultural products and exports. The following table shows the growth of the sugar cane industry from 1910 to 1918:

Year	Area under cultivation	Production of sugar	Total value of sugar products
1910	205,093	168,254	\$7,631,500
1911	296,520	268,878	12,196,000
1912	405,244	281,354	13,214,000
1913	434,896	345,076	12,849,000
1914	417,599	408,339	14,314,500
1915	427,483	421,192	16,606,000
1916	444,780	412,273	17,068,000
1917	459,606	425,265	19,352,500
1918	509,026	436,779	20,579,500

The phenomenal growth of this industry from 1910 to 1918 is due to the establishment of modern sugar centrals. In 1910 there was one modern sugar central whereas at present there are 28 and several are in process of construction.

TOBACCO—The Manila cigar like Manila hemp is well known everywhere. The tobacco crop of the Philippines in 1918 represented the sum of \$7,609,500. The importance of this industry may be better appreciated by reference to the following table:

Year.	Area cultivated	Production of leaves	Value
	<i>Acres</i>	<i>Short tons</i>	
1910	132,445	30,807	\$2,100,500
1911	170,499	28,070	1,914,000
1912	140,847	32,541	2,218,500
1913	170,499	50,666	3,454,500
1914	150,237	51,404	3,554,500
1915	131,704	42,133	2,842,500
1916	145,542	45,253	3,629,500
1917	152,708	53,822	5,442,000
1918	193,833	67,710	7,609,500

It will be noted that while the area grown in tobacco has not materially increased, the value of the product has more than trebled.

SECONDARY FOOD PRODUCTS—Corn leads in importance among the secondary food products. In 1918 there were 1,033,800 acres grown to corn producing 11,272,000 bushels valued at \$10,686,000. The other food crops worth mentioning under this heading are sweet potatoes, cassava, sesame, mongos, peanuts, bananas, mangoes, citrus, lanzones and a great number of tropical fruits and vegetables. Including the edible *algae* and *fungi* there are more than 400 species of plants in the Philippines, either wild or cultivated, that find a place in the dietary system of the people. So rich is the country in food producing plants!

LIVE STOCK—One of the most notable features of the live stock industry of the Philippines is the ever growing interest shown by the farmers in improved breeds of cattle, hogs and poultry. Live stock raising is one of the most important and profitable industries in the Philippines. Rinderpest alone has been the great deterring factor in what would doubtless be the unprecedented growth of this industry.

Special mention must be made of the "carabao" or water buffalo, which is the most important work animal in the Philippines. On lowland rice fields the carabao is used exclusively. It is only in a few provinces that oxen are used at all in farming.

In 1917 there were 1,271,000 head of carabaos and 603,000 head of cattle representing an aggregate value of \$82,410,500.

PROSPECTIVE AGRICULTURAL INDUSTRIES—The plants from which the various other tropical staple products in the world's markets are derived, such as rubber, coffee, tea, cacao, pepper, cinchona, and cassava are all known to thrive well in the Philippines, although the growing of those enumerated is yet of comparatively little importance. Rubber has the greatest future of these. The great Island of Mindanao, which is outside the typhoon zone, has been found to be suitable to the growing of rubber. As a matter of



DAM AND HEADWORKS, SAN MIGUEL IRRIGATION SYSTEM, TARLAC PROVINCE

fact all the large rubber plantations of the Philippines are located on Mindanao or the adjacent island of Basilan.

During the early years of American occupation, when the acreage planted to rubber in other countries increased by leaps and bounds, the erroneous impres-

he heads now has some 80,000 rubber trees planted. The success of its operations has induced others to plant rubber, and while the Philippine output of rubber is still insignificant, it may be said that the rubber industry has come to stay.

With the immense agricultural resources of the



COCONUT RAFTS ON THE PAGSANHAN RIVER

sion somehow gained ground that the Philippines was unsuited to rubber. And it is not very many years ago that one planter, who never had lost faith in the possibilities of the Islands for growing rubber, was able to demonstrate beyond any doubt that rubber could be grown in the Philippines successfully. The company

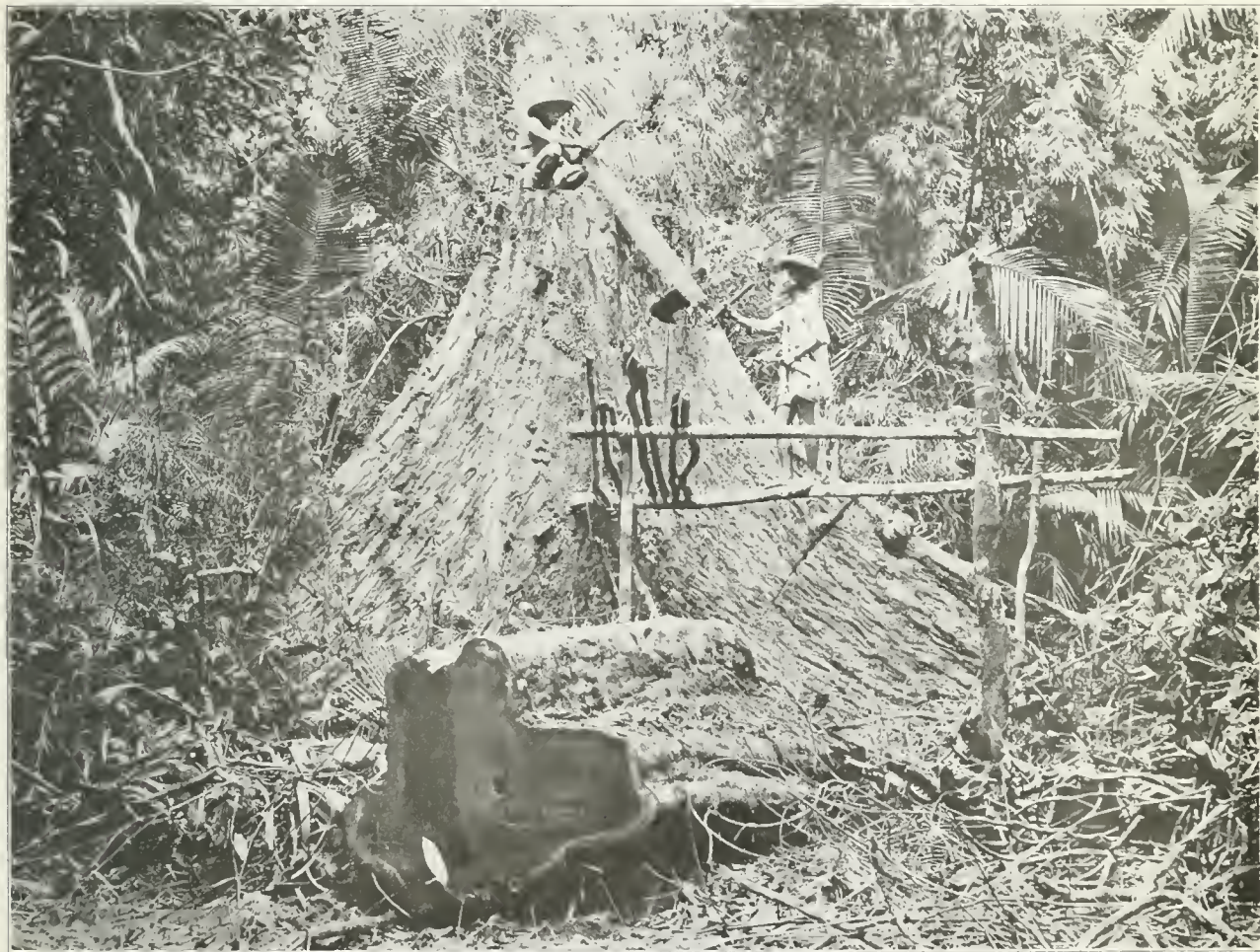
Philippines which are still practically untouched and the repeated public assurances given by the Government for the protection of American capital in the Islands, the day is near when American enterprise and money will enter into the agricultural field in the Philippines and cooperate in their development.

FOREST RESOURCES

AREA—The virgin forests of the Philippine Islands cover approximately 40,000 square miles, about equal to the area of the State of Kentucky. This is about one-third of the total area of the Archipelago. In addition there are estimated to be about 20,000 square

Less than 1 per cent of the timber is held under sure title of private ownership.

COMPOSITION—About 70 per cent of all Philippine timber belongs to the dipterocarp family, which is generally found in stands which are almost pure



CUTTING NARRA TABLE TOPS

miles of second-growth forest which will yield large quantities of firewood and some small-sized timber. Taken together, the virgin and second-growth forests of the Philippines cover an area about equal to that of the State of New Mexico.

OWNERSHIP—More than 99 per cent of the timber belongs to the Philippine Government and is under the administrative control of the Bureau of Forestry.

from the lumberman's point of view. The largest individuals of this family reach 200 feet in height and some specimens have a diameter of 7 feet. This family is by far the most important, as it furnishes the main bulk of the timber cut in the Philippines. About a dozen botanically distinct species furnish probably 80 per cent of the entire cut. From the standpoint of the lumberman, however, this number can be reduced

to three groups, namely, the lauans, apitongs, and yacals.

YACALS—This group comprises trees locally known as yacal, narig, mangachapuy, and dalingdingan. The timbers are hard and durable and are more plentiful than the other very durable commercial woods of the Islands.

APITONGS—The apitong group comprises timbers known as apitong, panao, hagachac, and guijo. The first three are marketed under the name of apitong. Guijo is generally considered somewhat superior. Well-seasoned timbers of this group weigh between 40 and 50 pounds per cubic foot.

