EVERYTHING ABOUT OUR NEW POSSESSIONS

BY

THOS. J. VIVIAN

AND

RUEL P. SMITH

EVERY-
THING
ABOUT
OUR
NEW
POSSES-
SIONS
BY
RUEL P. SMITH
AND
THOS. J. VIVIAN

F. M. Meader.

541 N. Lenzen St.

EVERYTHING

ABOUT

OUR NEW POSSESSIONS.

BEING A HANDY BOOK

ON

CUBA, PORTO RICO, HAWAII,

AND

THE PHILIPPINES.

BY

THOMAS J. VIVIAN AND RUEL P. SMITH.

NEW YORK:
R. F. FENNO & CO.
1899.

INTRODUCTION.

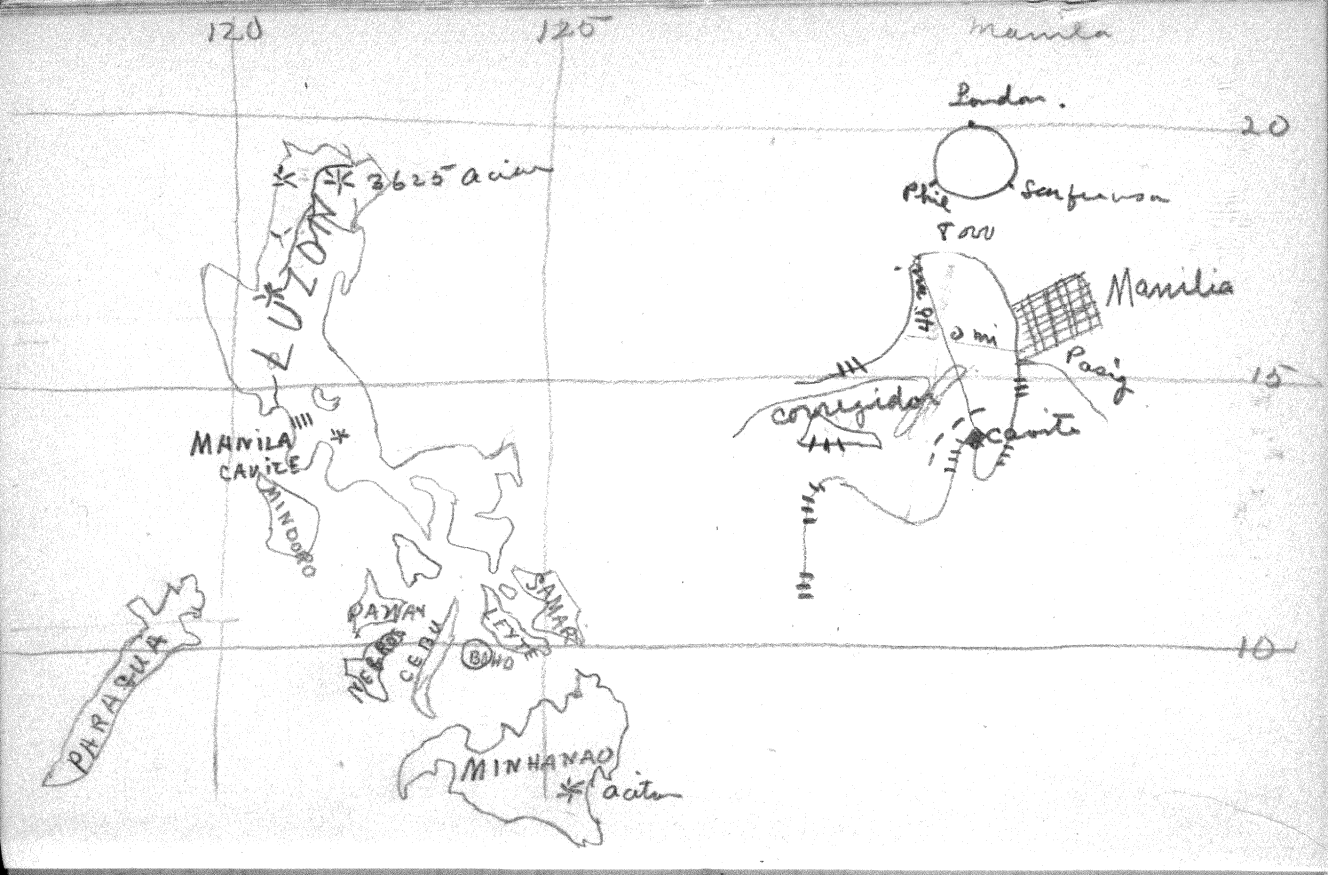
THERE is not one fact nor statement in this book that cannot be found in some other authoritative book or official document.

BUT the books and documents from which these facts and statements are taken would form a library of scores of volumes, with thousands of pages, and costing many dollars; while this is a handy book of but a few pages and costs but a trifle. Yet it contains all that is of value to the man who seeks information on our New Possessions.

The search for, extraction and arrangement of that information have taken months of hard, troublesome, tiring work.

BUT from this handy book a man may get that information in a minute, at a glance.

It is for these reasons, because it means the saving of time, labor and money, that it is believed this little volume will be valuable.


120
120
Manila
London.
20
15
10
LUZON
3625 acim
MANILA
CAVITE
MINDORO
PALAWAN
NEGROS
CEBU
BOHOL
LEYTE
SAMAR
MINHANAO
acitan
Manilla
Pasig
corregidor
Cavite

PHILIPPINE ISLANDS.

As to NUMBER and AREA.

It is estimated that there are about 2,000 islands in the group.

New ones are being continually added to the maps.

A part of the archipelago is unexplored.

The principal islands are: Luzon, Mindanao, Palawan, Paragua, Samar, Panay, Mindoro, Leyte, Negros, Cebu, Masbate, Bohol, Catanduanes, Polillo, Marinduque, Tablas, Burias and Ticao.

Luzon, the largest, has.....	41,000	square	miles
Mindanao has.....	37,500	"	"
Palawan has.....	10,000	"	"
The next four have, each.....	10,000	"	"
Aggregate land area of the group.	114,356	"	"

For comparison:

Virginia.....	42,450	square	miles
Pennsylvania.....	45,215	"	"

The total area of the group is equal to the combined area of Pennsylvania, Virginia, New Hampshire, Maryland and Connecticut, and is about a thousand square miles larger than the Territory of Arizona.

The area of the mainland of Spain is 191,365 square

miles. The comparative figures give an adequate idea of what that country has lost in the Philippines.

The Philippine Islands form a great part of the vast archipelago lying southeast of Asia. They cover about 1,000 miles north and south and 600 miles east and west. They extend from 5 degrees 32 minutes to 19 degrees 38 minutes north latitude, and from 17 degrees to 126 degrees east longitude.

On the north and northwest the islands are separated from China by the China Sea and the Indo-Chinese Peninsula. Toward the east is the Pacific. On the north small islands stretch out toward Formosa. On the south a double connection is formed with Borneo by the line of the Palawan, Balabac and Sulu islands.

As to POPULATION.

Total estimated population of the islands	8,000,000
Spaniards	20,000
English, American and other foreign people (about)	5,000

Most of the tribes are of Malay origin. Besides these are Tagolos, Ygorotes, Aetas, Negritos, pure blacks, Chinese, Japanese, Indios, Moors and mixed races.

Some 500 languages and dialects are spoken.

In the as yet inaccessible parts of the islands there are unsubdued savage tribes, estimated at about 600,000 in number.

The most primitive are the Negritos, a race of

dwarf blacks. They are confined to the higher mountain ranges in Luzon and Negros.

On first arrival the Spaniards found a part of the natives somewhat civilized; but while they had a written language, of which some specimens have been preserved, it proved to be of no value in throwing light upon their early history.

Their traditions are few and their folk lore has not impressed itself on any Spanish historian. The Philippine Malays are a superior race to many other Asiatic peoples; they take life easy and are in the main easy of control, when not wrought upon by scheming leaders.

The natives are all born gamblers, and cock fighting is their principal pastime. Every town has its cockpit. The Spaniards have taken advantage of this passion as a means of extorting heavy taxes, and the government has conducted a lottery to take advantage of the islanders' habit of gaming. They are fond of music, dancing and amusements of all kinds.

As to CLIMATE.

IN THE REGION OF MANILA.

Hottest season.....from March to June
Hottest month.....May
Maximum temperature in May.from 80 to 100 degrees
Coolest season.....December and January
Temperature in coolest season,
from 60 to 65 at night; 75 by day
Most delightful season..from November to February

U. S. WEATHER BUREAU'S COMPILATION, COVERING FROM 7 TO 32 YEARS:

Temperature, degrees Fahrenheit:

Mean annual	80 degrees
Warmest month	82 "
Coolest month	79 "
Highest	100 "
Lowest	60 "

Humidity:

Relative per cent	78
Absolute grains per cubic foot	8.75

Wind movements in miles:

Daily mean	134
Greatest daily	204
Least daily	95
Prevailing wind direction—NE., November to April; SW., May to October.	
Cloudiness, annual per cent	53
Days with rain	135

Rainfall in Inches:

Mean annual	75.43
Greatest monthly	120.98
Least monthly	55.65

The following is the mean temperature for the three seasons, at points specified:

	Cold.	*Hot.*	*Wet.*	
Manila	72	87	84	degrees
Cebu	75	86	75	"
Davao	86	88	87	"
Sulu	81	82	83	"

Owing to the extreme length of the archipelago from north to south there is a great variety of climate, but the general characteristics are those of the tropics. Seasons vary with the prevailing monsoons, or trade winds, and are classed as "wet" and "dry." The Spanish describe the seasons as "six months of mud," "six months of dust," and "six months of everything."

The northern islands lie in the track of the typhoons, which, developing in the Pacific, sweep over the China Sea from northeast to southwest during the southwest monsoon. They may be looked for at any time between May and November, but it is during the months of July, August and September that they are most frequent.

Early in the season the northern region feels the greatest force, but as the season advances the typhoon gradually works southward, and the dangerous time at Manila is about the end of October and the beginning of November. Typhoons rarely, if ever, pass south of 9 degrees north latitude.

Thunderstorms of great violence are frequent in May and June, before the commencement of the rainy season. During July, August, September and October the rains are very heavy. The rivers and lakes

then overflow, flooding large tracts of the low country.

The typhoon is the most interesting and the most terrible of storms. It is a great, revolving circle of tempest, varying from 40 to 130 miles of exterior circle and with an inner or comparatively calm core of from 8 to 15 miles. The entire great storm field moves across the sea at the rate of about 14 miles an hour.

Seamen note the approach of these hurricanes by clouds that look like fine hair, or feathers, or small tufts of white wool, traveling from east or north; a slight rise in the barometer; clear and dry weather, and light winds. Then quickly follow the usual threats of storm; the wind comes in sharp, violent gusts, and a long, heavy swell, confused and broken, rolls ahead of its path. If the barometer falls rapidly then the navigator must decide quickly whether to try to sail across the face of the storm and escape it, or to heave to, in accordance with well defined rules, adapted to whichever semi-circle of the storm must be encountered.

The sea, encircled by the great wind disc, is tossed into mountainous heaps with incredible quickness; the fury of the winds is almost indescribable.

As to DISTANCES.

San Francisco to Manila.....	8,111	statute miles.
New York to Manila.....	11,361	" "
Cadiz, Spain, to Manila.....	10,888	" "

As to COST and TIME in GETTING THERE.

Time—By Way of the Suez Canal.

New York to London—American Line, Southampton Service	7 days.
London to Hong Kong—Peninsular and Oriental Line	40 "
Hong Kong to Manila—Local Steamer Service	3 "
Total—New York to Manila	50 "

Cost—By Way of the Suez Canal.

New York to Hong Kong—First class, through rate	$434.00
Hong Kong to Manila	35.00
Total cost New York to Manila, first class	$469.00
New York to Hong Kong, second class	248.50

The Suez route is by way of Southampton, Gibraltar, Mediterranean and Indian ports to Hong Kong and Manila.

The through rate is much cheaper than the regular fares, each line making a reduction.

Berths should be engaged in advance at New York on the Peninsular and Oriental Line.

TIME—BY WAY OF SAN FRANCISCO.

New York to San Francisco	6 days
San Francisco to Hong Kong—Pacific Mail or Oriental and Occidental lines	20 "
Hong Kong to Manila	3 "
Total—New York to Manila	29 "

COST—BY WAY OF SAN FRANCISCO.

New York to Hong Kong, through rate	$303.50
Hong Kong to Manila, " "	35.00
New York to Manila, through rate	$338.50

The San Francisco route to Manila is by way of Honolulu, Yokohama, Nagasaki, Kobe, Shanghai and Hong Kong.

The through rate is cheaper than the sum of the regular fares.

Rates from New York, New Orleans and St. Louis to San Francisco are given in the division "Hawaiian Islands."

REGULAR RATES—SAN FRANCISCO TO MANILA.

(*Pacific Mail Steamship Co.*)

First class cabin, one way	$270.00
Four months, round trip	412.50
Twelve months, round trip	468.75

European servants accompanying families, one way	$195.00
The same, four months, round trip	300.00
The same, twelve months, round trip	337.50
Asiatic servants accompanying families, one way	50.00
The same, four or twelve months, reduced trip.	100.00
Missionaries and their families, first class, one way	213.75
European servants of same, one way	157.50
Asiatic servants of same, one way	50.00
European steerage, one way	145.00
Asiatic steerage, one way	78.00

Children 5 and under 12 years, half rate; 2 and under 5 years, quarter rate; under 2 years, free.

Baggage allowance—350 pounds each adult cabin passengers; 233 pounds each servant; 175 pounds each steerage passenger; excess baggage, 3 cents a pound.

Cabin passengers may, if they desire, stop over at Honolulu and proceed by a succeeding steamer of the Pacific Mail Co. or the Oriental and Occidental Steamship Co., without extra charge.

As to MAIL and CABLE SERVICE.

In round numbers, it takes about four weeks for a letter, mailed at the New York Post-Office, to reach Manila.

Mail goes by the way of San Francisco.

The regular foreign rate, 5 cents for each half

ounce, is charged for letters; merchandise, 1 cent an ounce up to four pounds.

For soldiers and sailors only 2 cents an ounce letter postage is charged.

From New York to Manila cablegrams go by way of the Suez, there being no Pacific cable.

Messages from New York to Manila over the Western Union cable cost $2.10 a word.

Among the important repeating stations between New York and Manila are Canso, N. S.; Valentia, Ireland; London, Brest, France; Port Said, on the Suez; Aden, Arabia; Madras, India; Singapore and Hong Kong.

As to TRADE.

In the Matter of Exports.

The principal staples of export are tobacco—manufactured and raw—Manila hemp, sugar cane, coffee, cocoanuts and copra.

The principal manufactures are hats, mats, baskets, ropes, furniture, coarse pottery, carriages and musical instruments.

EXPORTS FOR THE QUARTER ENDING DECEMBER 31, 1897.

Bales of hemp—280 pounds per bale—to the United States.....138,792
Bales of hemp—280 pounds per bale—to Great Britain. 78,106
Increase in the export of hemp in 1897—bales..158,485

Increase to the United States in 1897—bales..133,896
Decrease to Great Britain in 1897—bales..... 22,348

Of increased shipments of hemp from the Philippines in 1897 those to the United States were 544 per cent. greater than to all other countries combined.