LAUANS—It is in this group that the main wealth of the Philippine forests lies. It comprises timbers locally known as white lauan, red lauan, almon, balac-bacan, bagtican, mayapis, tiaong, and tanguile. For the sake of simplicity, they may be divided into two classes, namely, the white and red lauans. Export grades of the red lauans are used in Europe and America as substitutes for mahogany, and are frequently sold as such. While not so hard and durable as mahogany, lauan has a beautiful grain and permits of a very fine polish.

The main bulk of the forests produces timbers of comparatively few kinds and in some instances approaches pure stands of one or two grades. It is estimated that on an average 70 to 80 per cent of all the dipterocarp forests will yield timbers that belong to the groups described above.

OBTAINING A TRACT OF TIMBER—The public forests of the Philippines are not sold, but are developed under a license system. Small operators usually work under ordinary yearly licenses for definite small areas. Exclusive licenses, or concessions as they are popularly called, are generally in the form of a twenty-year exclusive license to cut and extract timber and other forest products from a specified tract. The land itself is in no way affected by such a license, merely the timber and minor forest products are included.

SAWMILLS—At present there are about 50 sawmills of all sizes and descriptions operating in the

Islands, about 12 of which can be compared to the average modern sawmills in the United States. The largest sawmills are located on timber concessions, while the others are operated under short-term licenses. The total cut of the sawmills of the Philippine Islands is about 100 to 130 million board feet per year.

MARKETS—Approximately 100 million board feet of lumber is used each year in the Philippine Islands. Of this only a small amount is imported, although the amount of such imported lumber is steadily being lessened as the capacity of the Philippine mills increase. China, Japan, and Australia use yearly more than 200 million board feet of American lumber, a large part of which could be furnished by lumber companies in the Philippines if there were a sufficient number properly capitalized and equipped. A market for Philippine lumber has already been secured in the United States and to a lesser extent in Europe. As already stated, many Philippine timbers are unexcelled for interior finish, cabinetwork, and other special uses for which imported woods are coming to be more and more demanded in the United States and Europe as the local supplies of hardwoods diminish.

A company properly equipped and managed and operating in a suitable tract should be able to deliver many kinds of native lumber in Manila at a cost of about half the prevailing market prices.

MINOR FOREST PRODUCTS—This term includes all products of the forest except timber or lumber. Many of the minor forest products of the Philippines are at present almost unknown in the world's markets and are largely confined to local use.

The most important are nipa, sugar and alcohol; rattan, used in making furniture; Manila copal or almacega, used in making high grade varnish; lum-bang, a nut producing high grade oil for varnish, tan barks; dye-woods and -barks; gutta-percha and rubber; paper pulp; fibers suitable for making baskets, hats, mats, ropes, etc.; soap barks; pili nuts, declared by many as superior even to almonds; wax; and different kinds of medicinal plants.

PUBLIC LANDS

It is estimated that there are about 73,214,742 acres of public land in the Philippine Islands.

Of this area 41,029,900 acres is considered suitable for agriculture, while the total area applied for as homesteads, lease and sale concession amounts to only 3,159,712 acres. It is thus to be seen that there are still 37,870,188 acres of agricultural public land.

In the Province of Cotabato alone on the great Island of Mindanao, there are still 3,578,169 acres of agricultural public land not yet occupied nor applied for, and in the Province of Samar, one of the Visayan group, 2,524,388 acres. In the Department of Mindanao and Sulu, comprising the Island of Mindanao and the Sulu Archipelago may be found some of the richest agricultural land suitable for growing rubber, hemp, coconut, rice, tobacco and other staple products, which is still part of the public domain and available to the farmers at practically no expense. The people inhabiting this Department are called Moros and though they are counted among the uncivilized people of the Philippines they can boast of a fairly high degree of Mohammedan culture.

HOMESTEADS—In accordance with Act No. 2874 of the Philippine Legislature, approved November 29, 1919, any citizen of the Philippine Islands or of the United States, over the age of 18 years, or the head of a family, who does not own more than 59 acres of land in the Philippines may enter a homestead of not exceeding 59 acres of agricultural land of the public domain.

Upon the filing of an application and approval thereof by the Director of Lands, possession may be taken of the land applied for upon payment of \$5 as entry fee.

The certificate or patent is issued after the land has been improved and cultivated. The period granted by law to homesteaders for the improvement and cultivation of their claims is from two to five years from and after the date of the approval of the application. After an applicant has complied with all the requirements of the law and the regulations promulgated in accordance therewith, he will be entitled to a patent upon payment of an additional amount of \$5, thus making the total homestead fee \$10; and small as this amount is, the law gives the homesteader the option to pay for it in annual installments.

SALE OF PUBLIC LAND—Any citizen of lawful age of the Philippine Islands or of the United States, and any corporation or association of which at least 61 per centum of the capital stock or of any interest in said capital stock belongs wholly to citizens of the

Philippine Islands or of the United States may purchase any tract of public agricultural land of not to exceed 247 acres, in the case of an individual and 2,530 acres in that of a corporation or association. Citizens of countries the laws of which grant to citizens of the Philippine Islands the same right to acquire public land as to their own citizens, may, while such laws are in force, but not thereafter, with the express authorization of the Legislature, purchase any parcel of agricultural land, not in excess of 247 acres.

Lands sold in accordance with the provisions of the foregoing paragraph must be appraised by the Director of Lands with the approval of the Secretary of Agriculture and Natural Resources. The appraised value of the land is to be at least equal to the expense incurred, or which may be incurred by the Government in connection with the application for purchase.

It should be noted here that an individual may purchase as much as 247 acres of land and a corporation 2,530 acres and in addition lease 2,530 acres.

LEASE OF PUBLIC LANDS—Another manner of occupying public land is by leasing it. Under the public land law of the Philippines the same conditions required for citizenship of individuals and corporations for the purchase of public lands are laid down regarding leasing public lands, with the exception that an individual may lease as much as 2,530 acres whereas under the law he may purchase only 247 acres.

The annual rental of lease must be at least equal to three per cent of the appraised valuation of the land, which is subject to reappraisal every 10 years from the date of the approval of the contract. Lease contracts run for 25 years but may be renewed for another period of not to exceed 25 years. In case the lessee shall have made important improvements which, in the discretion of the Secretary of Agriculture and Natural Resources, justify a renewal of the lease, a further renewal for an additional period not to exceed 25 years may be granted.

FRIAR LANDS—The Insular Government has another kind of land holdings commonly called "Friar Lands." These were formerly estates belonging to the religious corporations which were acquired by the Government through the intervention of President William H. Taft when he was Civil Governor of the Philippine Islands, upon payment of \$7,239,784.16.

Any person of legal age may purchase not to exceed 39 acres of the "Friar Land" estate. A corporation duly registered in the Philippine Islands may purchase as much as 2,530 acres.

The sale of friar lands, like that of public lands, is by public auction. The selling price is fixed by the Government with regard to the quality of land and its location.

Payment for the land may be made in full at the time of the purchase or in annual installments. If purchased on the installment plan the purchaser is allowed 12 years in which to pay the purchase price, beginning January first of the year following the purchase, plus interest of four per cent per annum on the unpaid balance.

After the purchaser has paid for the land applied for by him in full a deed is issued in his favor.

There were originally 50,657 lots of the "Friar Land" estates with an aggregate area of 281,525 acres appraised at \$10,059,550.76. By November 30, 1919, 43,558 lots representing an area of 268,054 acres, with an appraised valuation of \$8,046,638.76 had been disposed of so that now there remain only 7,099 lots measuring 119,441 acres, valued at \$2,012,912 unsold. This means that 69.1 per cent of the total "Friar Land" holdings of the Government has been disposed of.



INTERIOR OF A MANGROVE SWAMP

COMMERCE AND INDUSTRY

The Philippines traded with China and Japan years before the discovery of the Archipelago by Magellan in 1521. The articles exported were few in number and were mostly forest products and such crude produce of the local mines as the natives could turn out in their own unscientific way. The imports consisted mostly of wearing apparel, porcelain, trinkets, and other

were also established, such as the manufacture of cigars and cigarettes, the distillation of alcohol and the grinding of sugar in iron and steel mills, instead of as formerly, in wooden mills.

In 1834, the Philippines was thrown open to the commerce of the world and ships other than those of Spain were permitted to have a share in Philippine



A PUBLIC MARKET

articles of minor importance. After the arrival of the Spaniards, however, other European countries began to trade with the Philippines, although to a limited extent only, due to Spain's exclusive policy of closing all Philippine ports to all commerce except her own. Nevertheless, considerable progress was made along economic lines. Commercial crops, such as sugar, tobacco, cacao, coffee, and modern methods of cultivating the soil were introduced. With the improvement in the agricultural industries, manufacturing industries

trade. Figures show that since then the country has made rapid progress. The total value of imports and exports of the Philippines in 1831 was \$1,217,079. Within three years the total imports and exports had increased to give a total trade valued at \$4,118,297, showing an increase of almost 240 per cent. Half a century later, the total imports and exports amounted to \$21,959,537 representing an increase of about 430 per cent. In 1909 the total imports and exports were valued at \$66,008,756, and in 1919, \$231,756,878. This

shows an increase in trade of nearly 250 per cent during ten years.

IMPORTS AND EXPORTS—The important imports are cotton and its manufactures, iron and steel and their manufactures, rice and other foodstuffs, including fish and meat products, and other articles for industrial purposes, and the exports hemp and hemp products, copra and coconut oil, sugar and tobacco, embroidery, hats, sea products, lumber and minor forest products.