Of the total exports of hemp from the Philippines for the ten years ended 1897, amounting to 6,528,965 bales, or 914,055 tons, 41 per cent. came to the United States.

During these same years the islands exported to the United States and to Europe 1,582,903 tons of sugar. This was divided up as follows:

To the United States.....875,150 tons.
To Great Britain.....666,391 "
To Continental Europe..... 41,362 "

Of the total exports more than 55 per cent. came to the United States.

For the ten years ended 1897 the value of the exports of hemp and raw sugar to the United States amounted to $89,263,722.80, or an average of nearly $8,926,372 per year.

Data as to cigars, tobacco, copra, woods, hides, shells, indigo, coffee, etc., are not obtainable in full, but a conservative estimate would so raise the above figures as to show United States imports from these islands to average about $1,000,000 per month.

In the Matter of Imports.

The chief imports are rice, flour, machinery, dress goods, wines, coal, petroleum.

According to a British Foreign Office report the imports in 1896 from several of the most important countries were in value as follows:

Great Britain	$2,467,090
Germany	744,928
France	1,794,900
Belgium	272,240
United States	162,446
China	103,680

In 1897 the Philippines received these imports:

Cotton manufactures	$1,524,622
Silk "	142,135
Woolen "	64,704
Apparel	109,588
Machinery	191,269
Metals and manufactures of	337,216
Coal	57,852
Provisions	118,538

Great Britain led all the other countries in its exports to the Philippines.

As to RAILROADS and TRAVEL.

Only one railroad has been built, running from Manila to Pangasinan, 123 miles. It is a single track road, connecting the capital with the rice growing districts.

As to BUSINESS CHANCES.

From Consular Report Sept. 16, 1898.

The Chinese, who are in the majority among the aliens, control the retail trade.

Next to them come the Spanish dealers.

There are about 300 other Europeans in business in the entire group.

The richest dealers are the Creoles and Mestizos, a combination of Chinese and Tagalese.

In Manila there are many large cigarette factories, some of which employ as many as 4,000 hands. A few German, Swiss and English firms have entered that field.

There is a sugar refinery, a steam rice mill, a Spanish electrical plant, a Spanish telephone exchange, a Spanish tramway, worked partly by steam and partly by horse power; rope factories, worked mainly by hand (a few use oxen); a Spanish brewery, which furnishes a good beer; a German cement factory with 70 hands; a Swiss umbrella factory; and a Swiss hat factory, which makes felt and straw articles, the latter out of Chinese straw braid.

A cotton mill with 6,000 spindles and with capital (English) of £40,000 ($194,600) is in process of erection.

The European firms in Manila are divided as follows: Forty-five Spanish, 19 German, 17 English, 2 English and 6 Swiss brokers, 2 French storekeepers with large establishments, 1 Dutch, and 1 Belgian. Small retail stores (40 in number) are kept by Chinese firms.

The German and Swiss firms are general impor-

ters, while the export of hemp and sugar, the import of domestic dry goods, and the ship chandlery trade are in the hands of the English.

Credit from one to three months and 5 per cent. is given, while spot-cash sales command a discount of 7 per cent. Caution is advised in dealing with the Chinese merchants, as Manila has no mercantile register like Hong Kong.

Cotton yarns are a heavy import article, so far mainly from Barcelona, by reason of the minimum Spanish tariff. The Spanish manufacturers have done what England, Germany and Switzerland have always refused to do, and that is to renumber the yarns. In Manila, No. 10 is sold numbered 24; No. 16 numbered 30; No. 18 numbered 32; No. 22 numbered 49; No. 32 numbered 50, and No. 36 or 40 numbered 60. The orders given are for four-fifths unbleached and one-fifth bleached.

Dyed yarn is bought in Nos. 20 and 32, in colors of orange, green and rose. Turkey red yarn, in the correct numbers 20 to 40, especially 32, used to come from Elberfeld; but of late years Spain has managed to supply it.

Bleached and unbleached shirtings and drills, from Manchester, are sold in large quantities, but of late the pieces have decreased in yards as well as in widths. The staples now are white shirtings, 26 inches wide and 36 yards long; gray T cloth, 25 inches wide and 21½ yards long; gray long cloth, 28 inches wide and 32 yards long; and gray drills, 25 inches wide and 27 yards long.

Colored prints, 24 inches wide, with red ground and fancy crimps, are good sellers. Ginghams and chellass, for bed coverings, etc., common quality, in

large patterns with red ground—some with yellow or blue squares, some with indigo ground, and a few in green—in pieces of 24 yards, find a good market, while cotton cassinette, in light weight and double width, for trousers, is in demand.

Handkerchiefs, 17 by 18 inches and 22 by 22 inches, white, or white with colored borders, are the "correct thing." Black cotton zanellas, 18½ inches wide, for the dresses of the country women, and aniline black satins, in 45-inch goods, are considered stylish.

Woven cotton underwear is a great staple, and white cotton bed quilts, in fancy patterns, are used as ponchos, after a hole has been cut in the centre.

It is estimated that 500,000 dozen undershirts are used annually—two-third with arms half-length, sizes 34 to 40, 27 inches long, bleached white, striped, printed and network. Men's cotton socks, 9 to 11, and ladies' cotton hose, 8 to 9½, are the right sizes. Cheap cotton-lace pinta fichus are worn by all the women.

Other articles which have a good sale are low-priced sewing machines, carriages and parts, enameled ware for cooking utensils, and, last but not least, American clocks, which now have a good foothold, and for which there is an increasing demand.

In the Matter of Boots and Shoes.

The latest customs statistics show that the imports of footwear for the year 1894 amounted to about $94,000. The United States did not figure in the tables showing this trade into the Philippines, yet the United States are the largest manufacturers of boots and shoes.

This trade was divided as follows:

	Value.
Boots and shoes of leather and canvas	$13,204
Boots and shoes of patent leather and calfskin.	50,796
Slippers and common shoes worn by Chinese..	7,179
Footwear for children	23,114

Henry W. Gilbert, Consul, in his report dated Liege, July 5, 1898, advises our manufacturers to prepare for this trade with the islands.

As to GOVERNMENT and LAWS.

Until shortly before August 13, 1898, when Manila surrendered to the American forces, after a short land fight and bombardment, there was, in Madrid, a council of state for the Philippines, which had in charge "the interests of the colony," and which acted as an advisory board to the Minister of the Colonies.

At Manila the administration of the government had for its head a Governor General, who was at the same time Captain General, Director and Inspector General of all arms and institutes; he was also delegated Superintendent of Finances, President of the Administrative Council of the Ayuntamiento, Protector of the Spanish Bank, etc., etc. Next to the Captain Generalship of Cuba this was the most lucrative post at the disposal of the home government. His jurisdiction also extended over the Mariana, or the Ladrone, islands, the Carolines, and the Pelew islands.

The islands were divided into four provinces and four military districts, and were governed by politico-military commanders.

As to INSTITUTIONS.

IN THE MATTER OF RELIGIOUS WORSHIP.

The Roman Catholic is the established church in the Philippines.

There is one Archiepiscopal See and three bishoprics.

Most of the ecclesiastical authority is in the hands of the various religious orders—Dominicans, Augustines, Franciscans, etc.

As to CITIES.

ON THE ISLAND OF LUZON.

MANILA is the capital of the Philippine Archipelago and of the Province of Manila. It was founded in 1571. It lies on the left bank of the mouth of Rio Pasig, about 25 miles from the entrance of the bay, and has 110,000 inhabitants.

It is a fortified city, encircled by a wall with bastions and bulwarks, and a ditch and outer ditch where it does not front on the bay or river. The waters can be let in and thus isolate the city.

The streets are straight, well paved and illuminated. Prominent among its buildings are the gov-

ernor's palace, the royal court of chancery and the Convent of San Augustin, with its handsome church; the church and convent of the Recollects of San Francisco, whose buildings occupy an immense space; the royal college and pontifical university of St. Thomas, which is spacious, well constructed and possesses a notable physical laboratory; the municipal atheneum, in charge of the Jesuits, with a physical laboratory, natural history museum, and a magnificent apparatus for astronomical observations; the military hospital, with room for 1,000 beds, and the spacious and well-attended hospital of San Juan de Dios.

Among the buildings ruined in the earthquake of 1863, some of which are being reconstructed and others already so, are the cathedral and the customs building.

The real nucleus of the population of Manila is in its suburbs. These comprise the pueblos, or towns, of Binondo, San Jose, Santa Cruz, Quiapo, San Miguel, Sampaloc and Tondo. The neighborhoods of these suburbs are delightful and picturesque, with rivers, lagoons, creeks, islands and little hamlets. Bridges connect these suburbs with Manila.

The suburb of Binondo is the most mercantile of the archipelago; here were centered the Spanish control of the revenues and monopolies; here are the general tobacco warehouses, and here were administered the finances of the province. The streets of Binondo are narrow, but the houses tastefully and well built.

North of Binondo, separated by a river spanned by several bridges, is the suburb of Tondo, extending to the west of the bay, on flat, sandy ground. The houses are in general constructed of cane and nipa—

a species of palm with feathery leaves. The streets are narrow, but there is a handsome church, a small theatre and a market place.

Northeast of Binondo is the suburb of Santa Cruz, with good buildings, a flower market, theatre, public jail, etc.

Northeast of Manila, and at the extremity of the suburb of Santa Cruz, is the suburb of Quiapo, with good houses, well aligned streets and a pretty market place. There is a suspension bridge here over the Pasig measuring 350 feet long by 23 feet wide.

The suburb of San Miguel is situated to the east of Manila on the opposite bank of the Pasig River, and is connected with Quiapo by a wooden bridge. It has good buildings and a comfortable and well ventilated barracks. Along the river are a number of villas, the last one being called Malacamang, until recently the residence of the supreme Spanish authority of the archipelago. It consists of a palace, divided into two parts, surrounded by gardens.

On the island of San Andres, in the centre of the river Pasig, is the convalescent hospital, the San Jose poorhouse and the insane asylum.

To the northeast of Manila, adjoining it and fronting on the river bank, is the place known as Arroceros—the rice mills—where are located extensive tobacco factories, one of which employs 7,000 women; the botanical gardens, the Spanish theatre and the Kiosko, for public dances.

A mile and three-quarters south of Manila, on the bay, is the pueblo of Malate. It is crossed by the highway from the capital to Cavite and has a fine church and barracks.

On the shores of the Pasig River is the promenade

of Magallanes, on which is erected an obelisk to the memory of the great navigator, Magellan. There are cock pits and luxurious cafes, the Spanish Recreation Club, a military library, and, outside the town, a riding school and race course.

PASIG, in Manila province, is 7 miles from Manila and has a population of 22,000.

CAVITE, 7 miles down the bay from Manila, is the great dock and shipyard of the port. It is the capital of the Province of Cavite. About a mile from its shore was depth enough of water for the Spanish fleet to lie. It is a narrow spit of land, pointing toward the city of Manila, and its batteries took part in the battle of Manila Bay. There is a dock for gunboats and a private dock for vessels of 1,500 tons. From Cavite to Manila by road is 15 miles. All its buildings are of stone, among them being several churches, a theatre and casino.

BANGUED is the capital of the Province of Abra. It is 236 miles from Manila and has a population of 13,417. It has a telegraph station and was the residence of the politico-military governor.

ALBAY is the capital of the Province of Albay. It has a population of 14,000, and is situated on the bay of the same name, at the foot of the Mayon volcano.

NUEVA CACERES is the capital of the Province of the Camarines. It is 207 miles from Manila and has a population of 11,550. It is situated on the Naga River, which is navigable from the sea to the capital by vessels of from 150 to 200 tons. It has a cathedral, a bishop's palace, seminary for the clergy

of the country, a normal school, court house and postoffice.

BATANGAS is the capital of the Province of Batangas. It is 72 miles from Manila and has a population of 39,358. It is situated in a cove on the Calumpang River and has a good harbor. During the month of February agricultural and industrial fairs and expositions are held there.

BULACAN is the capital of the Province of Bulacan. It is 22 miles from Manila and has a population of 13,186. It has a church, a town hall and about 2,000 stone houses.

TUGUEGARAO is the capital of the Province of Cagayan. It has a population of 16,826. Among the principal houses are the government house, of elegant architecture, the court house, church and town hall.

LAOAG is the capital of the Province of Ilocos Norte. It has a population of 37,094.

VIGAN is the capital of the Province of Ilocos Sur. It is 238 miles from Manila and has a population of 19,000. It has a cathedral, Episcopal palace, court house, administration building and council seminary.

SANTA CRUZ is the capital of the Province of Laguna. It is 48 miles from Manila and has a population of 13,141. It is celebrated for its markets. High roads lead to Batangas, Cavite, Manila and the Province of Tayabas. There are many fine buildings.

LINGAYEN is the capital of the Province of Pangasinan. It is 146 miles from Manila and has a population of 18,886. It has a postoffice and telegraph

station, a good parish church and about 3,500 houses, some of stone, along one long and broad street.

TAYABAS is the capital of the Province of Tayabas. It is 91 miles from Manila and has a population of 15,000. There are dock yards in which good vessels are constructed.

IBA is the capital of the Province of Zambales. It is 122 miles from Manila and has a population of 3,512. It has a jail, court house, church, meeting hall and parish house, and was the residence of the mayor, judge and other functionaries. It has a post-office and telegraph station.

ON THE ISLAND OF MINDANAO.

ZAMBOANGA is the capital of the District of Zamboanga. It has a population of 21,300. It is a fortified place and a naval station, and has a fine barracks and the castle of San Felipe, which dominates the town and harbor.

BAGO, in the District of Davao, has a population of 7,000.

SURIGAO is the capital of the District of Surigao. It has a population of 6,285. It was the residence of the governor, judge and other officials.

ON THE ISLAND OF MINDORO.

CALAPAN is the capital, with a population of 5,585. It is 96 miles from Manila, on the harbor of Calapan, and has about 500 houses.

On the Island of Panay.

Iloilo is the capital of the Province of Iloilo. It is about 250 miles from Manila by steamer and has a population of 10,380. It is, next to Manila, the most important port in the Philippines. It stands on a low, sandy flat on the right bank of the river Iloilo.

Vessels of moderate draft—15 feet—can ascend the river a short distance and lie alongside wharves which communicate with the merchant houses, but large vessels must anchor outside.

Iloilo has a pretty cathedral, a seminary and court house. Among its industries are a machine shop, foundry, a carriage factory and a hat factory.

The better class of houses are built on strong, wooden posts, two or three feet in diameter, that reach to the roof; stone walls to the first floor, with wooden windows above and an iron roof. The poorer classes of dwellings are flimsy erections of nipa, built on four posts. The roads and bridges are nearly useless and practically impassible in the rainy season.

The chief imports are Australian coal and general merchandise from Europe.

The exports are sugar, tobacco, rice, coffee, hides and hemp.

Provisions of all kinds can be obtained, but the prices are higher than at Manila. Water is scarce. The Europeans depend mainly on rain water.

There is regular communication with Manila; the steamers generally arrive on Monday and leave on the same or following day.

Capiz is the capital of the Province of Capiz. It is 290 miles from Manila and has a population of

13,676. It has a harbor for vessels of ordinary draft and highroads to Iloilo, Antique and the District of Concepcion. There is a steamer kept by the State, stopping at the harbor every 28 days and connecting with Manila, Iloilo and Cebu.

On the Island of Cebu.

Cebu is the capital, with a population of 35,243. It is the mercantile centre of the Visaya group. It is 460 miles from Manila. It is an Episcopal See and has a cathedral, Episcopal palace, court house and some well built private edifices. There is a post office and telegraph station.

The city of Cebu is the most ancient in the Philippines. It has been the seat of government of the group of Visayan islands, which include Cebu, Bohol, Panay, Negros and Leyte. It is built on a large plain at the foot of the chain of hills that traverse the island throughout its length.

The merchants' quarter is situated along the port and includes some stone houses. The huts of the Malays, for the most part fishermen, are on the beach and form the west part of the city.

Maktan Island, which lies across the narrow channel from Cebu, is where Magellan was killed in 1521, after making the first passage across the Pacific.

As to GENERAL DESCRIPTION.

No methodical and detailed study of the geography, nor even of the number of the islands, has been made.

Present maps and charts are defective, except for the seaboard, in the survey of which the leading maritime nations have co-operated. The coast line is very irregular, the ocean cutting in and forming countless bays, gulfs, isthmuses and peninsulas. There are long passages and natural canals between the islands.

The whole surface of the Philippines is essentially mountainous, the only plains that occur being alluvial districts at the river mouths and the spaces left by the intersection of the ranges. The principal ranges have a tendency to run north and south, with a certain amount of deflection east and west, as the case may be, so that the orographic diagram of the archipelago, as a whole, has a similiarity to a fan, with northern Luzon as its centre of radiation.

From the southern point of Mindanao to the northern extremity of Luzon, the relief of all the islands is either in a line with the southern isthmuses or parallel to them.

On the other hand, the islands of Bohol, Cebu, Negros and Panay are disposed in a line with, or parallel to, the Sulu Archipelago, while Mindoro and the main section of Luzon form the northeast extension of Paragua and Borneo.

Most of the surface appears to be formed of old rocks, especially schists, and, in the north of Luzon, granite.

In 1627 one of the most elevated mountains of Cagayan disappeared, and on the island of Mindanao, in 1675, a passage was opened to the sea and a vast plain emerged. The more recent of the convulsions occurred in 1863 and in 1880. The destruction of property was great, especially in Manila.

The Philippines were once, it is believed, a part of

a gigantic continent, from which they were separated by some cataclysm. This continent probably extended from Celebes to the farthest Polynesian islands on the east, to New Zealand on the south, and to the Mariana and Sandwich Islands on the north.

The disposition of the mountain ranges in parallel chains affords opportunity for the development of streams both in Luzon and in Mindanao. The larger islands contain inland seas, into which pour numberless small streams from the inland hills. Many of them open out into broad estuaries, and in numerous instances coasting vessels of light draft can sail to the very foot of the mountains. These rivers and inland lakes swarm with fish and shellfish. Four of the rivers, at least, are navigable.

Most of the interior roads are scarcely worthy of the name, and not much is known of those running along the coast. In the dry season the roadbeds are fair, but when the rains come they are little more than sloughs, not being ballasted with rock or metal.

The soil of the islands is exceedingly fertile, but agriculture is almost wholly undeveloped. The islanders are skilful weavers of cotton and silk; they tan leather, are good ship builders and make wagons and carts.

A species of buffalo is the great beast of burden, and is used in the rainy season to drag a sort of sledge over the muddy roads. The Philippine horse is small and ugly, but is sturdy and useful in the dry season. The best specimens sell for $150. The bull, of Spanish origin, is found wild, and deer are plenty in the thickets.

Spain's efforts to secure a monopoly greatly retarded the early commerce of the Philippines with the

world, and it was not until 1809 that the first English firm obtained permission to establish a business house in Manila. In 1814 this permission was made more general. It is only, however, since 1834 that foreign capital and methods have materially developed the natural resources.

Internal commerce, as well as foreign trade, suffers from lack of facilities for transportation. This is marked during the rainy season, when the coasting trade is a dangerous one and the swollen condition of the streams nearly stops land traffic.

The public revenue has been about $12,000,000 per annum, of which the larger part was raised from direct taxation, customs, monopolies and lotteries. For the imposition and collection of taxes Spanish ingenuity has been exercised to the utmost, but the basis of the financial system in the Philippines was the poll-tax, which every adult under sixty years of age, male or female, had to pay. Almost every article of import was heavily taxed. On muslin and petroleum the duty was about 100 per cent. of cost.

In the Matter of Rivers.

The Rio Grande de Cagayan, on the island of Luzon	200	miles long.
The Agno Grande, on the island of Luzon	112	" "
The Abra, on the island of Luzon	87	" "
The Rio Agusan, or Buluan, on the island of Mindanao	236	" "
The Polangui, on the island of Mindanao	87	" "

For comparison:

The Hudson	300	miles long.
The Merrimac	120	" "
The Kennebec	150	" "

There are hundreds of smaller rivers on the various islands, besides countless small streams flowing from the inland seas.

In the Matter of Harbors.

Trade is confined chiefly to Manila, Iloilo, Cebu, Sual and, to a lesser extent, Zamboanga, on the island of Mindanao.

The Bay of Manila is one of the finest in the world, 120 miles in circumference. There are two long piers running out from the mouth of the Pasig River into Manila Bay.

At Cavite, 8 miles to the southwest by water, is a marine railway capable of handling vessels of 2,000 tons displacement; also a dock for small vessels.

Iloilo, the second port in importance, is on the island of Panay, about 250 miles in a direct line from Manila.

In the Matter of Mountains.

While none of the mountain peaks greatly exceeds 8,000 feet in height, Apo, in Mindanao, is over 9,000 feet; Halson, in Mindoro, is over 8,900 feet; and Mayon, in Luzon is over 8,200 feet. The latter is an

active volcano, which has been the scene of several eruptions during the present century. Extinct or active craters are numerous in the Philippines, and as a consequence of these subterraneous forces earthquakes are frequent and violent.

BY PROVINCES.

The Province of Manila, on the Island of Luzon, has a population of 400,000. Besides Manila and Pasig, elsewhere referred to, it has the town of Tambobong, three miles from Manila, with a population of 25,000, and a dozen others with population ranging from five to ten thousand.

The Province of Abra, in the northern part of Luzon, has a rich vegetation, and the oak, pine and strawberry tree flourish. Among the game are buffalo, deer, wild boars and monkeys.

The Province of Albay, in the extreme southeast of Luzon, is covered with almost impenetrable forests of rich timber. There are numerous rivers, and on the coast there are dockyards, where vessels are constructed. It has seven towns with population ranging between 13,000 and 20,000, and as many more of about 10,000.

The Province of North Camarines is crossed by numerous rivers. Its thick forests are inhabited by tribes of Negritos, and there are unworked mines of gold, silver, iron, copper and lead. It has six towns with population ranging from 9,000 to 17,000, besides scores of smaller villages.

The Province of Batangas is just south of Luzon

and opposite Mindoro. It is noted for its high mountains, thick woods and fertile valleys, over which roam droves of buffalo and wild horses. The principal industries are the manufacture of silk, abaca and cotton fabrics and dye stuffs. Lipa, eighteen miles from the capital, Batangas, has a population of 40,733; Bauang has 39,659; Balayang has 24,747; Taal has 33,378; Tanaun has 20,038, and there are numerous towns of from 5,000 to 10,000.

The Province of Bulacan, to the north of Manila, is one of the smallest but richest provinces in the archipelago. It is crossed by the Pampanga River, which empties into Manila Bay by several mouths, some of which are navigable. There are sugar mills, and cacao, rice, indigo, sesame, and fruits are grown. There are mines of iron and magnetite and quarries of alabaster. Striped cloths of silk and cotton are manufactured. Hagonoy has a population of 20,120; San Miguel de Mayumo has 20,460, and there are numerous towns of from 8,000 to 15,000.

The Province of Cagayan, which is bounded on the north by the China Sea, is the coolest territory in the archipelago, and in January and February the body must be given additional protection. In other seasons the air is impure and oppressive, owing to the humidity caused by more than fifty rivers and creeks flowing through the dense forests. The tobacco is especially celebrated. Stock is owned to the extent of 31,000 buffalos, 30,000 head of cattle, 14,000 swine and 15,000 horses. Its towns are mostly small.

The Province of Cavite is important because of its situation between Manila Province and Bay Lake. The Spanish military arsenal of the group of islands was located there. It has good timber lands. Imus,

eighteen miles from the capital, Cavite, has a population of 14,676; Indang has 13,334, and Bacoor 13,113.

The Province of Ilocos Norte, in the northwest of Luzon, is one of the most industrious provinces of the island. Live stock is raised of a fine quality. There is a fairly good pike connecting with Manila and running through several provinces. Its climate is better adapted to foreigners than most others. Batac has a population of 17,625, and there are quite a number of towns of about 10,000.

The Province of Laguna, lying east of the provinces of Manila and Cavite, is covered with mountains. Into one of the mountain valleys falls the cascade of Batacan, 500 feet high by 90 wide. Binan, 41 miles from the capital, Santa Cruz, has a population of 19,786; Calamba has 11,476; Nagcarlang has 12,976; San Pablo, 10 miles from Santa Cruz, has 19,537 population.

The Province of Nueva Ecija, to the north of Manila, raises many cattle. The coast is dangerous for vessels. San Isidro is the capital, with a population of 7,056. Gapan, four miles from San Isidro, has a population of 20,216; Cabanatuan has 12,000; Aliaga has 17,000, and Rosales 11,519.

The Province of Pampanga, to the north of Manila, raises sugar cane, rice, indigo and tobacco. There are sugar mills, and the manufacture of hats is highly developed. Lubao, four miles from Bacolor, the capital, has a population of 21,175; Mexico has 17,099; Arayat and Candaba, 14,000 each, and there are several others from 8,000 to 10,000.

The Province of Pangasinan is bounded on the west by the China Sea. A gold mine is worked in the mountains, and there are mines of iron, magnetite

and sulphur in a pure state. San Carlos, 10 miles from Lingayen, the capital, has a population of 23,934; Manaoag has 17,500; Dagupan has 16,000; Tayug has 19,612, and Urdaneta 16,588.

The Province of Zambales is in the southern part of the island. The mountains are covered with timber forests which are inhabited by fierce tribes of savages. Bolinao is 103 miles from Iba, the capital, and its municipal district is composed of 13 islands. Its population is 4,075. There is a meteorologic and semaphoric station, a submarine cable, and a dock-yard for coast vessels.

On the Island of Panay.

The Province of Antique is to the west of Iloilo province and has the Mindanao Sea on the south. The country is covered with great forests. The principal interests are stock raising and the manufacture of fabrics. Besides the capital, San Jose de Buenavista, with its population of 5,621, there are Bugasor, with 14,104; Culasi, with 10,553; Pandan, with 13,737, and Sibalom, with 11,675, of the larger towns.

The Province of Capiz is separated from Iloilo on the south by a ridge of mountains. There are gold and copper mines, and tobacco, sugar and rice are raised. During the year three fairs are held. Batan, Calibo, Ibajay, Macato, Mambusao and Panay are the larger towns, with population ranging from 10,000 to 15,000.

The Province of Iloilo is generally level and irrigated by numerous rivers. Tobacco, cacao, sugar

cane, rice and maize are grown; there is good pasturage for cattle and horses and there are gold and other mines. The principal industry is the manufacture of fabrics, requiring over 30,000 looms. Janinay, three miles from the capital, Iloilo, has a population of 28,738; Miagas, 22,100; Cabatuan, 18,177; Leon, 13,950; Pototan, 14,512; San Joaquin, 13,918; Oton, 13,363; Santa Barbara, 13,000, and there are many other towns from eight to eleven thousand.

On the Island of Cebu.

The Province and Island of Cebu is the most important province of the Visaya islands, on account of its central position, the nature of its ground and the industry of its inhabitants. Great mountain chains cross the island. Argao, 33 miles from the capital, Cebu, has a population of 34,050; Carcar has 30,300; Sibonga has 23,455; Dalaguete has 21,323; Talisay has 19,000; Barili has 20,914; San Nicholas has 17,800, and there are scores of others between ten and fifteen thousand.

On the Island of Mindanao.

The island and adjacent islands have been divided, since 1860, into eight districts. Mindanao possesses high and extended mountain chains which have not been entirely explored and which are densely wooded. It is inhabited throughout the interior by savages.

ON THE CALAMIANES ISLANDS.

The group is to the southeast of Manila and is composed of the islands of Busungan, Calamianes, Linapocan, Cuyo, Dumaran, Agutaya and the northern part of Paragua, ceded by the Sultan of Borneo to Spain at the end of the last century. They have an area of 340 square miles. The island of Cuyo, 10 miles long by 4 wide, is thickly populated. It is surrounded by many small islets and is defended by an armed battery. In Agutaya is another fortress. Coron is sterile, but has a curious source of wealth in its edible birds' nests, for which the Chinese pay double their weight in silver.

ON THE ISLAND AND PROVINCE OF LEYTE

The coasts are high but with good natural harbors. Carigara is a place of some trade; steamers from Manila touch there about once a fortnight. Dagami, 20 miles from the capital, Tacloban, has a population of 25,000; Tanauan has 18,509; Palo has 17,736; Borauen has 21,290, and there are other large towns.

As to HISTORY.

The islands were discovered by Magellan in 1521. In 1564 the group received the name of the Philippines in honor of Philip II.

From 1521 until 1542 various expeditions were sent out from Spain to conquer the islanders, but were

unsuccessful. In 1564 Miguel de Legaspi took out a party of campaigners and succeeded in getting a foothold in Cebu. Later the colonists transferred their equipment to Luzon, and in 1581 the city of Manila was founded.

This Spanish colony was fiercely assailed in following years by parties of Portuguese, Dutch and Chinese, but the Spanish held their ground. The English succeeded, however, in 1762, in taking Manila, which they held for a ransom of about five million dollars. This was among those debts which Spain could not pay, and the islands were finally released by the English.

The Philippines entered upon a new existence under partial American control, beginning May 1, when the Battle of Manila Bay was fought and the Spanish fleet was destroyed by the American fleet under Dewey. The actual cession of the Philippines to the United States occurred on December 10, 1898, when the Treaty of Peace was signed at Paris, at 8:45 o'clock P. M.

HAWAIIAN ISLANDS.

As to NUMBER and AREA.

Hawaii	4,210	square miles
Maui	760	" "
Oahu	600	" "
Kauai	590	" "
Molokai	270	" "
Lanai	150	" "
Niihau	97	" "
Twelve other small islands	63	" "
Total area of the 19 islands	6,740	square miles

For comparison:

Connecticut	4,750	square miles
Rhode Island	1,054	" "
Greater New York City	359	" "
Total of three	6,163	square miles
New Jersey	7,815	square miles

The Hawaiian Islands lie in the Pacific Ocean, about 2,100 miles southwest of San Francisco and about 3,440 miles from Yokohama. They are between the 18th and 22d degrees north latitude and the 154th and 161st west longitude. Their distance

from the equator is about that of Cuba, but the climate is modified and equalized by the northeast trade winds, which prevail nine months in the year, after sweeping over thousands of miles of ocean.

As to POPULATION.

BY ISLANDS.

Oahu	40,205	inhabitants
Hawaii	33,285	"
Maui	17,726	"
Kauai	15,228	"
Molokai	2,307	"
Lanai	105	"
Niihau	164	"
Total	109,020	inhabitants

BY NATIONALITIES.