The importation of cotton and its manufactures, and iron and steel and their manufactures has always been on the ascendant and the two items have invariably held the premier position in the import trade. The two alone constitute more than a third of the annual importation. In the line of other manufactured products the same tendency is also noticeable throughout. This shows that the buying capacity of the country has been steadily increasing; that it has been producing more and more wealth, and that its natural resources are being extensively developed year after year. As a consequence thereof, there has taken place an improvement in all phases of life of the people, more particularly in the development of their commerce and industry. The latter phenomenon finds proof in the progress attained in the direction of introducing physical equipment and means for the carrying out of all lines of commercial and industrial activities in the Islands for the past few years, such as transportation facilities, buildings, and mechanical equipment. Moreover, new industries have been organized and established, such as for example, the oil industry, for which there are today thirty-two oil mills equipped with 101 expellers with a total annual capacity of about 100,000 tons of oil. A few years ago the sugar exported was mostly of the muscovado grade. The Islands now have 28 sugar centrals. Most of them are located in Negros, the foremost sugar producing region of the Philippines. The export of lumber is also increasing. Manufactured hemp products, too, such as cordage, knotted hemp, and braids, are assuming an important position in the list of exports. Among other new manufactured products exported are pearl buttons, hats and embroideries which constitute 3 per cent to 5 per cent of the total exportations. Together with these, there are today in the Philippines modern iron and steel foundry plants, among them being the Atlantic, Gulf and Pacific Company and the Earnshaw Slipways and Engineering Company. The latter has recently been merged with the Honolulu Iron Works to undertake the manufacture of machinery for sugar centrals and for other purposes.

OCEAN TRANSPORTATION—In 1900 the total number of vessels entered at all ports of the Philippines from the United States and foreign countries was 573 with a total net tonnage of 670,337 tons. The total number of foreign vessels which entered the ports

of the Philippines in 1919 was 740 with a total net tonnage of 1,711,981, showing an increase of about 200 per cent.

INTERISLAND SHIPPING—As stated elsewhere, the Philippine Archipelago is composed of 7,083 islands. It frequently happens that very close neighboring towns are separated by water. Naturally steamers play a very important part in the commerce of the islands.

There are at present 438 steamers engaged in the interisland trade of the Philippines, 48 of which, ranging in size from 19 tons net tonnage to 823 tons and aggregating a total net tonnage of 13,736, make regular trips between Manila and other Philippine ports. The remaining 390 either do not make regular trips or are used on other routes. In addition, there are 2,203 sailing vessels also engaged in the coastwise trade.

For runs of average distance, the vessels most generally used are those ranging from 200 to 500 tons net. The larger vessels are used on routes connecting Manila with the other large ports, while smaller vessels are used for shorter and irregular routes. Owing to the scarcity of bottoms for ocean traffic, many of the steamers formerly engaged in the coastwise trade have been chartered, sold or otherwise transferred for oversea trade.

It is safe to say that every important part of the Philippines is conveniently accessible from Manila, as the interisland steamers make frequent trips to the other island ports.

All interisland steamers, including all other kinds of public utilities, are regulated by a public utility commissioner.

CURRENCY AND FINANCE—In 1906 the total monetary circulation in the Philippines including certificates, bank notes, subsidiary and minor currency, was \$15,015,250.50, representing a per capita circulation of \$1.86. On December 31, 1919, the total circulation was \$73,288,478, which meant a per capita circulation of \$6.79 and showing an increase of about 390 per cent. The total assets of the banks in the Philippine Islands on December 31, 1902 amounted to \$27,059,594.03. On December 31, 1919, the total resources of all commercial banks in the Philippine Islands amounted to \$183,967,549, showing an increase of about 550 per cent during the period covered. The total deposits in banks in 1902 amounted, in round numbers, to \$17,000,000. In 1918 for the same item, the total was, in round numbers, \$100,000,000, showing an increase of 500 per cent. These show a tremendous growth of commerce in the Philippines.

Another index of the growth of Philippine trade, both foreign and domestic, and also of its industries, is the total collection of taxes on business. Three of the principal sources of revenue of the Philippine Government are license and business taxes, and import



PASIG RIVER FRONT, MANILA

duties. In 1909 and 1918 the total tax collected from these sources were respectively as follows:

	1909	1918
License and business taxes.....	\$982,688	\$7,887,303
Excise tax	2,717,049	6,600,421
Import duties	6,624,093	6,739,869

showing an increase of 100 per cent. The items which reflect unmistakably the business progress of the country is the percentage taxes on sale by merchants and on gross receipts by common carrier, which in 1912 totalled about \$1,000,000 and in 1918, \$7,000,000, showing that the volume of business in the Philippines since 1912 to the close of the fiscal year 1918 was increased about 700 per cent. This progress is further reflected in the organization of corporations and partnerships. In 1906 the total number of corporations registered to engage in all lines of business was 32 with a capital stock of \$3,008,750. On December 31, 1919, the total number of domestic corporations registered were 1,796 with a total capital stock of \$141,964,136. As to partnerships, in 1900 there were only 71 registered, with a total capital of \$11,398,280. On December 31, 1919, there were 2,051 with a total capital of \$128,726,983.

BANKS—There are 8 banks doing business in Manila. They are the Philippine National Bank; International Banking Corporation; Hongkong and Shanghai Banking Corporation; Chartered Bank of India, Australia and China; Bank of the Philippine Islands; Yokohama Specie Bank; Asia Banking Corporation and American Foreign Banking Corporation. Their combined yearly operations amounted to \$4,197,682,500 in 1919.

The Philippine National Bank has a branch in New York and another in Shanghai, China. The local branches are located in the following cities: Iloilo, Cebu, Corregidor, Cabanatuan, Aparri, Davao, Bacolod, Albay, Legaspi, Dagupan, and Vigan.

Besides the local branches listed above, the Phil-

ippine National Bank maintains agencies in 41 different provinces.

The International Banking Corporation has a branch in Cebu; the Hongkong and Shanghai Banking Corporation, and the Chartered Bank of India, Australia and China have branches in Iloilo and Cebu, and the Bank of the Philippine Islands in Iloilo and Zamboanga.

It is the present plan of the Philippine National Bank to increase its provincial branches so that there will be at least one branch in every province. This bank is the sole depository of the Philippine Government and was organized by Act 2612 of the Philippine Legislature approved February 4, 1916, for the purpose of promoting agriculture, commerce, and industry. On its organization 51 per cent of its stock was retained by the Government and the remaining 49 per cent offered to the public.

COMMERCIAL POSSIBILITIES—With the increased agricultural production and the consequent increase in the per capita wealth of the people, it stands to reason that the commerce of the country will witness a corresponding growth. The Philippines too, because of its strategical location, can serve as a convenient distributing point for the Asiatic trade. The manufacture of finished articles for China, Siberia and other Oriental countries from tropically grown raw materials can of course be carried on in the Philippines to a great advantage. The saving in freight alone would be a decided gain to the manufacturers. At present the people of the Philippines pay more for refined sugar than the people of the United States, though raw sugar is one of the principal exports of the country. The field in sugar refining is practically untouched. Fish, vegetable and fruit canning are practically unknown, though the excess production of fruits vegetables and fish, at certain seasons, not to speak of the greater production that would doubtless result through the development of the canning industry, would be sufficient to maintain several large canneries. All in all the opportunities for manufacturers are such that they are bound to draw enterprising capital to the Islands.



GATHERING NIPA SAP

TRANSPORTATION

RAILROADS—The Philippine Government in 1917 purchased the Manila Railroad, which was operated by an English syndicate and had a 620 mile system in operation and at once began to develop a comprehensive scheme for extending the lines and providing additional facilities.

The following table will show the effect upon agricultural development in the provinces served by the Manila Railroad:

east coast of Luzon and also between the islands of Marinduque and Mindoro and Luzon as feeder lines.

The east coast of Luzon, particularly in the Province of Tayabas and Ambos Camarines, which is fertile and well adapted to growing hemp and cocoanuts, is served by vessels operated by the railroad company, connecting with the railroad at Hondagua, where there is a deep-water, land-locked harbor.

On the Island of Cebu the Philippine Railway Co.



GILBERT BRIDGE, LAOAG, ILOCOS NORTE

Year	Rice	Sugar	Copra	Total
1915	203,949	57,984	70,469	605,460
1916	217,528	53,340	55,983	791,080
1917	285,221	94,656	106,012	1,028,268
1918	314,209	126,994	121,100	1,085,646

	1915	1916	1917	1918
Passengers transported.....	4,375,545	4,243,311	5,717,504	6,851,705

The number of passengers transported for 1919 is estimated at more than 8,000,000.

In addition to its railroad lines the Manila Railroad Company is operating steamship lines on the

has in operation 60 miles and on Panay, 72. These lines have been extremely beneficial in the development of agriculture and commerce in localities which they reach and will afford facilities for additional industrial and manufacturing projects.

ROAD SYSTEM—The Philippines are fairly well covered with a network of roads, making travel easy and convenient. Out of 846 municipalities 625 are connected by public highways.

On June 30, 1919, there were 5,919.2 miles of roads, of which 2,689.5 miles were first class roads, 1,263.9 miles second class and 1,965.8 miles, third class.

First class roads are well graded and surfaced,

thoroughly and constantly maintained. Bridges and culverts are usually complete and permanent, and when missing their places are supplied by ferries capable of carrying automobiles weighing two tons or more. These roads are continuously passable at all times with possible exceptions during typhoon periods.

Second class roads are fairly graded, partially or naturally surfaced, and generally intermittently maintained. Bridges and culverts are usually complete but, in part, are temporary structures. These roads are continuously passable for vehicle traffic during the dry

The following table shows the number and total span of bridges and culverts in existence on June 30, 1919.

	Number	Span in meter
Concrete	4,274	16,790.30
Steel	140	5,509.23
All other durable structures	3,081	6,735.48
Temporary	2,179	18,466.70
Total	9,674	47,501.71



GOVERNOR REYNOLD'S BRIDGE AND MAYON VOLCANO IN THE BACKGROUND, ALBAY

season, but more or less impassable during the rainy season.