Americans	4,000
British	2,250
Germans and other Europeans	2,000
Hawaiians and mixed blood	38,020
Japanese	25,000
Chinese	21,500
Portuguese	15,000
Polynesians and miscellaneous	1,250
Total	109,020

The American residents, although in so small a minority, practically control the affairs of the country, and with the British and Germans constitute the controlling element in business. The Chinese and Japanese do not possess political power. The relation they bear to the body politic is that of laborers.

The native Hawaiians are a friendly, affectionate people, readily obedient to law. The Portuguese are largely immigrants from the islands and colonies of Portugal in the Atlantic.

As to CLIMATE.

BY RANGE OF TEMPERATURE.

Hottest months	August and September
Highest temperature in each	88 degrees
Lowest temperature in each	68 "
General average in August	78 "
General average in September	77 "
Coldest month	January
Highest temperature in January	81 degrees
Lowest temperature in January	55 "
General average in January	70 "
General average for the year	74 "
General average for the last 7 years	74 "

BY HUMIDITY.

(Honolulu, 1898.)

	Inches.
Rainfall for the wettest month (December)...	6.70
" " " dryest month (September)...	.64
" " " year	33.75
" " " last seven years (average)...	38.80

IN THE MATTER OF HEALTH.

The Health Board has charge of a dispensary on Oahu and one hospital on each of the other principal islands, and assists a second hospital on the island of Kauai. It assists also a maternity home in Honolulu. It has charge of an insane asylum in Honolulu.

It has charge of the inspection and location of slaughter houses and inspection of animals to be slaughtered, the special inspection of fish, the inspection of food supplies in general and inspection and removal of garbage. It has been called upon to pay considerable attention to tuberculosis in neat cattle, to sewerage and to filtration.

It is obliged to examine into nuisances and causes of sickness of all kinds and to abate them, also to look after the sanitary condition of dwelling and lodging houses and to determine the number of people who may be lodged in the latter.

It may enforce the improvement of land deleterious to the public health by reason of being low and wet or for other reasons. It controls licenses for the practice of medicine. It alone may import opium. It keeps a record of births, deaths and marriages.

The board has charge also of the examination and vaccination of all school children, which is required by law. It also exercises certain supervision of cemeteries.

As to DISTANCES.

(*All reckonings being by statute miles to Honolulu.*)

From New York (*via* San Francisco)	5,350	miles
" San Francisco	2,100	"
" Portland, Oregon	2,460	"
" Victoria, B. C.	2,360	"
" Auckland, N. Z.	3,810	"
" Sydney, N. S. W.	4,484	"
" Yokohama	3,440	"
" Hong Kong	4,893	"
" Panama	4,620	"

As to COST and TIME in GETTING THERE.

Roundly speaking, it will cost from $175 to $225 to get from New York to Honolulu by first class, and from $125 to $150 by second class, and it will take from eleven to thirteen days' time.

In detail these are the facts and figures:

FROM NEW YORK TO SAN FRANCISCO.

By way of the New York Central or Pennsylvania road, first-class ticket	$81.75
Second class	69.75
To the first-class passage add sleeping-car berth	20.50
Total, first class	$102.23
To the second-class passage add sleeping-car berth, New York to Chicago (no tourist berths), $5, and tourist berth from Chicago to San Francisco	$11.00
Total, second class	$80.75
By way of the Erie, Northwestern and Union Pacific, first-class ticket	$78.75
Second class	68.75
To first-class passage add sleeping-car berths, all the way	20.50
Total, first class	99.25
To second-class passage add tourist berths, all the way	9.00
Total, second class	$77.75
By way of the Lehigh Valley road, the "Black Diamond Express," first-class ticket	$79.75
Second class	68.75

To these prices add the usual prices for sleepers.

First-class sleeping berths, all the way.....$20.50
Second-class tourist berths, all the way..... 9.00
Total, first class.....100.25
Total, second class..... 77.75

From New York to Honolulu.

Through tickets, first class, can be bought for.$143.75
Through tickets, second class, can be bought for 118.75

To these prices add a war tax of $7 and prices of sleeping accommodations from New York to San Francisco.

The time between here and San Francisco varies from 4 days and 5 hours to 6 days, according to the road and the character of the train.

In the Matter of Meals En Route.

Most of the dining cars and dining stations between New York and San Francisco serve meals on the American plan.

Price per meal in dining car.....$1.00
Price per meal in dining station..... .75

Patronage of dining car or station restaurant is, of course, optional.

Three meals daily in dining car, six days' trip..$18.00
Three meals daily in dining stations, six days' trip. 13.50

This expense can be lessened considerably by the economy of a lunch basket.

Steamship rates on both Pacific and Atlantic lines include the cost of meals.

From St. Louis to San Francisco.

By the "Frisco Line."

First-class ticket, by extreme Southern or Santa Fé route	$57.50
Sleeper	14.50
Tourist class, over either routes	47.50
Sleeper	6.00

The tourist, or second-class travel, is well recommended. The cars are operated by the Pullman Company and a porter is in attendance.

From New Orleans to San Francisco.

By the Southern Pacific.

First class	$57.50
Sleeper	13.00
Second class	47.50
Sleeper	5.00
First class, with stop-over privileges, good for thirty days	67.50

Sleeper berths for this ticket are bought from point to point.

From San Francisco to Honolulu.

Three lines, the Oceanic Steamship Company, the Oriental and Occidental Steamship Company and the Pacific Mail, ply between these ports.

One steamer of the Oceanic Line, the *Australia*, makes Honolulu her destination. The other two steamers of the same line touch there and go on to Samoa and Australia.

The steamers of the other two lines touch at Honolulu and go on to Japan and China.

The Oceanic Steamship Company's rates are $75 cabin and $25 steerage. The other two lines charge $100 and $30, respectively.

Time from San Francisco to Honolulu, from six to seven days.

From Northwestern Ports.

The Canadian-Australian Royal Mail Steamship Company's steamers, sailing from Victoria and Vancouver, stop at Honolulu on their way to Australia and New Zealand.

Fine sailing vessels make regular trips between Port Townsend and San Francisco and Honolulu, with passenger accommodations. The price is $40 for cabin passage.

From Victoria and Vancouver to Honolulu, first cabin, steamer	$75.00
Second cabin	25.00
Cabin passage by sailing vessel from San Francisco	40.00

Steerage..... $25.00
From Hong Kong or Tokio to Honolulu, cabin passage, steamer..... 250.00

There are two steamers every four weeks, both to and from Vancouver, by way of the Canadian-Australian line.

Freight Rates.

The rates of freight from San Francisco to Honolulu are: For steamers, $5 per ton and 5 per cent. primage; sailing vessels, $3 per ton and 5 per cent. primage.

The rates from Atlantic ports range from $5 to $7 per ton, with 5 per cent. primage.

The duration of the voyage between New York and Honolulu has been from 89 to 134 days.

As to MAIL SERVICE.

By postal route, from New York to San Francisco, letters take..... 5 days
By postal route, from San Francisco to Honolulu, letters take..... 7 days

Total from New York to Honolulu..... 12 days

There is a regular postal system in Hawaii.

On the arrival of a steamer at Honolulu the mail is sent to the different islands and into the interior by mail carriers.

The Hawaiian Islands belong to the Postal Union.

Money orders can be obtained on the United States, Canada, Great Britain, Germany, Norway and Sweden, Denmark, the Netherlands, Portugal, Hong Kong and Australia.

RATES OF POSTAGE.

Letters to any part of the islands, 2 cents each half ounce.

Letters to United States, Canada, Mexico and colonies, 5 cents each half ounce.

Postal cards to same, 2 cents.

Parcels post—United States, per pound, 12 cents.

As to TRADE.

EXPORTS.

Articles sent to the Pacific ports of the United States for the six months ended June 30, 1897:

	Value.
Sugar, 230,350,296 pounds	$6,698,595.37
Rice, 2,168,600 pounds	87,378.30
Coffee, 218,489 pounds	31,756.52
Bananas, 43,457 bunches	43,334.50
Wool, 10,024 pounds	851.44
Hides, 10,863 pieces	40,119.39
Pineapples, 64,874 pieces	7,429.70
Other exports, including goat skins, sheep skins, molasses, betel leaves, taro flour, watermelons, canned fruits, honey, etc	28,442.28
Total	$6,937,907.50

Articles sent to the Atlantic ports of the United States for the six months ended June 30, 1897:

	Value.
Sugar, 145,612,711 pounds	$4,322,757.37
Sugar, foreign	41.00
Total	$4,322,798.37

IN THE MATTER OF IMPORTS.

For the six months ended June 30, 1897.

Whence Imported,	Value.
United States	$3,058,380.92
Great Britain	351,381.52
Germany	52,878.70
China	102,273.91
Japan	159,555.45
Australia and New Zealand	75,975.73
Canada	16,179.93
Pacific Islands	3,003.16
France	18,385.70
Other countries	70,474.23
Total	$3,908,489.25

IN THE MATTER OF SPIRITUOUS LIQUORS.

All kinds of liquors withdrawn from bond during first half of 1897.....362,243 gallons
This would average for each man, woman and child on the islands.....3½ gallons

Of the whole, Japanese sake amounted to
151,732 gallons
This, if consumed wholly by the Japanese, would average for each man, woman and child.6½ gallons
Of the whole, Chinese sam shoo amounted to
9,230 gallons
This would be, per capita.....3½ pints

Considering the Chinese as confining their drinking to their native liquor, the figures would indicate them to be the most temperate people of the islands.

California, in the time specified, contributed wine to the extent of.....84,549 gallons

Merchant Marine.

Fifty-eight vessels fly the Hawaiian flag, consisting of 27 steamers, 3 ships, 8 barks, 18 schooners and 2 sloops.

Their aggregate tonnage is 30,382.

Thirty-one of the vessels were built in the United States.

One hundred and eighty-one vessels entered the port of Honolulu during the first six months of 1897.

The tonnage of these aggregated 251,992 tons.

The United States, as usual, led all other countries, both in number of vessels—111—and amount of tonnage—127,018.

One hundred and two vessels, with an aggregate tonnage of 126,419, were from American ports.

The commerce of the islands is decidedly with the United States.

As to RAILROADS and TRAVEL.

There are three railroads on the islands.

The principal road is the Oahu Railway and Land Company Line, which runs from Honolulu to Waianae, the total length, including sidings, being 38.5 miles. It was opened July 1, 1890. In 1897 the road carried 85,596 passengers, earning $30,993.50; and 66,430.49 tons of freight, earning $69,752.76; total earnings, $100,746.26.

The equipment consists of 5 locomotives, 14 passenger coaches, and 132 freight cars. The road is bonded for $2,000,000, at 6 per cent., with $700,000 worth of stock, which is to be increased to $1,500,000.

The Kahului Railroad, on the island of Maui, is 13 miles long.

The Hawaiian Railroad, on the island of Hawaii, is about 20 miles long.

They are used principally for carrying plantation products for shipment.

As to BUSINESS CHANCES.

The reader is especially referred to the Honolulu Chamber of Commerce. The following is from a report by Sanford B. Dole, dated Honolulu, August 30, 1898:

"Coffee raising is comparatively a new enterprise and there are opportunities for its culture on a much larger scale than at present. Four or five years from transplanting are required for a coffee tree to reach its full bearing capacity.

"On account of the increasing demand for coffee lands and the fact that this enterprise can be profitably carried on in small holdings, the Government has devoted its energies, under the settlement provisions of its land legislation, mainly to the opening of coffee lands to settlement in small farms within 100 acres in extent, except in the Olaa coffee region, where pioneer holders of original crown leases were allowed to acquire, upon the basis of such leases, a larger area.

"These lands have been eagerly taken up by actual settlers, and are generally prosperous. In the last biennial period 422 holdings, not including the Olaa lots, were taken up, including an aggregate area of 20,234 acres and worth, at the moderate Government appraisement, $118,853, unimproved value.

"The area of good coffee land as yet unoccupied is comparatively large. A large part, however, of the public lands of this class is held under leases to private parties. The expiration of the terms of these leases will, from time to time, augment materially the area under the control of the Government suitable for settlement purposes.

"The banana is a hardy plant without insect enemies and is cultivated largely with irrigation. It requires a fertile soil and thorough cultivation and can be raised from the seashore nearly up to the frost line. The yield is large and the crop, as raised for export, a profitable one.

"Under free trade with the main land the cultivation of pineapples, avocado pears and tobacco and the manufacture of taro flour and jams and jellies and the canning of fruit will undoubtedly become profitable. Other fruits and some vegetables will be profitably raised for the Pacific coast markets.

"Indian corn, Irish and sweet potatoes and garden vegetables are successfully and profitably raised for the home demand.

"The raising of live stock has, as a rule, been carried on in a haphazard way, relying upon the natural growth of native grasses for pasturage, without other feeding. While considerable attention has been paid to the improvement of all kinds of stock by the introduction of good blood, the condition and quality of live stock at the islands on the whole is not very creditable to the country; yet the business is generally profitable."

As will be seen by reference to the list of exports, the production of sugar in Hawaii is enormous, but the interest is so controlled by trusts that it can scarcely be called a "business chance."

As to COST of LIVING and WAGES PAID.

PRICE OF PROVISIONS.

Fresh Hawaiian butter, from 25 to 50 cents per pound.

Hams, from 16½ to 30 cents per pound.

Bacon, from 16½ to 20 cents per pound.

Cheese, from 20 to 35 cents per pound.

Family pork, from 15 to 18 cents per pound.

Corned beef, 7 cents per pound.

Fresh meat, from 6 to 15 cents per pound.

Loin of porterhouse steaks, from 6 to 15 cents per pound.

Tinned fruits, per dozen, from $1.75 to $2.25.
Golden Gate flour, per 100 pounds, $2.50.
Lower grades, $2.20.
Hawaiian rice, $3.25 to $5 per 100 pounds.
Hawaiian bananas, per bunch, 25 to 55 cents.
Potatoes, from 1 to 2 cents per pound.
Eggs, per dozen, 25 to 50 cents.
Rolled oats, per case, $5.50.
Ice, in small quantities, 1½ cents; 50 pounds and over, 1 cent per pound.

Hotel Rates.

The principal hotels in Honolulu are the Hawaiian and the Arlington.

Board, with room, at either is from $3 to $5 a day.

Besides these, there are private boarding houses, where the rates are from $10 a week up.

In Hilo the rates are somewhat less and the accommodations more limited.

Carriage Fares.

From the steamer to the hotels, for either 1 or 2 persons	$0.25
From the steamer to the hotels, for each additional person	.10
Carriage fare, per hour, 1 passenger	1.50
" " " " 2 "	2.00
" " " " 3 "	2.50
" " " " 4 "	3.00

To the Pali, 1 passenger, each way.....$3.00
" " " 2 " " " 4.00
" " " 3 " " " 5.00

Saddle horses cost a dollar an hour.

Bicycles can be hired at prices a little higher than in the East.

Wages Paid.

Cooks, Chinese and Japanese, $3 to $6 per week, with board and room.

Nurses and house servants, $8 to $12 per month, with board and room.

Gardeners or yard men, $8 to $12 per month, with board and room.

Sewing women, $1 per day and one meal.

Engineers on plantations, from $125 to $175 per month, house and firewood furnished.

Sugar boilers, $125 to $175 per month, house and firewood furnished.

Blacksmiths, plantation, $50 to $100 per month, house and firewood furnished.

Carpenters, plantation, $50 to $100 per month, house and firewood furnished.

Locomotive drivers, $40 to $75 per month, room and board furnished.

Head overseers, or head lunas, $100 to $150.

Under overseers, or lunas, $30 to $50, with room and board.

Bookkeepers, plantation, $100 to $175, house and firewood furnished.

Teamsters, white, $30 to $40, with room and board.

Hawaiians, $25 to $30, with room; no board.

Field labor, Portuguese and Hawaiian, $16 to $18 per month; no board.

Field labor, Chinese and Japanese, $12.50 to $15 per month; no board.

Bricklayers and masons, $5 to $6 per day.

Carpenters, $2.50 to $5.

Machinists, $3 to $5.

Painters, $2 to $5 per day.

As to GOVERNMENT and LAWS.

The following scheme of government for the Territory of Hawaii was provided for in a bill before Congress prepared by the Hawaiian Commission and submitted by the President on December 6, 1898:

The islands to be known as the Territory of Hawaii, the capital of the Territorial Government being at Honolulu.

All white persons, including Portuguese, and persons of African descent, and all persons descended from the Hawaiian race who were citizens of the Republic of Hawaii immediately prior to the transfer of the sovereignty thereof to the United States, are declared to be citizens of the United States.

The President of the United States is to appoint a Governor, a Secretary of the Territory, United States District Judge, United States District Attorney and a United States Marshal.

An Attorney General, a Treasurer, Superintendent of Public Works, Superintendent of Public Instruc-

tion, Auditor, Deputy Auditor, Surveyor, and a Chief Sheriff, in place of the Marshal of the Republic, are, by the bill, to be appointed by the Governor.

The laws of Hawaii, not inconsistent with the Constitution or laws of the United States or the provisions of this act, are to continue in force, subject to repeal or amendment by the Legislature of Hawaii or the United States.

The offices of President, Minister of Foreign Affairs, Minister of the Interior, Minister of Finance, Minister of Public Instruction, Auditor-General, Deputy Auditor-General, Surveyor-General, Marshal and Deputy Marshal of the Republic of Hawaii are abolished.

The Legislature of the Territory shall consist of two houses, called the Senate and House of Representatives. The Senate to be composed of fifteen members, and the House of thirty members.

The Supreme Court is to be the sole judge of the legality of an election to a seat in either house. A general election is to be held on the Tuesday next after the first Monday in November, 1899, and biennially thereafter.

No member of the Legislature shall be eligible to any Government office during his term. No officer, employe, notary public or agent of the Territory is eligible to election to the Legislature.

The salary of each member is $400 and 10 cents a mile traveling expenses, and $200 for each extra session.

A Senator must be a male citizen of the United States; be 30 years old or over; have lived in the Hawaiian Islands not less than three years; have in his own right property in the Territory of the value

of not less than $2,000, or else have been in receipt of a money income of not less than $1,000 during the year immediately preceding the date of election.

A Representative must have attained the age of 25 years; be a male citizen; have lived in the islands not less than three years; must own not less than $500 worth of property, or have received a money income of not less than $250.

Sessions of the Legislature are to be not longer than sixty days.

A voter for Representatives must be a male citizen of the United States; have resided in the Territory not less than one year; have attained the age of 21 years; have registered; have paid all taxes due by him to the Government; and be able understandingly to speak, read, and write the English or Hawaiian language.

In order to be qualified to vote for Senators a person must possess all the qualifications and be subject to all the conditions required by this act of voters for Representatives, and, in addition thereto, he shall own and be possessed in his own right of real property in the Territory of the value of not less than one thousand dollars, and upon which legal taxes shall have been paid on that valuation for the year next preceding the one in which such person offers to register; or shall have actually received a money income of not less than six hundred dollars during the year next preceding the first day of April next preceding the date of each registration.

The Governor of the Territory is authorized to appoint registration boards.

The judicial power of the Territory to be vested in one Supreme Court and in such inferior courts as

the Legislature may from time to time establish. The Supreme Court to consist of a chief justice and not less than two associate justices.

Voters qualified to vote for members of the House of Representatives may elect a delegate to the House of Representatives of the United States to serve during each Congress.

In the Matter of Courts.

(Subject to revision under proposed Territorial Law.)

There are three sets of courts—a supreme court, superior courts of record, and local courts.

There is the Supreme Court.

There are five Circuit Courts.

There are twenty-nine District Courts.

The chief justice and associate justices are all of American descent and are graduates of American colleges and law schools. The circuit judges comprise two Americans, one Englishman, one Portuguese and one Hawaiian. The district judges are mostly Hawaiians.

The Supreme Court law library contains over 5,000 volumes.

In the Matter of Its Present Police System.

The police officers of the islands consist of a marshal, a deputy marshal, three sheriffs, twenty-three deputies, 196 officers, besides prison officers and guards.

The marshal is the chief of police, and is appointed by the Attorney-General, with the approval of the President. (The bill before Congress will abolish the offices of marshal and deputy marshal, substituting for the marshal a chief sheriff, to be appointed by the Governor of the Territory, who, himself, succeeds to the duties of the President of the Republic.)

On three—the main islands—there is a chief of police of the island, called sheriff, appointed by the marshal.

In each district of the seven islands there is a deputy sheriff.

As to INSTITUTIONS.

IN THE MATTER OF SCHOOLS.

The English language is the medium of instruction.

Total number of pupils (1898)	14,522
Attending public schools	10,568
Attending private schools	3,954
Number of public schools	132
Number of private schools	60
Number of teachers in the public schools	298
Number of teachers in private schools	209

[Of all the teachers 49.9 per cent. are Americans.]

THE PRINCIPAL SCHOOLS.

Oahu College, in the suburbs of Honolulu, has large, modern buildings; high school course, classical

course, sciences, modern languages, music, drawing, etc.; with an endowment of $285,000.

Honolulu High School occupies private residence, formerly the palace of the Princess Ruth; course of instruction, high.

Lahainaluna Seminary, on Maui, now a Government school; instruction in agriculture, carpentry, printing and mechanical drawing.

Normal School at Honolulu, with a practice school attached; has an enrollment of fifty pupils, with three teachers.

St. Louis College, boarding and day school; has over 500 pupils.

Iolani College, at Honolulu, an academy for boys.

Average Monthly Salary of Male Teachers.

In the United States	$47.37
In Hawaii	74.55

Of Female Teachers.

In the United States	$40.24
In Hawaii	55.18

Of all Teachers.

In the United States	$42.26
In Hawaii	63.18

Cost of Education Per Pupil.

In the United States	$18.92
In Hawaii	21.17

Average Number of School Days Per Year.

In the United States	140
In Hawaii	200

In the Matter of Papers.

In Honolulu.

Dailies:

Pacific Commercial Advertiser	English
Daily Bulletin	English
Hawaiian Star	English
Independent	English
Aloha Aina	Native
Ka Loea Kalaiaina	Native
Hawaiian Shimpo	Japanese

Semi-weeklies:

Hawaiian Gazette	English
Shim Nipon	Japanese
Yamato Shimbun	Japanese

Weeklies:

Weekly Hawaiian Star	English
The Kuokoa	Native
O Luro	Portuguese
O Directo	Portuguese
Hawaiian Chinese News	Chinese
Chinese Times	Chinese
Chinese Chronicle	Chinese
Ka Makaainana	Native

In Hilo.

Weeklies:

The Hilo Tribune	English
Hawaii Herald	English

IN THE MATTER OF CHURCHES.

In Honolulu.

Central Union Church; Congregational.
Methodist Episcopal Church.
The Christian Church.
The Christian Chinese Church.
The Salvation Army.
St. Andrew's Cathedral; Episcopal.
Roman Catholic Church.
Protestant Mission; Portuguese.
Japanese Union Church; connected with the Hawaiian Board of Missions.
Japanese Church.
Kawaihao Church, Congregational; native.
Kaumahapili Church, Congregational; native.

As to CITIES.

City life in the Hawaiian Islands is practically confined to *Honolulu*, the capital. It is situated on the island of Oahu, and has a population of about 20,000 people. The city straggles along the water front, on each side of its business centre, from Kalihi to Diamond Head, for about seven miles. For a mile back from the sea front the land is but slightly raised above the sea level. Then, however, comes a rapid rise from hills to mountains, the whole city lying at the foot and in the valleys of a mountain range which rises to a height of 3,000 feet. A fringe of cocoanut trees along the sea front adds a tropical appearance

to the city, while the houses are mostly hidden from view by dense foliage.

Honol lu is a modernized city, with electric lights, telephones, markets, newspapers and many new buildings of stone. The Executive Building, which cost $500,000, is built of stone, situated in a ten-acre park, beautified with trees and shrubbery.

There is a well equipped opera house, completed in 1896, which has a seating capacity of between twelve and fifteen hundred. Public parks are numerous, the public buildings are attractive, and the private residences, with wide verandas, look out upon bright gardens and lawns adorned with vines and palms.

The hills back of the city are especially adapted for fine residences, having an altitude of from 100 to 1,100 feet above the sea.

The hotels are built of stone and are well managed.

The principal streets are Nuuana Avenue (for residences) and King Street (for business).

There is a public library and a Y. M. C. A. building.

As to GENERAL DESCRIPTION.

A group of islands exporting annually over sixteen million dollars' worth of products; having a mild, equable climate; possessing excellent schools and a good judiciary; destined to play an important part in the growth of commerce on the Pacific, bearing important relations to the great trans-Siberian Railway and the inevitable Nicaragua canal—this group, the

islands of Hawaii, as a new possession of the United States, must interest every American citizen.

A maximum temperature of 88 degrees, a minimum of 55, an average temperature of 74 degrees for the last seven years—such is the consistently delightful climate of Hawaii. There is never any frost nor snow, except upon the highest mountains.

Kauai, the most northwesterly of the group, has an area of about 590 square miles, and is the most fertile of the islands in proportion to its size. It has rich, broad valleys, lying between mountain ranges, largely productive of sugar, but producing also coffee and rice.

Oahu is the most thickly populated of the islands, having over 40,000 inhabitants. There is situated Honolulu, the capital and largest city in the archipelago. This island is principally devoted to pasturage and agriculture, but the sugar industry is a growing one, owing to the development of the artesian water supply.

The most profitable sugar lands known are on the island of Maui. For the purpose of sugar irrigation 6,000,000 gallons of artesian water are pumped daily to a height of 400 feet.

Hawaii, from which the group takes its name, is the largest of the islands. It contains nearly 2,500,000 acres of land and has a population of nearly 34,000. Its principal town is Hilo.

The Hawaiian islands are destined to become a great cable centre. They will ultimately be a meeting place for cables from all ports of the great circuit of our coasts, from the Asiatic coasts as far south as Hong Kong, from the South Pacific and from the South American coast.

The five larger islands of the group are separated by three channels that aggregate about 118 miles in width. The new development of the islands will demand cable communication between them all.

Hawaii takes just pride in her schools. The law requires that every child between the ages of six and fifteen years, inclusive, shall attend either a public or a private school, in which the English language is the medium of instruction. Attendance is enforced by means of truant officers or school police.

The Republic in its Constitution forbade any aid from the public treasury to any sectarian, denominational or private school, and by the new school law of 1896 no priest or minister of religion is eligible to the office of Minister of Public Instruction or to become a member of the Board of Education. Clergymen may be teachers or instructors in Government schools, but no distinctively religious teaching is permitted.

The school system and its methods are peculiarly American.

It is an interesting fact that over one-eighth of the expenditures of the Hawaiian Government have been for the support of the public schools.

The Government has devoted earnest efforts toward the protection of the public health. A strict quarantine is maintained at points where ships from infected ports might call. Ordinarily malarial fevers are rare, though there has been some typhoid among the United States troops recently stationed at Honolulu.

The Hawaiian Islands maintain a prison system, corresponding mainly to the State prisons of the United States.

In the Matter of Harbors.

In the island of Oahu lies the key to the commerce of China, Japan and Australia. This is the magnificent Pearl Harbor, a few miles from Honolulu. It contains eight square miles of water and is accessible from the sea by a passage a third of a mile in width. The depth of water in this harbor is from five to ten fathoms. The harbor is many times larger than that of Honolulu, and possesses unequaled facilities for the development of an Eastern commerce.

It is expected that by a small appropriation a coral reef, which bars the entrance from the ocean for large vessels, will be removed by the Government of the United States, whereupon this will furnish the best harbor on the Pacific.

In the Matter of Mountains.

The great volcano of Haleakalau, the largest extinct volcano in the world, is on Maui, the old lava from which has become decomposed and fit for cultivation. The monster crater is twenty miles in circumference and half a mile deep.

There are three great mountains on Hawaii, Mauna Kea, Mauna Loa and Hualalai. The first two are nearly 14,000 feet high, the other 8,000. Upon Mauno Loa are two great volcanoes—Kilauea, upon the side of the mountain, at an elevation of 4,000 feet, and Momuaweoweo, at the top, or at about 13,500 feet elevation. These two volcanoes are still alive.

The slopes of these mountains comprise most of the agricultural land upon this island. It is covered

with a tangle of vegetation, but is susceptible of cultivation after this is cleared. There are great fields of sugar cane on this island, the best of which yield from five to eight tons of sugar an acre.

As to SCENIC INTEREST.

The Pali Road, at the head of Nuuana Valley, six miles from the postoffice in Honolulu, is one of the wonders of the islands. The road leads out from the city, up a gradual ascent to the height of about 1,200 feet. After passing through a beautiful residence section, with finely kept grounds, the scenery on either hand becomes that of the mountain and wilderness.

The road terminates at a precipice, famed in the war annals of Hawaii as that over which the great chief, Kamehameha, drove his foes. The table-land, 1,200 feet beneath, stretches away to the Pacific, far in the distance, while at the sides there rise up lofty peaks high above the Pali Road.

The excursion can be made by carriage or saddle-horse.

The Punch Bowl, the crater of an extinct volcano, lies just back of the city, about 500 feet above the sea, and is a favorite place of resort.

Mount Tantalus, a peak at the rear of the Punch Bowl, can be climbed by a picturesque road through groves of trees, while from the summit, at an altitude of about 2,000 feet, one of the most magnificent views on the islands can be obtained.

The favorite bathing resort is at Waikiki, where

there are excellent bath-houses. The water is warm and the beach of a fine sand. The place is popular with moonlight bathing parties.

Bicycling is growing more and more popular and the enthusiast recognizes almost every make of American and English wheels.

Pearl Harbor is reached by trains of the Oahu Railway and Land Company, which leave the station at Leleo three times daily.

The volcano of Kilauea, on the island of Hawaii, generally reached by way of Hilo, is undoubtedly Hawaii's greatest natural wonder. The steamer Kinau leaves Honolulu and arrives at Hilo on the evening of the second day out. After a night's rest at the hotel the start is made in the morning. The road to the volcano was constructed by the Hawaiian Government at a cost of $100,000. The ascent is 4,100 feet, and may be made either on horseback or in carriages. At about the middle of the afternoon the Volcano Hotel, a comfortable inn, is reached.

The crater of Kilauea is about three miles in diameter. In the daytime it has the appearance of a great pit of black pitch, vague with the rising of clouds of smoke or steam. The active lake of Ha-le-mau-mau is in the southern part of the crater, and at night lights up the whole with shooting flames of greater or less brilliancy, according to the volcano's activity.

As to HISTORY.