Third class roads are all traffic routes for carts not included in the first and second class roads. Such roads are usually narrow, poorly graded or not graded, and generally impassable in the rainy season.

In 1918, the cost of maintenance of first class roads was \$1,378,405.35, while the cost of maintaining the second and third class roads only amounted to \$294,725.16.

The average cost of constructing first class roads is about \$8,046.55 per mile.

It is interesting to note that first class roads in the Philippines are maintained by a corps of "camioneros" or road laborers. A foreman is in charge of 50 or more road laborers, on the average, while each road laborer has one kilometer of road to keep clean and smooth by patching all ruts promptly with gravel or other suitable materials. He is also responsible for keeping the gutters open and for taking care of the grass on the road shoulders. By this means roads are kept in good repair constantly at the minimum expense.

The road system in the Philippines is the best to be found anywhere in the Far East.



TYPICAL MODERN CONCRETE BRIDGE



AN OLD MASONRY BRIDGE

MINERAL RESOURCES

The Philippine Islands is rich in mineral products, and the time is not very far distant when the working of minerals should constitute one of its basic industries. Nearly all the islands are known to contain deposits of economic minerals. Undeveloped prospects are waiting industrious pioneers to make them paying mines, and many regions which may bring forth more valuable deposits are still unexplored. The most important minerals are gold, silver, lead, zinc, copper, iron, coal, petroleum, sulphur, asphalt, asbestos, and manganese. The total value of mineral production amounted to \$117,046 in 1907. In 1917, just ten years later, the total figures had increased to \$3,015,225, and in 1918, to \$3,266,677.

GOLD—The production of gold is steadily increasing. This is due to the greater number of companies engaged in gold mining and to better methods employed resulting in the recovery of a higher percentage of gold. The output in 1918 was worth \$1,287,985. Masbate, Mountain Province and Camarines are the principal gold producing districts. In the first two they have quartz mining and the recovery of gold is by cyanidation aided by amalgamation. Dredging is most common in the Camarines district.

There are eight mining companies in the Mountain Province, eight in Ambos Camarines, five in Masbate, two in Surigao and one in Marinduque.

SILVER, LEAD, AND ZINC—No silver is mined separately, but a small amount is found in natural alloy with the gold. It has been discovered in all of the gold deposits in the ratio of one part silver to about five parts gold. Native silver has been reported to occur in Benguet and in Mindanao. Silver is also known to occur associated with galena in Bulacan, Ambos Camarines, Marinduque, and Mindanao. A big deposit of lead and zinc has been encountered in Marinduque, and the area is said to be extensive.

COPPER—Copper deposits are known to exist in several provinces. The best known and undoubtedly the largest is the Mancayan deposit, Mountain Province, Luzon. This deposit has been worked for a number of years by Spaniards and the mountain people, and large amounts of high-grade ore are said to have been taken out. Several mining engineers have visited the district and the consensus of opinion is that there are more than half a million tons of ore available averaging about 2½ per cent. Other important copper deposits are in Benguet, Pangasinan, Batangas, Mindoro, Marinduque, Masbate, Panay, and Mindanao.

IRON.—There are valuable deposits of iron ore in the Philippines. The Bulacan iron-ore region near

the town of Angat and San Miguel has been known since the early days, and native furnaces have been in desultory operation throughout the last two hundred and fifty years. Iron castings, mostly agricultural implements, have been produced at these mines since 1,664 from native furnaces which employ rather primitive methods of smelting. These native furnaces are still continuing operations but the annual production has fallen off considerably. The Camarines deposit is now being worked extensively and the ore shipped to Japan. A large lateritic deposit in Surigao, Mindanao, has been reserved by the Government. Engineers of the Bureau of Science who examined the deposit estimated that it contained over 551,000,000 short tons of available ore averaging from 45 to 50 per cent iron. Another deposit of probably equal importance has been reported to occur in Bukidnon, Mindanao.

COAL—Almost every island in the Archipelago and the majority of the provinces are known to contain coal. Most of the coals thus far discovered fall under the class lignite, but high-grade bituminous coals have also been encountered. The coal fields cover an estimated area of 58 square miles and are estimated to contain at least 68,000,000 short tons of coal. Experiments conducted at the Bureau of Science have proven conclusively that Philippine coals can be fired very economically and efficiently, and can be relied upon with absolute certainty in a suction producer-gas plant of the type used in the Bureau of Science.

PETROLEUM—Petroleum-bearing shales are known to occur in several provinces. The Bondoc Peninsula, Tayabas Province, Luzon, has been investigated by the Bureau of Science, and is believed to be worthy of exploration. Mindanao has also attracted the attention of oil concerns and exploratory work has been begun in several parts. Petroleum is also known to occur in Cebu, Iloilo, Capiz, and Leyte provinces. The oil of the Bondoc Peninsula has a paraffin base and is practically free from sulphur.

ASPHALT—Commercial quantities of asphaltic materials exist in Leyte, and some exploratory work has been done on the deposits. There is a great abundance of low-grade material from which high-grade asphalt could be extracted. Various outcrops and seepages of hydrocarbons, ranging from petroleum itself through viscous liquids and semi-solids to hard coal-like bitumens, are known, and a proper combination of the different materials could no doubt be made to fulfill almost any road conditions.

SULPHUR—Sulphur occurs in more or less pure

form around the solfataras and also in a very impure state mixed with volcanic ash on Camiguin Island in the Babuyan group north of Luzon, in Camiguin de Misamis north of Mindanao, and in several places in Occidental Negros. Less important deposits are in Taal Volcano, on Pocdol Mountain, Sorsogon Province, on Mount Apo in Mindanao, and in Leyte near Burauen, and on Biliran Island. The 1918 production amounted to 72 tons valued at \$5,570.

ASBESTOS—Asbestos minerals found in the Philippines are of two kinds: the amphibole and the chrysotile, with the former species predominating. The asbestos deposit in Ilocos Norte is now being worked, and its output is made available in the manufacture of pipe packings, boiler coverings, shingles, etc. Other

asbestos deposits are in Pangasinan, Zambales, and Antique.

MANGANESE—Manganese occurs in Ilocos Norte, Pangasinan, Bulacan, Tarlac, and Masbate. Considerable development work has been done, and a big production is expected in the near future. Three thousand tons of manganese ore were mined in Ilocos Norte and shipped to Japan in 1916.

1918 MINERAL PRODUCTION—The value of metallic minerals mined in 1918 was \$1,309,129.50, of which \$1,287,985 represented the gold production. Of the non-metallic minerals, clay products, salt, sand and gravel, stone, coal and lime were the leading ones. The total production of non-metallic minerals amounted to \$1,957,547.50 for the same year.



ENTRANCE TO SUBTERRANEAN RIVER OF PALAWAN

SANITATION

The sanitary work in the Philippines is controlled by a central bureau of the Government called the Philippine Health Service. By thus centralizing the power of control over sanitary work in one branch of the Insular Government, health measures can be enforced economically and effectively.

The supervision over health work in the provinces is delegated to the district health officers, of which there were 45, all qualified physicians, at the end of 1919.

The municipalities are grouped into sanitary divisions, each of which is in charge of a competent official. With few exceptions the men in charge of sanitary divisions are also qualified physicians. At the end of

was 17.86 per thousand as against 6.02 obtaining in previous years. The death rate among the inhabitants of Manila, counting all, was 53.01 in 1918 as against 29.03 in 1917, due again to the influenza epidemic. The death rates in the provinces are much lower, being 18.97 for 1917 and 28.52 for 1918.

For the last five years, to and including 1917, 12 per cent of the mortality has been due to malaria, 10 per cent to tuberculosis and 3 per cent to dysentery.

As the water supply and sewerage facilities are improved dysentery rapidly decreases; bubonic plague is not present; smallpox, though widely prevalent and epidemic has been held and controlled; rabies is under control; and deaths from diphtheria are very few.



PHILIPPINE GENERAL HOSPITAL, MANILA

the year 1919, there were 279 sanitary divisions comprising 792 out of the 846 municipalities. In other words, nearly 94 per cent of the total number of municipalities in the Philippines form a part of these sanitary divisions.

Some of the important functions of the Philippine Health Service are as follows:

1. The control and supervision of all hospitals for dangerous communicable diseases, and the isolation of persons suffering from such diseases.

2. The control of sanitation of schoolhouses and premises, prisons and all other places for the detention of prisoners.

3. The establishment and maintenance of internal quarantine in times of epidemic and the systematic inoculation of the inhabitants with virus, sera and prophylactics.

It will thus be seen that the Philippine Health Service is so organized and so empowered as to enable it to cope effectively with communicable diseases.

During 1918, the death rate was quite high on account of the influenza epidemic. In that year the death rate among Americans in the City of Manila

The following table graphically shows the position of the Philippines with respect to the countries for which data are available:

Comparative death rate scale for 1917

Countries	Death rate per 1,000 inhabitants
Oriental:	
Egypt	40.50
China	40.00
India	35.00
Straits Settlement	31.64
Ceylon	27.00
Burma	24.93
Philippines	22.29
Anglo-Saxon:	
United States	14.70
England	13.70
Canada	12.70
South Australia	11.73
Queensland	11.00
New Zealand	10.35
Latin:	
Porto Rico	28.50
Mexico	23.39
Cuba	19.70
Italy	18.20
France	17.70

It will be seen that the Philippines has the lowest mortality figure among the Oriental countries for which statistical data are in possession of the Philippine Health Service, and that it compares favorably with Porto Rico and Mexico.

At the present writing, there are five Government hospitals in the City of Manila; and 16 in the provinces. The number of hospitals in Manila and in the provinces is increasing and there is an increasingly great readiness manifested by the people in entering hospitals.