The Hawaiian, or Sandwich Islands, so far as authenticated history goes, were discovered by Captain

Cook in 1778. The Spaniards assert a previous discovery, but have succeeded very poorly in convincing anybody of the validity of their claim. The natives treated Captain Cook with great kindness until the following year, when he met his death at their hands.

At the time of Captain Cook's discovery each of the principal islands had its chief. One of them was named Kamehameha. He conceived the idea of conquering all the other chiefs, and when Vancouver visited the islands, in 1792, Chief Kamehameha persuaded him to lay down the keel of a vessel for him. Following this model, the chief increased his fleet to some twenty vessels, introduced firearms among his people, and then made war on the other islands, becoming monarch of the entire group.

His son, Kamehameha II., succeeded him. He did away with idolatry. Then came Kamehameha III., in whose reign (1844) the integrity of the kingdom was recognized by the United States, France and Great Britain. The succeeding monarchs were Kamehameha IV., Kamehameha V., Lunalilo, Kalakua, and, in 1891, Queen Liliuokalani.

Queen Liliuokalani was opposed to the progressive element in the islands and, in January, 1893, a quarrel arose between her and her cabinet regarding the new constitution. A Committee of Safety was speedily formed, which summarily deposed the queen, imprisoned her, overthrew the government and substituted a provisional one.

The movement could hardly have been accomplished without bloodshed had it not received the bristling moral support of the American forces there, United States Minister Stevens landing the marines

from the United States war vessels then in Honolulu harbor for the protection of American interests.

A republic was proclaimed on July 4, 1894, with Sanford B. Dole as President, and a formal declaration of desire to become annexed to the United States was made.

On June 11, 1898, the Committee on Foreign Affairs of the House of Representatives reported a joint resolution for the annexation of Hawaii.

On June 15 the House of Representatives passed the joint resolution by a vote of 209 to 91—not voting, 49—the opposition being made up almost entirely of Democrats.

On July 6 the Senate passed the joint resolution, by a vote of 42 to 21. Six Democrats voted in affirmative, and 17 Democrats, 1 Populist, 1 Republican, 1 Silver Republican and I Silverite in the negative. There were twelve pairs.

The President at once approved. He appointed the following commissioners to consider the reciprocal relations of the two countries: President Sanford Dole, of Hawaii; Justice Frear, of the Hawaiian Supreme Court; Senator Morgan, of Alabama; Senator Cullom, of Illinois, and Representative Hitt, of Illinois, Chairman of the House Committee on Foreign Affairs.

As to LEPERS.

The subject of leprosy as one of the unfortunate institutions of Hawaii has been generally treated with such picturesque license that the following official facts will be found valuable:

Where They Live.

Isolated in a settlement on the north side of the island of Molokai.

It is a peninsula containing about 5,000 acres of land.

It is separated from the world by a stormy ocean on the north and a range of almost impassable mountains on the south.

Their number in 1897 was:

Hawaiians	984
Half-castes	62
Chinese	32
Americans	5
British	4
Germans	4
Portuguese	6
Russians	1
South Sea Islanders	2
Total	1,100

How They Live.

In two villages, Kalaupapa and Kalawao, on opposite sides of the peninsula.

These contain 716 buildings in all.

They include court house, jail, school houses, offices, warehouses, work shops, hospitals, dormitories, etc.

At Kalawao there is a Roman Catholic home for boys.

At Kalaupapa there is a similar home for girls.

There are a Young Men's Christian Association, Protestant churches, Roman Catholic and Mormon churches.

There is a general store.

There are bands in each town, the members of which are lepers.

The lepers may build houses and cultivate land for their own use.

They constitute a little world by itself, conducted systematically.

How the Spread of Leprosy is Prevented.

Visitors are not allowed, except by special permission.

None can leave the settlement except by special arrangement.

Transportation of lepers is under the care of a board of inspection.

Money only leaves the settlement after it is purified, and then on rare occasions. Outside business is transacted mostly by postal orders.

Great cleanliness is enforced at the settlement.

The disease is not as contagious as has been popularly supposed.

CUBA

AND ADJACENT ISLES.

As to AREA.

Length (of Cuba)	730 miles.
Average breadth	80 "
Area	43,319 square miles.
Coast line, over all	2,200 miles.
Coast line, including all indentations	7,000 "

For comparison:

Area of Pennsylvania.....45,215 square miles.

Cuba is nearly seven times as long as Long Island, and would stretch from New York city to Cincinnati.

The Isle of Pines, which is the only one of Cuba's island satellites of any importance, is 45 miles from east to west and 33 miles from north to south. A description of the island will be found at the end of this division of the volume.

Though the area of Cuba is 43,319 square miles, its habitable area can only be estimated at 32,500 square miles; the balance of 10,819 square miles being made up of desert sand keys that skirt the island impassable swamps that line its south coast, and the rugged and unexplored uplands of its eastern extremity.

As to POPULATION.

Of the island (estimated, 1894).....1,631,687

Of the aboriginal inhabitants none survived to see the seventeenth century. The present population may be divided into five classes:

1. Natives of Spain—"Peninsulares."
2. Cubans of Spanish descent—"Insulares."
3. Other white persons.
4. Persons wholly or in part of the African race.
5. Eastern Asiatics.

The number of white persons of other blood than Spanish is trifling, as is also the number of coolies or Asiatic laborers, imported from the Philippines. Thus reckoning the first three classes together and excluding the fifth entirely, there will be this division of whites of all classes and negroes of all shades—70 per cent. whites and 30 per cent. negroes.

For comparison:

The ratio of the races in the city of Washington according to the census of 1890 was 67 per cent. whites and 33 per cent. negroes.

BY PROVINCES.

Pinar del Rio	225,891
Havana	451,928
Matanzas	259,578
Santa Clara	354,122
Puerto Principe	67,789
Santiago de Cuba	272,379

Urban population..... 889,689
Rustic population..... 741,998

By Cities.

Cuba has thirteen cities whose population exceeds 10,000. They are these:

Havana (city proper).....200,448
With suburbs (Vedado, Chorrera, Marianao, Puentes Gordes, La Ciénaga, El Principe Tulipan, El Cerro, Regla and Cojunar).....300,000
Matanzas..... 50,000
Santiago..... 42,000
Cienfuegos..... 41,000
Puerto Principe..... 40,679
Santa Clara (Villa Clara)..... 34,655
Guanabacoa..... 28,043
Cardenas..... 20,505
Sancti Spiritus..... 17,540
Sagua la Grande..... 14,000
Trinidad..... 13,500
Caibarien..... 12,000
Manzanillo..... 10,736

Note.—For descriptions of these 13 chief cities see under head of "As to Cities."

Of towns containing 5,000 population and over, but less than 10,000 population, there are these 19:

Guantánamo..... 9,000
Pinar del Rio..... 8,000

Macagua	8,000
San Antonio de los Banos	7,500
San Juan de los Remedios	7,230
Lagunillas	7,030
Colon	7,000
Nuevitas (San Fernando de)	6,991
Güines	6,828
Santa Ana	6,350
Bejucal	6,239
Santiago de las Vegas	6,200
Jovellanos (Bemba)	6,000
Guanajay	5,792
Holguin	5,400
Placetas	5,280
Guarra	5,250
Baracoa	5,072
La Isabela (La Boca; Concha)	5,000

The 64 towns having a population of 1,000 and over, but less than 5,000 are arranged alphabetically as follows:

Alfonso XII	3,000
Alquizar	2,700
Arroyo Naranjo	3,000
Artemisa	2,049
Bahia Honda	1,889
Banta	2,000
Batabano	1,860
Bainoa	1,000
Bayamo	3,634
Bolondron	1,758

Cabanas	1,454
Camajuani	4,180
Camarones	1,200
Catalina	3,142
Caimito	1,788
Candelaria	1,200
Cayajabos	1,353
Cartagena	1,497
Ceiba del Agua	2,950
Cervantes	1,560
Cifuentes	1,887
Cimarrones	3,000
Corralillo	2,000
Corral Nuevo	2,092
Consolacion del Sur	2,000
Cuevitas	1,629
Gibara	4,608
Guira de Melena	3,500
Jaruco	2,165
Jiguani	1,393
Limonar	2,000
Los Abreus	4,503
Mayari	1,854
Macurigeo	3,650
Managua	1,000
Mantua	1,380
Madruga	1,000
Mariel	1,637
Melena del Sur	1,082
Moron	3,017

Nueva Paz. 2,737

Palmillas. 1,014
Palmira. 2,987
Pipian. 1,079

Quemados de Guines. 2,000
Quivican. 2,108

Recreo. 2,879
Rodas. 2,230

San Antonio de Cabezas. 1,500
San Antonio de las Vegas. 1,136
San Cristobal. 3,522
San Juan y Martinez. 2,100
San José de las Lajas. 2,170
San Nicolas. 1,500
San Luis. 3,556
San Juan de las Veras. 2,267
Santa Cruz de los Pinos. 1,244
Santa Cruz del Sur. 1,000
Santo Domingo. 1,500
Santa Isabel de las Lajas. 3,102
Sierra Morena. 1,600

Tapaste. 1,136

Union de Reyes. 4,100

Victoria de las Tunas. 1,791

Note.—It has been decided by the United States Government to take a complete census of Cuba, not

only to fix its population but to determine who are citizens and qualified electors in the election which shall be held to establish a representative government.

This census will be taken under direction of the military government.

As to CLIMATE.

IN THE MATTER OF TEMPERATURE.

Average annual temperature:

Havana	76.08
Cienfuegos	76.50
Matanzas	78.04
Santiago	80.00

For comparison:

Washington	54.07
New Orleans	68.08

Hottest month's temperature (average):

Havana, July	82.04
Cienfuegos, July	85.50
Matanzas, June	82.02
Santiago, July	83.00

For comparison:

Washington, July	76.09
New Orleans, July	82.04

Coldest month's temperature (average):

Havana, January. 70.03
Cienfuegos, January. 67.50
Matanzas, February. 72.00
Santiago, January. 77.00

For comparison:

Washington, January. 32.02
New Orleans, January. 53.08

Hottest actual weather:

Havana, July, '91. ..... 100.06
Cienfuegos, July, '90. ..... 93.00
Matanzas, July, '33. ..... 93.00
Santiago, August, '63. ..... 102.00

Washington, September. 104.00
New Orleans, July. 99.00

Coldest actual weather:

Havana, February, '96. ..... 49.06
Cienfuegos, January, '95. ..... 48.00
Matanzas, January, '35. ..... 51.00
Santiago, January, '90. ..... 50.00

Washington, January. ..... —.14
New Orleans, January. 15.00

For the interior of the island only two temperature records have been found, namely, for Ubajay and the mines of San Fernando. Ubajay is a village about 15 miles southwest of Havana and about 242 feet above sea level. Its average temperature from four years' observations was 73.6° F. The record is quoted by Baron Humboldt and was made during 1796-1799. The San Fernando mines are about 150 miles eastward of Havana and 554 feet above sea level. The temperature record is for the year 1839 and shows an average of 75°. From these records the average annual temperature of the interior of the island would appear to be considerably lower than on the coast.

It is known, too, that in the interior, at elevations of over 300 feet, the thermometer occasionally falls to the freezing point in winter. Hoar frost is not uncommon, and during north winds thin ice may form. It hails frequently, but snow is unknown in any part of the island.

In the Matter of Humidity.

The relative humidity of Cuba's atmosphere averages 75 per cent. of saturation, and, while there is actually a wet and a dry season, judged by the amount of rainfall, it is a significant climatic fact that the mean relative humidity of the twelve months differs hardly enough to warrant characterizing one month as being drier or damper than another. That is, the air is always heavily charged with moisture. The following figures, showing the percentage of humidity in the twelve months of the year at Havana, bear out this statement in a remarkable fashion:

Month.	*At 6 a. m.*	*At noon.*	*At 6 p. m.*
January.	85	63	93
February.	85	62	70
March.	85	58	70
April.	84	68	67
May.	85	62	69
June.	89	67	74
July.	88	63	70
August.	88	62	72
September.	90	70	78
October.	89	69	78
November.	87	68	77
December.	82	64	72

In the Matter of Rainfall.

The rainfall shows to a greater degree than the temperature the influence of locality and season of the year. As in other lands on the border of the tropics, the year is divided between a hot, wet season, corresponding to the northern declination of the sun, and a cool, dry period. From May to October is called the wet season, though rain falls in every month of the year. With May spring begins, rain and thunder are of almost daily occurrence, and the temperature rises high, with little variation. The period from November to April is called the dry season. For seven years the mean annual rainfall at Havana in the wet season has been observed to be 27.8 inches, and of the dry months 12.7.

The eastern part of the island receives more rain than the western. There are seldom over twenty rainy

days in any one month, the average being from eight to ten. The rainfall is generally in the afternoon, and on an average there are only seventeen days in the year on which it rains in both forenoon and afternoon.

So far as present meteorological records go, a description of the rainfall of Cuba is practically that of the rainfall at Havana, the short and fragmentary records that have been kept at Matanzas and Santiago hardly being representative. Taking, then, the rainfall at Havana for the years 1885-1897 inclusive, these are the figures:

Year.	Rainy season (June to October, inclusive, 5 months).	Dry season (November to May, inclusive, 7 months).
1885...	26.79 inches	21.38 inches
1886...	47.49 "	17.04 "
1887...	32.38 "	16.95 "
1888...	23.97 "	29.54 "
1889...	35.71 "	24.02 "
1890...	28.15 "	28.41 "
1891...	38.02 "	20.51 "
1892...	49.49 "	8.81 "
1893...	38.95 "	21.64 "
1894...	38.08 "	12.63 "
1895...	38.78 "	17.07 "
1896...	31.09 "	19.97 "
1897...	27.70 "	18.51 "

Last year Havana's monthly record of rainy days was as follows:

	Rainy days.
January	8
February	7
March	6
April	4
May	8
June	10
July	12
August	12
September	14
October	9
November	8
December	6
Total	104

In the Matter of Health.

While great things may be expected of the American system of sanitation as applied to Cuba, it must not be overlooked that the island is a tropical country and that its climate is very different from that of even our warmest sections. Acclimatization is a necessary process, and during that process the following simple rules will be found of value:

If possible, the first visit to Cuba should be made in the cool season. Even then linen or cotton garments will be needed. During the period of acclimatization one should guard against any excess of work or pleasure, late evenings, bodily or mental fatigue, exposure to the sun, or rapid cooling off, or any cause that might produce illness.

Exercise on foot, horseback or in a carriage is necessary for one who is visiting this land for the first time, but only in the morning and evening; washing and bathing are also very good, first in tempered and after a few days in cold water; baths should not be taken after hard work, and the best time is the morning or at noon and after the body has been at rest.

While ready perspiration is one of the essentials to the preservation of health, danger also lurks in it, for when in such a condition a few moments in the shade, exposure to a breeze will bring on a cold more quickly in Cuba than in any other place outside the tropics. If it is noticed that the perspiration is stopping on a warm day, a physician should be consulted immediately, and also in the case of giddiness, headache, etc.

As to food, the visitor should use wholesome and nutritious meats, and the salt and fresh water fish that abound in these regions. It is also well to use certain condiments, such as pepper, cloves, allspice, cinnamon and others that heighten and flavor food and aid digestion; though used, they should not be abused. The moderate use of certain tropical fruits to which northerners are accustomed, such as oranges, lemons, limes and pineapples, is advantageous without question, but there are hosts of others, mostly of a soft, squashy nature and a sweet sickish taste, such as the mango, sapote, alligator pear, etc., that it is wise to avoid. The combination of alcohol with them is almost deadly, and it is well to let the banana alone.