INDOOR BASEBALL TEAM NATIONAL ACADEMY

BUILDINGS

Naturally the style of construction that meets with the most favor in any country is that most suitable to the prevailing climatic conditions. In the Philippines, where the temperature throughout the year is mild, all buildings, with the exception of those requiring no special ventilation, are plentifully supplied

nipa, the latter serving as roof covering and siding. The nipa, by the way, is the leaf of a palm of that name. In some parts of Luzon and in other regions where the nipa was not readily available, cogon, a kind of grass, was used for roofing and siding. These primitive houses could be compared with the



A NIPA HOUSE

with windows, usually with sliding sashes made of translucent shells set in wooden grilles, and in some cases almost completely surrounded by open balconies. The Philippine homes particularly are designed with careful thought given to securing the maximum circulation in every corner of the building.

At the time of the coming of Magellan the houses found in the Philippines were made of bamboo and

thatch-roofed huts commonly found in England in the old days, with this important difference, that stones did not enter into the primitive structures in the Philippines.

Though weak and frail looking, bamboo houses can withstand violent typhoons, and the nipa and cogon, if properly put on, are water tight and last 10 years or more. Light material houses are still prevalent in

provincial towns and even in the outskirts of the large cities. Of course the style has changed and been improved upon.

Towards the end of the sixteenth century the use of wooden posts was introduced, but it was not until skilled carpenters from Spain came to the Islands that wooden posts were squared and dressed or planed. Then adobe stones were used in building. The early types of stone structures were exceedingly massive. The churches and convents found throughout the Philippines and the public buildings in Manila and in provincial capitals as well as the important dwelling houses are of heavy masonry. As a rule, when adobe stones are used in building houses they form the wall which constitutes the ground floor. The main or second floor usually projects over this wall by about 3 feet.

Towards the middle of the nineteenth century a lighter type of construction was developed which was much simpler and cheaper inasmuch as the stone walls were much thinner and not so difficult to build. To this day this style of houses, namely with the projecting second floor and windows all around, is still quite common.

The latest type of construction is the reinforced concrete introduced shortly after American occupation. The first building of reinforced concrete built in Manila is the Manila Hotel, a five-story structure. Since then a great number of reinforced concrete buildings have been put up both in Manila and in the provinces. Clubhouses, schools, dormitories, municipal buildings and provincial capitols, public markets, slaughterhouses, warehouses, residences and even churches are now built of reinforced concrete.



A STRONG MATERIAL HOUSE



UNIVERSITY HALL

MANILA

CENTER OF ORIENTAL TRADE—The center of a circle with a radius of 3,500 square miles wherein dwell some 762,000,000 people, for whom it could be the distributing point, Manila, the capital of the Philippine Islands, is commandingly placed as may be noted by the lines of steamer travel on the chart on page 48.

spathodeas campanulatas, cassia, acacia and walnut trees border many of the streets. The paving is mostly macadam with some asphalt, some wooden blocks and some cobbles. A number of canals and estuaries afford the means of travel by banca, as well as the Pasig and San Juan rivers.

PARKS AND PLAZAS—There are 61 parks and



ONE OF THE Y. M. C. A. BUILDINGS, MANILA

THE WALLED CITY—Intramuros, a mile long, one half mile wide, is one of the best extant examples of a medieval town. Three of the seven ancient gates still remain. In the bastion opposite the Luneta Police Station there is now an aquarium.

DISTRICTS—Outside of Intramuros, the city is divided into the districts of Binondo, San Nicolas, Trozo, Sta. Cruz, Quiapo, Tondo, Ermita, Malate, Paco, Sampaloc, Sta. Mesa, Singalong, and Sta. Ana. Not all of these are election districts however.

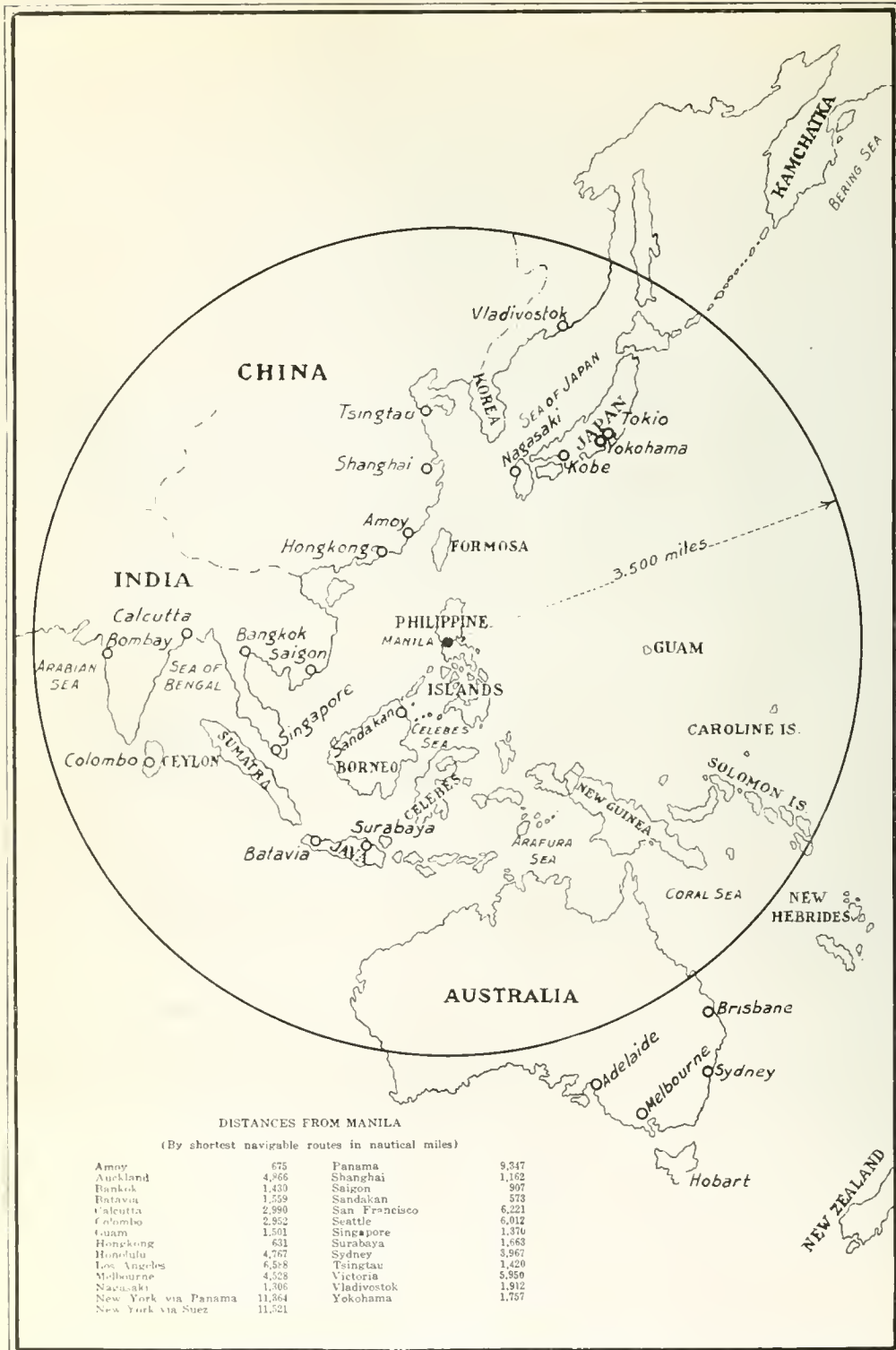
STREETS—Manila has about 150 miles of streets, some of which are wide and handsome avenues. Of the latter Calle P. Burgos (the Bagumbayan), Isaac Peral, Avenida Rizal, Taft Avenue, Azcarraga, the Luneta and Malecon Drives, are the most notable. The boulevard that will skirt the bay to Cavite is constructed as far as Pasay. Magnificent fire trees,

plazas, among them the famous Luneta and the Mehan (Botanical) Gardens, Plaza McKinley, and Harrison Park.

MONUMENTS—The Rizal Monument, on the Luneta; the Legaspi-Urdaneta Monument, facing its north end; the Anda Monument, at the foot of the Malecon drive; the Magallanes Column, on the river bank near the Treasury Building; the statue of Elcano, in the Ayuntamiento; and that of Benavides in the small plaza of Sto. Tomas, Charles IV in Plaza McKinley, and Queen Isabela II in Malate are the finest of the score or more adorning the city.

WATER SUPPLY—To Carriedo, whose fountain can be seen at the Rotonda, Manila owed her first water system. This served until 1908 when the Montalban reservoir was constructed at a cost of about \$2,000,000.

CHART SHOWING MANILA AS COMMERCIAL CENTER



Courtesy of Manila Merchants' Association

The impounding basin at Montalban has a capacity of 400,000,000 gallons, from which the distributing reservoir at San Juan holding 54,426,774 gallons is fed. Manila uses about 22,500,000 gallons a day except in the dry season.

El Deposito, another reservoir at San Juan, holds an emergency supply of some 20,000,000 gallons pumped from the Mariquina River by the Santolan pumping station. Still another site is being surveyed.

Far East, the Philippines, which accepted Christianity from the Spanish discoverers has, of course, a Catholic Church in every town and village not strictly Mohammedan or pagan, and hospitals, colleges, schools, seminaries and orphanages all over the Islands. Five of the nine bishops are Filipinos. The Catholic Church also supports by a regular system of alms-giving nearly all the indigent poor of the Islands, thus relieving the Government of the burden of maintaining poor-



CATHOLIC CATHEDRAL, MANILA

This is the watershed of the Angat River, in Bulacan Province. A water purification plant will also be installed.

MISCELLANEOUS—There is a \$2,000,000 sewerage system; the fire department has motor equipment; and there are 12 public markets.

CHURCHES AND CHURCH INSTITUTIONS—Distinguished as the only Christian country in the

houses, and many thousands of orphans and half orphans are fed, clothed and educated free of charge in its schools and institutions.