The continuous use of alcohol causes a marked deterioration in the constitution, being one of the greatest obstacles to acclimatization. However, a little rum mixed with water is a stimulating and wholesome drink, especially on hot days. Soft drinks and

lemonade are not good, as they cause a kind of plethora which turns into diarrhœa.

In a word, live soberly and moderately, keep clean and use common sense, and Cuba's climate will not down you.

While much that has been written concerning Cuba would seem to indicate that it is a veritable pest hole, such descriptions actually cover only the worst conditions and comparatively a small portion of the island, for probably at least two-thirds of it are as healthy, even in the summer, as any country in the world.

Cases of longevity are not wanting. There are numerous instances where natives have attained 100 years, some 130 years, and there is even one known to have lived to the age of 150. Longevity is most frequent among the colored population.

As to DISTANCES.

All reckoned in statute miles to Havana.

From cities of the United States.

	Miles.
Key West	100
New Orleans	690
Mobile	640
Tampa	350
Savannah	613
Charleston	662
Philadelphia	1,137
New York	1,215
Boston	1,348

From foreign cities.

Quebec	2,421
Vera Cruz	809
Rio de Janeiro	3,536
Buenos Ayres	4,653
Montevideo	4,553
Port of Spain	1,521
Bermuda	1,150
Gibraltar	4,030
Plymouth (Eng.)	3,702

From Cuban cities and towns.

Artemisa	45
Baracoa	765
Batabano	33
Bayamo	609
Bemba (Jovellanos)	90
Candelaria	29
Cobre	669
Coloma	128
Consolacion del Sur	100
Guantanamo	730
Guanajay	35
Guines	46
Holguin	613
Jaruco	23
La Union	80
Las Vegas	61
Marianao	7
Manzanillo	636
Madruga	52

Matanzas	56
Moron	276
Nuevitas	407
Pinar del Rio	113
Punta Brava	14
Puerto Principe	345
Rincon	14
Sagua la Grande	212
Sancti Spiritus	270
San Antonio de los Banos	21
San Felipe	26
San Juan de los Remedios	235
Santa Clara	209
Santiago de Cuba	682
Santiago de las Vegas	13
Trinidad	247

As to COST and TIME in GETTING THERE.

There are now many ways of reaching and sending to Cuba, by rail and sea, and by the all-sea route, as witness the following list:

By the PLANT SYSTEM there is the choice of two routes:

(1) The Florida and West Indian Limited, *via* Charleston, Savannah and the West Coast Railroad. Trains by this route leave New York daily 9.20 A. M., arrive Port Tampa next day 8.30 P. M.

(2) The New York and Florida Special, *via* Jacksonville and St. Augustine. Trains by this route leave

New York daily 12.20 P. M., arrive Port Tampa next day 8.50 P. M.

Both these trains connect daily, *except Sundays and Wednesdays,* with the U. S. mail steamers of the Plant Line, for Key West and Havana, according to the following schedule:

Steamship New Olivette leaves Port Tampa Mondays and Thursdays, 9:30 P. M.; arrives Havana Wednesdays and Saturdays, 6 A. M.

Steamship Whitney leaves Port Tampa Saturdays, 9.30 P. M.; arrives Havana Mondays, 6 A. M.

Steamship Yarmouth leaves Port Tampa Tuesdays and Fridays, 2 P. M.; arrives Havana Wednesdays and Saturdays, 2 P. M.

Note.—The New Olivette and Whitney touch at Key West; the Yarmouth does not.

Children under five years of age carried free; five years of age and under twelve, pay half fare; twelve years and over, full fare.

One hundred and fifty pounds of baggage carried free on each full fare ticket, and 75 pounds on each half fare ticket. Baggage in excess of 150 pounds on full fare ticket will be charged for. Any piece of baggage weighing more than 250 pounds must be forwarded by express or freight.

Through one way tickets from New York to Havana, first class, are $54.75; round trip, $99.

Pullmans run on these trains, the rates to Tampa being as follows:

From New York, double berth, $8.50; drawing room, $32. From St. Louis, double berth, $8; drawing room, $30. From Chicago, double berth, $8.50; drawing room, $32.

By the MIAMI ROUTE there is also a choice of two ways:

(1) By the Florida East Coast Railway.

(2) By the Atlantic Coast Line.

Over the first route trains leave New York daily at 12.05 A. M.; arrive at Miami next day at 10.30 P. M.

Over the second route trains leave New York daily at 8.50 P. M.; arrive at Miami next day at 10.30 P. M.

From Miami the steamship Miami plies direct to Havana, according to the following schedule:

Leaves Miami Sundays and Wednesdays at 10.30 P. M.

Arrives Havana Mondays and Thursdays at 3 P. M.

Through Pullman sleepers and dining cars between New York and Jacksonville and chair cars between Jacksonville and Miami.

Over both the Plant and Miami roads the trains run direct to the steamer's side.

The cover-all time on the Miami route is as follows:

New York to Havana	63	hours
Boston to Havana	68	"
Philadelphia to Havana	55½	"
Baltimore to Havana	53½	"
Washington to Havana	51½	"

The rates by this route are the same as those over the Plant System.

All first-class tickets to Havana include meals and berth on steamer.

Those who wish to still more break the journey can take steamer from New York, Boston or Baltimore to

Savannah by the OCEAN STEAMSHIP COMPANY OF SAVANNAH, connecting at Savannah with the Florida and West Indian Limited for Tampa or *via* Jacksonville to Miami.

Steamers of the Ocean Steamship Company of Savannah leave New York from Pier 34 North river, foot of Spring street, every day at 5 P. M., except *Sunday and Monday.*

Steamers of the same company leave Boston every Wednesday at noon and every Saturday at 3 P. M., from Lewis' Wharf.

Note.—Steamers sailing from Boston on Wednesdays touch at New York. Steamers sailing on Saturdays go direct to Savannah. From Savannah to Boston all sailings are direct.

Steamers of the Merchants' and Miners' Transportation Company (working with the Savannah line) leave Baltimore from the foot of West Falls avenue at 4 P. M. every Monday, Wednesday and Friday.

If the passenger elect to travel *via* Port Tampa he must take such train as will enable him to connect with the steamship Mascotte, of the Plant Steamship Line, which leaves Port Tampa every Monday, Thursday and Saturday at 9 P. M., reaching Havana every Wednesday, Saturday and Monday at 6 A. M.

If he elect to travel *via* Miami he must take such train as will enable him to connect with the steamship Lincoln, of the Florida East Coast Steamship Company, which leaves Miami Sundays and Wednesdays at 11 P. M. and reaches Havana on Mondays and Thursdays at 3 P. M.

The passenger rates on the Savannah Line of steamers are as follows:

From New York to Savannah.

First class, one way	$20.00
First class, excursion	32.00
Intermediate, one way	15.00
Intermediate, excursion	24.00
Steerage, one way	10.00

Philadelphia passengers are booked *via* New York at same rates.

From Boston to Savannah.

(*Via* direct ship or Sound Lines and New York.)

First class, one way	$22.00
First class, excursion	36.00
Intermediate, one way	17.00
Intermediate, excursion	28.00
Steerage, one way	11.75

First-class and excursion tickets include meals and berths in staterooms on steamer.

Intermediate tickets include meals and berths in staterooms in intermediate cabin.

Steerage passengers are furnished with mattresses and meals on steamer.

Children under five years, free; between five and twelve years, half fare; over twelve years, same as adult.

Trunks (except one small steamer trunk) are not allowed in staterooms. Baggage can be checked through to destination the same as by rail.

Through tickets can be purchased by these steamers

to Havana, either *via* Tampa or Miami, at the following rates:

From New York.

Cabin	$52.25
Excursion (cabin)	91.00
Intermediate	42.25
Excursion (intermediate)	75.50
Steerage	31.75

From Boston, Worcester, Springfield, Providence, Newport or Fall River.

Cabin	$54.25
Excursion (cabin)	95.00
Intermediate	44.25
Excursion (intermediate)	79.50
Steerage	33.50

First-class tickets include meals and berth on steamer from Port Tampa or Miami to Havana.

All tickets include meals and berth on Savannah Line between New York or Boston and Savannah.

Those who wish to take an all-sea voyage have the following routes to select from:

LA COMPANIA TRASATLANTICA, J. M. Ceballos & Co. Steamers on this line leave New York the 10th, 20th and 30th of each month, arriving on the 14th, 24th and 4th, respectively.

The steamer sailing from New York on the 20th

and arriving at Havana the 24th connects at Havana with the steamer leaving there about the end of each month for the principal ports of Cuba and Porto Rico.

The steamer leaving New York on the 30th connects at Havana with the steamer that leaves on the 10th of the following month for San Juan de Porto Rico. The rates over this line are as follows, all being from New York:

Class.	To Havana.	To Santiago.	To Nuevitas.	To Gibara.
First cabin....	$37	$65	$60	$65
Second cabin..	26	45	40	43
Steerage.	17	30	25	26

Excursion Tickets, 25 per cent. discount.

Families comprising parents, their children and servants will be allowed a reduction of 15 per cent. on established rates.

Children from seven to twelve years, half fare; from three to seven years, quarter fare; less than three years, free.

Each first cabin passenger is not allowed over 600 pounds of baggage. Each second cabin passenger is not allowed over 400 pounds.

THE NEW YORK AND CUBA MAIL STEAMSHIP COMPANY (WARD LINE).—Steamers of this line leave Piers 16 and 17, East river, every two or three days for Havana and every week for Guantanamo, Santiago, Cienfuegos and other ports on the south side of Cuba.

It is both a freight and passenger company.

THE MUNSON STEAMSHIP LINE.—Steamers of this

line sail as follows: From New York to Matanzas, Cardenas, Sagua, Caibarien, Nuevitas, Gibara and Baracoa, every two weeks.

From Halifax to Havana, monthly.

From Galveston to Havana, every two weeks.

PENSACOLA CUBAN STEAMSHIP LINE.—Regular semi-monthly service from Pensacola to Havana and other Cuban ports.

THE EARN LINE.—Philadelphia to Havana and Santiago and Baltimore to Havana. Steamers every twenty days.

Other lines, mostly freighters, are these: The Mobile Steamship Company, from Mobile to Cuban ports; the Mutual Steamship Line, from New York to Cienfuegos, Manzanillo, Santiago, Gibara and Nuevitas.

As to MAIL and CABLE SERVICE.

Mails are sent to Cuba by every available steamer, the rate being five cents on every half ounce.

There are four cable lines connected with Cuba. The International Ocean Telegraph Company has a cable from Florida to Havana; the Cuban Submarine Company has a cable connecting Havana with Santiago de Cuba and Cienfuegos; the West India and Panama Company has a cable connecting Havana with Santiago de Cuba, Jamaica, Porto Rico, the Lesser Antilles and the Isthmus of Panama; the Compagnie Française de Cables Sous-Marins has a

line connecting Havana with Santiago de Cuba, Haiti, Santo Domingo, Venezuela and Brazil.

The only three towns in Cuba having cable connections are Havana, Cienfuegos and Santiago.

Cable rates from New York are as follows:

To	By the International Ocean Telegraph Co. Per word.	By the U. S. & Hayti Tel. & Cable Co. Per word.	By the W. India Cable Co. Per word.
Havana.....	$0.40	$0.40	$0.90
Caibarien, Los Abreus, Placetas, Remedios, Sagua la Grande, Santa Clara & Cienfuegos.....	.60	.60	.60
Caimanera, Guantanamo & Santiago.....	.73	.73	.73

Press rates to Havana, 10 cents per word.

The telegraph and telephone systems in Cuba belonged to the Spanish Government, but the latter farmed them out for a limited number of years to a company called the Red Telefonica de la Havana. Since the American occupation they have passed under the control of the United States Military Governor. Nearly all the public and private buildings in Havana and its suburbs are connected by telephone and telephones are in great favor as labor saving devices in nearly all the big towns and cities. The Statesman's Year Book, 1898, says that there are 2,300 miles of telegraph line, with 153 offices, in Cuba; messages in 1894, 357,914.

As to TRADE.

Because of revolution and foreign war, Cuba's commerce has not only been intermittent, but the records of trade have been illy kept or not at all. The following facts and figures are, however, reliable:

The imports consist mainly of jerked beef from South America, codfish from the British North American provinces, flour from Spain, rice from Carolina, Spain and the East Indies, wine and olive oil from Spain, boards for boxes and barrels from North America, coal from Europe and North America and petroleum from the United States, besides large quantities of British, German and Belgian manufactures and hardware. Cattle are imported from Florida and the coasts of the Gulf of Mexico.

The exports consist of sugar, tobacco, coffee, brandy, copper, wax, honey, cotton, leather, horn, cocoanut oil, timber and fruit.

The latest year for which the statistics of the commerce of the island *with all countries* can be compiled in a comparative form is 1896, for which year the following figures of values are reasonably accurate:

Country.	Imports From Cuba.	Exports To Cuba.
United Kingdom.....	$174,187	$5,843,892
Belgium.	208,304	1,089,239
France.	3,338,900	424,600
United States.....	40,017,730	7,530,880
Spain.	9,681,120	33,474,680

The varying trade of the United States with Cuba for the years inclusive 1891-1897 is shown in the fol-

lowing statement. The trade of 1898 amounted practically to nothing:

IMPORTS FROM CUBA TO THE UNITED STATES.

	Free.	Dutiable.	Total.
1891...	$26,044,502	$35,669,893	$61,714,395
1892...	66,140,835	11,790,836	77,931,671
1893...	66,049,369	12,657,137	78,706,506
1894...	67,418,289	8,259,972	75,678,261
1895...	17,684,765	35,186,494	52,871,259
1896...	2,074,763	37,942,967	40,017,730
1897...	1,270,059	17,136,756	18,406,815

EXPORTS FROM THE UNITED STATES TO CUBA.

	Domestic.	Foreign.	Total.
1891...	$11,929,605	$295,283	$12,224,888
1892...	17,622,411	331,159	17,953,570
1893...	23,604,094	553,604	24,157,698
1894...	19,855,237	270,084	20,125,321
1895...	12,533,260	274,401	12,807,661
1896...	7,312,348	218,532	7,530,880
1897...	7,599,757	660,019	8,259,776

It will be seen here that the years of great contrast are those of 1893 and 1897. In 1893 our trade with Cuba reached its maximum since 1874. In 1897 it reached its minimum, except, of course, in 1898. The imports and exports for these two contrasting years are as follows:

PRINCIPAL IMPORTS FROM CUBA INTO THE UNITED STATES.

Articles.	1893.	1897.
Free of duty:		
Fruits, including nuts.....	$2,347,800	$154,422
Molasses.	1,081,034	5,448
Sugar.	60,637,631	—
Wood, unmanufactured....	1,071,123	63,670
Other articles.....	911,781	1,046,519
Dutiable:		
Tobacco—		
Unmanufactured.	8,940,058	2,306,067
Manufactured.	2,727,030	1,971,214
Iron ore.....	641,943	—
Sugar.	—	11,982,473
Other articles.....	348,106	877,003
Total imports.....$78,706,506		$18,406,815

PRINCIPAL EXPORTS FROM THE UNITED STATES TO CUBA.