Besides the Cathedral there are 22 churches, 8 public chapels and 13 other chapels in institutions to which the public are admitted in Manila. The Knights of Columbus have a clubhouse for soldiers and sailors.

St. Paul's Hospital and training school for nurses;

the Hospital of San Juan de Dios; the Hospicio de San Jose, an orphan asylum and home for aged women; the Hospicio in Cavite for the mentally deficient; and the Monte de Piedad pawn shop and savings bank in Manila, founded in 1882 (the building in Plaza Goiti was not erected until 1894) for the purpose of loaning money at a low rate of interest to the poor and financed with the balance of certain charity funds contributed in Spain, are also under the Catholic Church. St. Rita's Hall, a dormitory for young men pursuing their studies in Manila, was established in 1918, and St. Mary's Hall, for young women, in 1919.

There are 199 Catholic Mission stations in the remote and less civilized regions.

American Protestant missions began their work in the Philippines soon after American Occupation. The Baptist, Christian and Missionary Alliance, Congregational, Disciples, Episcopalian, Methodist, Presbyterian, Seventh Day Adventist and the United Brethren Churches, the Y. M. C. A. and the American Bible Society are represented by 190 missionaries. Two hundred and fifty Filipino lay workers are associated with them in the conduct of various missionary institutions and there are 220 ordained Filipino preachers with upwards of 1,500 lay preachers and evangelists and 85 deaconesses and Bible women. Church members number 90,000 and there are as many more adherents. There are 13 hospitals and dispensaries, 2 orphanages, 12 mission schools, and a Union Theological Seminary with High School and College departments. The missions also operate 27 dormitories for students of the government schools. They have invested \$1,750,000 in various institutions, this sum not including the value of many hundreds of church buildings and chapels scattered from Mindanao to Northern Luzon. The

Y. M. C. A. has an Army and Navy department, an American-European, Student and City Associations, all adequately equipped and doing a very extensive work. Portions of the Bible have been translated into over 20 Filipino dialects, the New Testament complete in eight dialects and the entire Bible into seven of the most important of these dialects. The American Protestant community in Manila is served by the Episcopal Cathedral and by the Union Church. There are 12 Filipino congregations in the city, one half of which have services in English. Three of the hospitals, one orphanage, three of the schools, the Theological Seminary and its departments, and eight of the student dormitories are in Manila.

The Christian Scientists have a church with a reading room, and a Jewish synagogue is about to be erected.

CLUBS AND SOCIETIES—All of the great fraternal orders are well represented, and religious, charitable, social, musical, literary, athletic, and other societies abound. The American Mestizo Association maintains an orphanage. The Woman's Club of Manila has organized to date 383 provincial clubs and it and they are fully in the swing of the world movement of women for reform and progress. Its pet charity is the boat load of Christian cheer it collects for the afflicted at Culion, the leper colony.

CEMETERIES—The *Cementerio del Norte* is, like the most modern of American cemeteries, given perpetual care. It covers about 133 acres. Adjoining is the Catholic Cemetery, La Loma. The Chinese also have a cemetery. Paco Cemetery is closed now, but once a year, on All Saints Day, it is opened and in the evening brilliantly illuminated. Thither go the people bearing memorial wreaths to deck the niches.



LEARNING TO MAKE LACE, SAGADA MISSION SCHOOL



ST. RITA'S HALL

And Scenic Trips and Films

To many who read this, it shall be given to learn somewhat of the loveliness of the Islands in the films. True, that cunning thief the camera has filched from Nature but little of the secret of her colors. But even so, the films will tell more than dull print can ever hope to portray. And with imagination, perchance those so favored will think, when they leave the cine, they have seen the Philippines.

Seen, they may have, but did they sense the magic of her? They tell of the "Call of the East," of the witchery of the Tropics. Let them come to the Philippines and they shall feel the power of the double enchantment, for a tropic and an eastern sorceress both is Filipinas.

Just when does she begin to murmur the charm that draws the stranger from other lands to her? Answer, you, who have felt her spell. Was her very name enough? Did some faint whisper come to your inner ear that day the captain registered "Tropics" in his white uniform and the passengers butterflied forth at the signal from their sober, temperate zone chrysalises? Or was it when the Southern Cross lifted above the horizon or later, when the enraptured gaze turned from the moon's resplendent track across the waves to watch the phosphorescence shimmer away from the vessel's forefoot? Was it the gorgeous sunsets, rose and crimson brodered with gold, suffusing the azure and white of the sky above, tinging the violet and green of sea; dissolving into purples, greys, darker and darker, to be shrouded at last in the cloak of night; and the sunrises reversing the miracle of celestial splendor that no human speech, nor brush, can ever depict, that wiled you? Or did the angry lightnings from Filipinas' eyes entice while they bade you beware?

* * * * *

The morning breeze springs up,—a caress, no more—and the palm-lined shores with their villages clustering about some grey old church and white convent, grow distinct; the coral atolls where the still waters are green as a pale emerald, the flying fish skimming over the glittering ocean, distract the attention from the purple haze of mountains deep shaded with mighty forests. At last Corregidor, stalwart sentinel at the wide harbor's mouth, the watchdogs El Fraile and El Carabao at his heels, steps into view. Down the bay, amid the shipping of many nations, glides the steamer, and the launches of the customs and quarantine nose out to sniff the stranger over. The Farola comes nearer and then the grizzled old swashbuckler Fort Santiago, with his plain, but so serviceable, American

hat—the headquarters of the U. S. Army in the Philippines.

* * * * *

They named Manila the Pearl of the Orient, for in the East about the pearl clusters the richest of its imagery for all that is pure and precious, lovely and beloved. But a ruby she is when the flame flowers of the fire-trees crown her, an emerald for her perpetual green, a turquoise for her skies; all the jewels, she and the rest of the Philippines with her. She is so colorful—the very "White Wings" on the Bagumbayan tone in as to their nether garments with the cannas and hybiscus and the fire trees. The everyday clothes of the populace titillate the color sense and when there is a procession or other festivity the effect is heady like wine. Royal purple, plum, heliotrope, mauve; magenta, solferino, scarlet, flame, geranium, cerise, salmon, pinks, (there is a girl's school that turns out over a thousand strong in pink, and another that marches in cerulean blue); greens, vivid and tender; all the blues; yellow, orange, *champaca*: every hue, shade and tint Art has borrowed from Nature—or invented—if, indeed, she ever did invent any—blend, combine, contrast, and, where it suits their caprice, laugh defiance at each other. Of a truth the colorfulness is worth going around the world to see.

And how the mixture of centuries and lands intrigues the interest. The architecture: It includes splendid examples of the Grecian, Moorish, seventeenth-century Spanish, Renaissance, Gothic and Byzantine. The Seven Lamps shone over the drawing boards of famous builders, lay and secular, to whom Manila owes her many fine edifices. Fray Herrera, son of him who designed the Escorial, built St. Augustine's. The little naive, native huts—was he who conceived their plan of more celebrated lineage still—Adam himself? The atrocities in rows common to every city, who fathered them? The costumes: Old Spain gave the peasant's neckerchief that has evolved into the *pañuelo*, and the court train of her *damas*; her priests the *tapis*; the ground plan is Malayan, the sleeves swelled to suit the climate. This, which has changed but little in over three centuries, is the predominating model; but America, Paris, half Asia and the South Pacific contribute also to the *revue des modes*: Georgette crepe and coconut fibre rain cape and skirt, white duck and *renque*, all in the same rain shower on the same block. The shops: Modernities with plate-glass fronts, office buildings with their elevators, elbow in between the open-fronted *Chino* shops of Rosario. And the *carabao* snails by and the "little gray hawk" that "hangs aloft in the air," happens to be an aeroplane. The Pasig:

Down by the entrance modern steamers are warped to the river wall, and farther up dumpy river steamers like frowsy housewives shuffle about their work of conveying to the big household of Manila chickens, pigs, fruits and vegetables, careless of the smuts on their faces; an immaculated shirtwaisted launch swings by; a string of bamboo-roofed caseoes squat by the market; sturdy bargemen with thirty-foot bamboo poles shove the unwieldy lorchas about, and the bit bancas now toddle bravely along, now reel and wobble from the cuffs of their elders.

Interest? You shall find it at every turn. To see her churches alone, in detail—St. Augustine's with its

In the provinces around Manila, there are various places of more than passing picturesqueness, places historically and otherwise interesting, and several resorts noted for their medicinal springs and baths. Sibul Springs in Bulacan, and Los Baños in Laguna, are the principal ones. At Sibul too, is the cave of Biac-na-bato, where the pact was signed that ended the insurrection of 1897. At los Baños visitors on their way to the celebrated falls of Pagsanhan and to the falls of Botocan, usually stop to see the town and lake and the agricultural college.

Montalban Gorge contains the reservoir whence Manila derives its water supply. There is a cave opening



MUNICIPAL PLAZA, LAOAG, ILOCOS NORTE
(Converted into War Garden)

ceiling of solid stone nearly four feet thick, and the illustrious dead beneath its flags; St. Sebastian's of solid steel made in Belgium and brought out in sections and assembled; St. Ignatius' and others with exquisitely carved woodwork, the work of Filipinos; their altars, statutes and paintings—to appreciate their architecture and the engineering skill that erected them, would require not days or weeks but months. And there are the treasures of the museums and libraries, and the exhibits. Yet, the tourists see but little of Manila in their haste to "do" the country and rush away to another. "Run off another film" is their cry. Well, a city isn't scenery. And so for the scenery.

just above the river bank extending—they whose courage and liking for bats will permit can verify this—clear through the mountains.

Antipolo has the shrine of Our Lady of Good Voyages, the image of the Virgin brought from Mexico to insure the safety of the galleons from the anger of the sea, and the attacks of the pirates who used to lie in wait in the San Bernardino Strait and the Verde Island Passage. It is dressed in a robe that falls in a cone, so stiff it is with gold, and its jewels are of enormous value.

The ruins of the Guadalupe church and the bamboo organ at Las Piñas are featured in all the guide books.

Fort McKinley, America's largest army post, in point of acreage, is close to Manila, too.

The spin to Lucena and on to Atimonan, both in Tayabas, over the South Road, is a favorite one. On the east are the little town of Binangonan de Lampón, a celebrated port in the sixteenth century in the galleon trade, and the land-locked harbor of Hondagua.

Batangas has Taal the terrible. A small launch carries those who would look down into crater of the grim volcano across Lake Bombon to the island from which Taal rises, somewhat under a thousand feet in height, and fairly easy to climb.

Across the bay is Cavite, a pretty little old town of historic interest, also the U. S. Navy base and radio



THE TOWN OF PAGSANHAN, LAGUNA PROVINCE

Farther south, in Albay, Ambos Camarines and Sorsogon are beautiful mountain views and extensive plantations of coconut and hemp. Peerless Mayon of the perfect cone is in Albay, the volcano of Isarog in Ambos Camarines, and Bulusan in Sorsogon.

In Bataan and Batangas, west and south of Manila, respectively, are orange groves and coffee and fruit orchards. At Limay, in Bataan, is a big lumber mill. A narrow gauge road leads back into the heart of a magnificent dipterocarp forest where the felling and logging of superb hardwoods are going on.

station in the Philippines; an enjoyable short voyage up the coast to Olongapo where the dry dock Dewey is located, affords views of Zambales Province. Corregidor, the "Rock," the Gibraltar of the Far East, is the home of the big guns that guard the harbor, and an army and hydroplane station. Mariveles, the quarantine station, beyond Corregidor, that no one cares to be invited by the Government to look over, is a pretty spot to go to for an excursion.

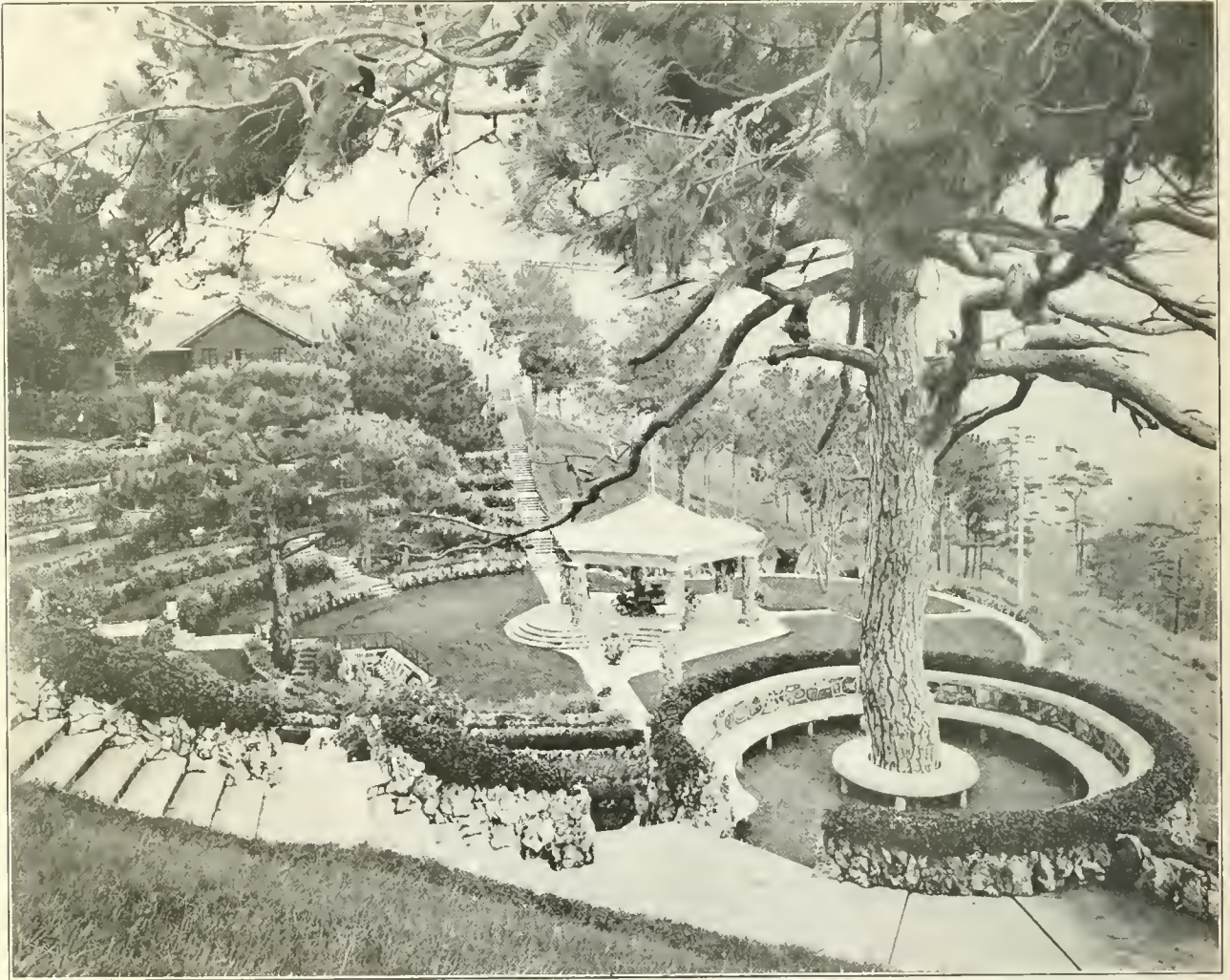
Pampanga is Luzon's sugar province, the rival of Negros. The modern centrals there and the fields of



NAGUILIAN ROAD TO BAGUID

growing cane; Camp Stotsenburg, one of the principal army posts and the aeroplane station; San Fernando, with its strikingly handsome capitol, school and other buildings grouped about the pretty plaza, are all well worth seeing. Pangasinan, the "rice granary" of

and cooler grows the air, behind drops all the lowland vegetation, to make room for sturdy trees of the temperate zones. Wave on wave the trees roll up the mountains that stand on each other's shoulders below, around and above the small tableland on which Baguio



CAMP JOHN HAY AMPHITHEATER, BAGUIO

the Philippines, Tarlac, and Nueva Ecija, a farming and cattle and hunting country, are within automobile distance.

Baguio, which is often called the Simla of the Philippines, is classed with even more famous mountain resorts by its admirers; that is, all who know it.

The Benguet road is the most traveled route. It leaves the lowlands at Dagupan and now ascends, now crosses and recrosses the gorge of the Bued river, coiling back on itself in the famous Zigzag. Cooler

edges away from the sheer precipice at the head of the gorge.

For some years a summer capital to which the Government transferred its work and personnel during the hot months, it is a chartered city, but the all-year residents are few, though many of the well-to-do of Manila have summer homes there. It has two hotels. Camp John Hay, the military hospital post, is the main show place, among its beauties being the open air amphitheater that General Bell built with mountaineer



PAGSANHAN FALLS, LAGUNA PROVINCE

labor, terraced as their wonderful rice terraces are, and gay with flowers.

Other places to see are the Mansion House, the official summer residence of the Governor-General; Bishop Brent's Schools for American children and the school for mountain girls; the Constabulary School; the rest houses of the different religious Orders, Mirador, the Observatory, and Mt. Sto. Tomas, whence a glorious view may be had over the whole majestic panorama of mountains and valleys to the lowlands and to the China Sea. On horseback or afoot, in Baguio and its immediate environs, just enjoying the air, the roses, the pungent pines, the tree ferns, the fields of Benguet lilies, every day is a delight. But beyond lie more regions that beckon.

The strawberries and green peas at Trinidad, where are the Government stock farm and agricultural school, extend an American welcome to the visitors. On the mountain trail to Bontoc the rest houses with their big open fire places are "just like home." The great ore-rich valley of Amburayan lies on one side of the divide; on the other is the Lepanto basin with Cervantes in the cup of the hills. Sagada and Lubuagan are easy of access by side roads and trails, but to reach Tauang and Balbalan means difficult and proportionately interesting and exhilarating going through magnificent forests of cedar, from one rancheria to another. At Banaue are rice terraces nearly a mile in height. Generation after generation has toiled to build them. The mission stations with their schools where the young folks are taught modern trades and perfected in their own handicrafts are heart-warming evidences alike of Christian love and charity and self-sacrifice and the grateful appreciation of the wild peoples and their eagerness to come out of the dark and stand with their brethren of the lowlands in the full light of civilization.

Descending horseback in a westward direction one comes to Butac and a telephone message will bring an auto to whisk one on to Tagudin, the sea outlet of the Mt. Province, that has a Belgian convent noted for its laces and embroideries. The train or an auto will convey the traveler thence north to the extreme end of Luzon and back down the coast to Manila. The great North Road, that follows the sea most of the way, is a scenic route for its entire length, and along or near it are interesting old towns to visit, such as Laoag, San Fernando, which offers delightful sea bathing. Vigan, Paoay, San Vicente and Bangui, where the Ilocano weaves, carvers and potters can be watched at their fascinating tasks.

Something of the great tobacco provinces of Cagayan and Isabela can be seen by taking the steamer from Manila to Aparri, and thence sailing up the Cagayan, a Mississippi, a Nile of a river, which interisland steamers can navigate for twenty-five miles. By small boats it is possible to reach Cauayan, Isabela. From there the road is so nearly completed that autos

can be taken to Santa Fe, Nueva Vizcaya, where it divides, one branch becoming a cart road (in process of evolution into an auto road) leading to San Jose, Nueva Ecija, and thence to Manila, the other a horseback trail to San Nicolas, Pangasinan, a short and easy stage to the railroad. Among the sights is a salt incrustated mountain, a dazzling landmark for miles around, in Nueva Vizcaya. The people thereabouts often place small objects, such as baskets, under the drip of the salt springs. These become coated with salt in such a manner that they appear to be of pure marble.

Travel on the east coast is not for those over fond of upholstered, springy comfort. It means roughing it over the heavily forested mountains, camping out at night, far from all but the smallest settlements. There are sights and experiences, though, for those who would essay the exploration of this wild region.

First-class steamers connect Manila with the Visayas. The run to Cebu and Iloilo, the principal cities, takes some thirty-six hours.

The city of Cebu is a thriving hemp port with a modern pier. It is the capital and railroad center and is supplied with water by the new Osmeña Water Works. But it is for its historic interest that it is principally noted. Here a Cross marks the spot where Magellan said his first mass in the Islands—opposite Cebu, on the small island of Mactan, a monument stands on the place where he and his comrades were killed;—here, the image called the Holy Child of Cebu; Calle Colon, the oldest street in the Islands, old Fort San Pedro and noted old churches and old schools. An automobile road through the province affords a pleasing succession of views of the sea through arcades of the coconut palms that fringe the long narrow island of Cebu; a second road cuts across its backbone, giving finer views still.

Hemp, coconut and banana plantations and well cultivated fields make up the most of Leyte's scenery. There are many pretty wild bits, too, through which her first class roads pass, and along the river courses. From Tacloban, the capital, steamers sail through the beautiful Straits of San Juanico en route to Catbalogan, the capital of Samar.

Samar is almost all mountains down which, in the rainy season, hundreds of rivers break the speed laws to the sea. The new provincial road from north to south just being completed passes through some delectable scenery.

Bohol to the south is a coconut island. It has white coral roads swept by the sea breezes, one of which describes a fine loop and passes through the region of round-topped hills that look as though they might have been built by some super-mound-builders.

The city of Iloilo is the sugar port. Near are two towns of considerable historic interest—Jaro and Molo. A railroad runs through the province and its neighbor Capiz, thus making it easy to see considerable of the island of Panay, which is made up of the provinces of Iloilo, Capiz and Antique. There are the white coral

cliffs near Ventura, honey-combed with caves, some with interesting legends attached to them, as is the case with one having its outlet in Dumalag, Capiz. The stone church at Miagao has the most quaintly carved façade in the Islands. The hand weaving of the delicate textiles jusi, piña and the like is one of the leading industries of Iloilo Province.

In Romblon are quarries of white marble. The province is also noted for its fine mats. The many

plantations and modern centrals and the river and mountain scenery as well, notably the volcanoes of Canlaon and Magaso. Bacolod, Silay and Talisay are attractive provincial towns.

Dumaguete, where the Silliman Institute is located, is in Oriental Negros, the sister province of Occidental Negros and shares with it the same island and the honor of possessing beautiful scenery.

In the Department of Mindanao and Sulu, the Moros



A CORNER OF PLAZA PERSHING, ZAMBOANGA

small islands in the group are covered with coconut plantations.

On Mindoro is the big San Jose Sugar Estate. There are mines, lumber camps, Lake Naujan and the sea gardens of Puerto Galera to enthuse over; but the interior is impenetrable jungle. The Apo reef with its light house is off the coast. Marinduque, having some famous mineral springs near Boac, and Masbate with its gold mines are to the north.

The rich sugar province of Occidental Negros to the south is well worth visiting for the sake of seeing the

come into the pictures with other non-Christian peoples; the vegetation is more luxuriant; the sea presents a more imperative claim to the interest.

Zamboanga is well laid out and maintained in park-like order for some distance back from the pier. This area, where many of the principal buildings are, is embellished by fountains and lily basins, ornamental stone and concrete seats and figures and an almost complete collection of the flowering and other ornamental trees, vines and shrubs of the Philippines. The Department Capitol, the Army Post and Constabulary Headquarters,

the old fort of Nuestra Señora del Pilar and the Cathedral, and the Moro market are most interesting to inspect. Nearby is the Moro village of Kawa-Kawa, built out over the water.

Jolo is more Malayan, more Arabic, more Oriental. Its Chinese pier, the sultan's palace at Maimbung, the pearl and sponge fisheries, the diving, the bazaars, are the features that most attract the tourist, these and the gateway and Ariola's Drive, palm-bordered. Be-

though he had frivolously peroxidized it—that's sulphur from the crater. On the north coast is Iligan whence the superb lake region of Lanao is reached, and the Bukidnon country, with its lush rolling pasture lands and fertile valleys and forests. On into the great basin of the Agusan, up the river by steamer and launch and raft the real traveler may venture and find himself in a veritable tropic world Kingsley would have joyed to describe. Falls higher than Pagsanhan leap from



A LILY BASIN, NEAR THE NEW PIER, ZAMBOANGA

tween Zamboanga and Jolo is Basilan, a pretty coconut and rubber island.

From Iligan and Camp Overton, the old military road leads up to famed Camp Keithley, passing on the way the lovely Maria Cristina Falls. Keithley itself, in the words of one deeming it idle to attempt to do it justice, "is the most beautiful place in the world." Had he seen the world? He had not; he didn't want to, he said. He had seen enough having seen Keithley.

Coastwise steamers touch at various places, the most important being the hemp port of Davao. Near enough is mighty Apo, whose head glistens gold in the sun as

the flower and fern-wreathed cliffs; dark sullen swamps brood over their own loneliness; from the sedges myriads of water fowl rise; huge vines strangle the trees.

But all these scenes are of but the outer circle; the vast hinterland hides its secrets, awaiting, perhaps, the day when some Sindbad shall be borne by his roe-aeroplane into its heart and, returning with the tale, fire the imaginations of the Jasons and Humboldts, the forelopers, who shall lead the march of development and civilization to the conquest of all the rest of the great island empire of Mindanao.

To the north and west is Palawan, off to itself, only its east coast much in touch with civilization. There is an underground river in Palawan that has been followed for a couple of miles by Government and other exploring parties. Its vine-draped entrance looks alluring; all caves are seductive; ergo: somebody sometime will explore its Stygian depths still farther and solve the mystery of the river's other end—and make another film.

* * * * *

Close-ups of parts of the pictures: Palawan's great butterflies of iridescent azure; golden birds; orchids painted to the eyes, that would "vamp" the heart out of a collector; bivalves a yard across, orange cowries; rocks and stones showing here a glint, there a streak—of glints and streaks are treasure dreams made.

Night scenes, when Illusion queens it from her throne of moonbeams.

* * * * *

So as the journeys through the Islands go, the films unreel. Films of land and sea and sky, beautiful, gorgeous, awe-inspiring; of historic spots and buildings, monuments, ruins, for which memory and imagination can supply the scenario; of peoples familiar and strange; of industries modern to the minute, or old, old, as the Pharoahs, the patient work of potter and weaver, of craftsman, artisan, woodman, fisherman, husbandman; of ceremonies and amusements. Films of peoples primitive and cultured; of tribes, races, nations, distinct, assimilated and assimilating, foreigners; foreigners whose descendants a few generations later will be Filipinos—the Filipino Nation that is to be, in that wonderland the Philippines.

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A FISHERMAN AND HIS PARAW

JOURNALISM IN THE PHILIPPINE ISLANDS

The first newspaper that can properly be so called was published in Manila, February 27, 1779, and was called "Al Público" (To the Public). It was devoted to recounting the progress of the campaign against Mohammedanism. It continued in this vein until 1809, when it assumed more of a general news character. It was written in Spanish.

In July 1811, "Del Superior Gobierno" (Concerning the Head Government) appeared, published to keep the residents of the Philippines *au courant* with the movements of Napoleon's army of invasion in Spain. It lasted until 1814. Both this journal and "Al Público" were printed on rice paper.

From 1821 to 1837, the press in the Philippines was free and the number of papers increased to ten. They were informative, also political. One of them "La Filantropia" (Philanthropy) was the first to write on "The Rights of Man" and "Love of Country." This was May 25, 1822. The Mercantile Register, issued somewhat later, published information concerning the country's products and market reports.

In 1837 began the censorship of the Press. The first paper to issue censored was "Precios Corrientes de Manila" (Current Prices in Manila).

The number and variety of publications increased rapidly from 1840 on, not only in Manila, but all over the Islands. Nearly all were published in Spanish; but some were in the dialects of their respective readers in the different provinces. In general they might be

classified as: newspapers, 33; technical, 26; commercial, 13; literary, 12; religious, 10; political, 8; humorous, 8; official, 6; fashion, 2; miscellaneous, 26. This classification includes monthly, weekly and other publications issued up to the close of the Spanish regime.

At present, including the American papers, there are 25 dailies, 39 weeklies, 32 monthlies and 19 other periodicals in the Islands, of which number 66 are published in Manila and 49 in the provinces. Many are bi-lingual; Spanish-English predominating.

THE AMERICAN PRESS—Several papers were issued by the soldiers with more or less regularity during the first months of American occupation, the first probably being the American Soldier, succeeded by the Manila Freedom, which later became a daily. A cable service was shortly arranged for and the American issued containing the first press cable October 11, 1898. On the evening of October 10, the same cables were published in a bulletin called the Manila Times, which bases its claim to the title of "pioneer daily" on that fact. As the editor of the Times was an Englishman, the Cablenews-American, formed by the merger of the old American and the Cablenews, calls itself the "oldest American daily paper." There are now three American dailies, a weekly and a monthly publication, in Manila, a daily in Cebu and one in Iloilo, and a weekly in Zamboanga owned and edited by Americans.



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