Articles.	1893.	1897. □
Wheat flour.....	$2,821,557	$564,638
Corn.	582,050	247,905
Carriages and street cars and parts of.....	316,045	3,755
Cars, passenger and freight, for steam railroads.....	271,571	9,202
Coal.	931,371	638,912
Locks, hinges and other builders' hardware.....	395,964	49,386

Railroad bars, or rails, of steel.	$326,654	$14,650
Saws and tools	243,544	34,686
Locomotives.	418,776	20,638
Stationary engines	130,652	1,189
Boilers and parts of engines	322,284	35,578
Wire.	321,120	35,905
Manufactures of leather	191,394	39,753
Mineral oil	514,808	306,916
Hog products	5,401,022	2,224,485
Beans and peas	392,962	276,635
Potatoes.	554,153	331,553
Boards, deals, planks, joists, etc.	1,095,928	286,387
Household furniture	217,126	34,288
Other articles	8,708,717	3,103,315
Total exports	$24,157,698	$8,259,776

Spain's commerce with her lost dependency for the years 1891-1896 inclusive was as follows:

	Imports from Cuba to Spain.	Exports from Spain to Cuba.
1891	$7,193,173	$22,168,050
1892	9,570,399	28,046,636
1893	5,697,291	24,689,373
1894	7,265,120	22,592,943
1895	7,176,105	26,298,497
1896	4,257,360	26,145,800

Lastly, the following table is decidedly interesting as showing in what articles Europe and the United States have respectively controlled the import trade

into Cuba. It is compiled from the British Foreign Office papers of 1897 and gives the trade of 1896.

Articles.	From Europe to Cuba.	From U. S. to Cuba.	Total Value
Butter, cases	6,338	54	$319,700
Cheese, cases	1,881	44,358	323,673
Rice, hundredweights	853,538	23,800	2,807,481
Beer, barrels	4,629	2,860	82,379
Beer, cases	6,574	2,044	43,090
Salt fish, drums	5,036	79,521	686,000
Flour, bags	404,019	100,321	4,285,522
Coal, tons	29,050	180,487	2,085,370
Potatoes, barrels	53,083	231,774	996,702
Maize, bags	—	97,303	467,049
Lard, hundredweights	—	194,308	2,078,811
Total values			$14,175,777

As to RAILROADS and TRAVEL.

The following, it is believed, is the first tabulation made of the railroads of Cuba:

SYSTEMS.

Ferrocarril Occidente (Western Railway).

	Miles.
Havana to Pinar del Rio	113
Branch:	
Vinales to Muelle	15
Total of system	128

Ferrocarriles Unidos (United Railways).

Havana to Guanajay	36
Havana to Matanzas	56
Havana to Bemba	34
Havana to Batabanó	36
Havana to La Union	80
Branches:	
Matanzas to Güines	39
Regla to Guanabacoa	2
Robles to Madruga	5
Total of system	288

Ferrocarriles Unidos de Caibarien.

Caibarien to Cifuentes	47
Caibarien to Placetas (*via* Camajuani)	35
Palmira to Cartagena	29
Branches:	
La Luz to Lequito	3
Bartolomé to Tobar	14
Zulueta to Yera	11
Zulueta to Altamira	5
Total of system	144

Ferrocarril Cienfuegos-Santa Clara.

Cienfuegos to Santa Clara	43
Branches:	
Palmira to San Frances	6
Nuevas to Cruces	8
Ranchuelo to San Juan de Los Yeros	6
Ranchuelo to Concepcion	5
Cruces to Alegre	10
Total of system	78

Ferrocarril de Sagua la Grande.

Isabella to Cruces	54

Ferrocarril de Matanzas.

Matanzas to Murga	62
Branches:	
La Union to Alfonso XII	3
Navajas to Venero San Juan	50
Total of system	115

Ferrocarril de Puerto Principe-Nuevitas.

Puerto Principe to Nuevitas	50
Jucaro to Moron	38
Total of system	88

Ferrocarril de Sancti Spiritus.

Sancti Spiritus to Tunas de Zaza	22
Branches:	
Casilda to Byaba	19
Sagua la Grande to Cayuagua	10
Total of system	51

Ferrocarril de Sabanilla y Moroto.

Santiago to San Luis	20
Branch:	
Cristo to Minas de Ponupo	12
Total of system	32

Ferrocarriles Cardenas-Júcáro.

Cardenas to Santa Clara	107
Cardenas to Yaguaramas	67
Branches:	
Recréo to Itabo	15
Bemba to Navajas	11
Colon to Guareiras	6
Altamisal to Macagua	21
Manacas to Mamey	12
Manacas to Hacienda	13
Total of system	252

Ferrocarril de Holguin.

Holguin to Jibara	26

Ferrocarril de Guantanamo.

Jamaica to La Caimanera	19

Juragua Iron Co. Railroad.

Santiago to America	19

Spanish-American Iron Co. Railroad.

Daiquiri to Vinent	3

Sigua Iron Co. Railroad.

Sigua to Arroyo la Plata	5

Suburban Roads.

Havana to Marianao	8
Havana to Guanabacoa	3
Havana to Chorrera and Vedado	4
Havana to Amilo	3

Note.—It is so impossible to give anything like an accurate statement of the business and earnings of the Cuban railroads that it has been thought better to give none than to present misleading figures. Then, too, many of the roads are private concerns, which refuse to furnish returns. Generally speaking, the traffic on the main public railroads in normal times has been both extensive and remunerative.

The first railroad was built in Cuba in 1834, running from Havana to Güines, a distance of forty-four miles. In 1837 a line was constructed from Nuevitas to Puerto Principe; also one from Cardenas to Bemba (Jovellanos). From time to time other lines were commenced, some of which were finished and are to-day a part of the railway system of the island; others were abandoned or consolidated. Though the various lines constituting the railway system of Cuba are owned by different companies, there is practically but one trunk road, that centering in Havana, to or from which the major portion of traffic naturally comes or goes.

While the lines of roads, both in number and mileage, have been continually growing, railroad construction has received many setbacks through insurrection, financial and industrial stagnation and the lack of energy and enterprise of the natives.

By far the largest portion of the trackage is of light weight, iron rails being still in use on many roads. All the roadbeds are rough. The roads are generally single track and 4 feet 8½ inches gauge. The rolling stock is principally of the American type, but not all of American manufacture. The locomotives are wood burners, the passenger and freight cars smaller than

ours and the whole outfit about thirty years behind the age.

Railroad building in Cuba is accompanied by many obstacles. On the table lands are found streams and chasms which must be trestled, numerous hills and ridges to be cut through, while the forests with their luxuriant growth of vegetation are almost impenetrable. In the lowlands are to be found large swamps and marshes which must be crossed, dense forests and numerous low-banked streams which often overflow their banks and flood the whole country.

In the Matter of Other Travel.

Outside of the railroads, personal and business communication on the island is very uncertain. A so-called system of public roads or "calzadas" prevails in the neighborhood of the principal cities, but the good character and passability of these roads is short lived, and travel over the island, whether on foot, on horse or in carriage, is tedious and uncertain.

The national carriage is the volante. It consists of a two-seated carriage, slung low down by leather straps from the axle of two large wheels, and has shafts fifteen feet long. The horse in the shaft is led by a postilion, whose horse is also harnessed to the carriage with traces. In case of a long and rough journey a third horse is harnessed on the other side of the shafts in the same manner.

Ox carts and pack mules are used for conveying goods in the interior of the island, outside of the railway lines.

A liberal number of these roads is shown on maps,

but too great reliance on their actual and entire existence should not be had because of this fact.

Internal means of communication, on an extensive scale, seems never to have been considered as essential to Cuba. The island is long and narrow and possesses many fine harbors. Transportation of commodities is accordingly carried on by water; the land transport being confined to the short trips from the inland towns to the seaports. The natural tendency of travel by land has therefore been to the nearest seaport. It has been poetically but truthfully said of many Cuban roads that they are fit only for the birds.

As to BUSINESS CHANCES.

It is the fairest thing to say at the outset that Cuba is not the place for a poor man. Native and imported labor is altogether too cheap. For commercial enterprise and investment, however, it offers unusual advantages.

December 23 Secretary of War Alger issued an order that no franchise or concession should be granted except upon the approval of the Major-General commanding the United States military forces and the authorization of the Secretary. Later the supervision of these concessions was placed in the hands of a Colonial Commission, but in the gradual transference of the civil power to the Cubans the right to grant these concessions is being claimed by them.

As examples of the class of investment that is being energetically carried on may be mentioned these:

The Regla Ferries and Railroad (Havana Suburban) have been bought by the Harvey syndicate for $293,000, and an electric light plant at Cienfuegos is to be established, with a capital of $190,000, and the same syndicate has secured a franchise for twenty miles of electric railroad in and around Santiago, the control of the electric plant and a contract for lighting the city.

A syndicate of American capitalists is preparing to build a series of railroads across the island and a backbone railroad the length of the island, the capital already at command being quoted at $10,000,000.

Much of the freight carrying is done by coasters and considerable capital is being invested in this direction.

English capitalists already have a strong hold on the railroads and are doing their best to extend their interests. French capitalists are also active.

The business men of all the Atlantic board cities are busily studying the outlook and extending their trade, and from what has been written under the heads of General Description, Cities and Commerce will be found valuable hints as to what Cuba gets, what she most needs and the countries from which she draws her supplies.

Money will have the first chance in Cuba, brains the next and labor the third. Not that American labor following in the wake of American investments will not be well paid in time, but at present neither labor nor brains can accomplish much more than they do here. The application of all three, however, even if the monetary capital is small, should produce marked results.

Real estate, for example, offers some excellent op-

portunities for small investors. There is a great future for fruit raisers, and small stores, bustlingly conducted, would soon mean large fortunes, especially if the storekeepers delivered the goods. So would moderate sized department stores.

As to PRODUCTS.

AGRICULTURAL.

Cuba's tobacco has been celebrated all over the world as the best in the world. It is indigenous to the island. While the "Vuelta Abajo" (lower valley) tobacco stands as a synonym for the finest grade of the leaf, it is by no means the only excellent tobacco of Cuba. The Vuelta is situated in the centre of Pinar del Rio Province and is the garden spot of the island, as well as the most prosperous and thickly settled. The tobacco plantations in the fertile country surrounding Puerto Principe, of Santa Clara province, of the country back of Matanzas, and of the alluvial plains and valleys around Havana, all furnish a splendid leaf.

The tobacco crop on an average is estimated at 560,000 bales of 110 pounds each, or 61,600,000 pounds. Tobacco leaf exported in 1895 amounted to 30,466,000 pounds; in 1896 to 16,823,000 pounds, the decrease being due to the decree of May, 1896, forbidding tobacco leaf exports except to Spain. In 1896 the cigars exported numbered 185,914,000. The Royal

Imperial Factory of La Honradez, in Havana, produced 2,532,000 cigarettes.

About 80,000 persons are ordinarily engaged in the cultivation of tobacco.

The latest attempt at an estimate placed the number of tobacco plantations or fields at 9,500.

In normal times Cuba is one of the most favored countries of the world for the economical production of sugar. The total sugar crop of any other West Indian island is equal only to the output of three or four of the largest Cuban manufactories. Of the other cane-sugar countries of the world Java is the only one which comes within 50 per cent. of the amount of sugar produced annually in Cuba in normal times. The reasons for the extent of the crops and profitable character of the production are these:

(1) The favorable climate and the fertility of the soil. The rainfall, about 50 inches, is so distributed that irrigation is not a necessity.

(2) The centralization of the estates, with consequent large sugar houses, these indeed having a larger daily capacity than those of any other country.

(3) The proximity of the United States, affording a cash market for the product.

(4) Low cost of labor.

What this industry will be developed into under the fostering care of American enterprise may easily be imagined. If all the land suitable to the growth of sugar were devoted to this industry it is estimated that Cuba might supply the entire Western Hemisphere with sugar. The island has already produced

in a single year for exportation 1,000,000 tons, and its capabilities are still in the experimental stage. The yield in 1895 was 1,040,000 tons and 400,000 tons of molasses.

The "ingenios," or sugar plantations, vary in extent from 500 to 10,000 acres and number 1,500.

The first coffee plantation in Cuba was established in 1748. There are now about 1,000 plantations or "cafetales," varying in extent from 150 to 1,000 acres and employing a general average of from 50 to 60 negroes to each 1,000 acres.

Other agricultural products of Cuba are cocoa, cotton, sarsaparilla, vanilla, copal, China root, cassia, Palma Christi, mustard, pepper, ginger, licorice, balsam, rubber; and of fruits, the pineapple, custard apple, cocoanut, plum, guava, banana, orange, citron, lemon and mango.

Agriculture, however, is in an altogether unsatisfactory condition, and the crops are due rather to the fertility of the soil and pushing power of the climate than to the energy of the workers.

Mineral.

The mineral wealth of Cuba is simply enormous, yet it may be said to be practically untouched.

Gold and silver have not been found in paying quantities, although the early settlers mined a considerable quantity of each.

Copper was mined at Cobre (12 miles from Santiago) before Columbus discovered the island. In the early part of the present century English capital-

ists purchased the Cobre mines, shipping annually to the United States from 1828 to 1840 about $3,000,000 worth of ore. The mines were closed, but not exhausted, in 1867.

The iron ore found in Santiago province is among the richest in the world, yielding from 62 to 67 per cent. of pure iron. The Juragua and Daiquiri iron companies (American) have a combined capital of $5,000,000, the shipments from their mines running from 30,000 to 50,000 tons of ore per month. Undeveloped mines of equal value are scattered over this province and in Pinar del Rio.

Manganese ore in rich deposits is found in the Sierra Maestra range, stretching west from Santiago to Manzanillo. American capital opened a manganese mine at Ponupo and built a railroad to it, but the enterprise was stopped in war times. Nearly all the manganese used in the United States comes from the Black Sea regions.

Asphaltum deposits are of frequent occurrence and have been mined to a small extent; antimony, with lead, exists near Holguin; crude petroleum is found in Havana and other provinces; salt is deposited in great quantities in many parts of the island; quicksilver has been found near Remedios (Santa Clara province), while among the other mineral products with which the island is rich are clays, limestone, ochre, chrome, chalk, marble, jasper, loadstone, molding sand and talc.

The mountains are of coral formation, while the lowlands seem to be composed largely of fossils of sea matter from prehistoric times and are extremely rich in limes and phosphates.

ANIMAL.

A large proportion of the wealth of Cuba is found in its domestic animals, including chiefly the ox, horse, hog, sheep, goats and mules, numbering many million head. Cuba contains 3,300 breeding farms. Domestic fowls include geese, turkeys, peacocks and pigeons, and there are over 200 species of indigenous birds.

In the rivers, bays and inlets are to be found more than 700 kinds of fish. Oysters and other shellfish are numerous but not good.

The only animal peculiar to Cuba is the jutia, shaped like a rat. There are a few deer in the swamps and the woods abound in wild dogs and cats. The manati or sea-cow frequents the shores. Before the war horses and mules were so numerous that no one thought of traveling afoot. Sheep do not thrive in Cuba, the wool having been replaced by hair.

FOREST AND TIMBER.

Of the 20,000,000 acres of wild and uncultivated land in Cuba 12,000,000 are of virgin forests. These forests are full of the most valuable timber trees.

The palm is the most common of all the Cuban trees, and perhaps the most valuable. There are a great many varieties. Of these the palma real (royal palm) is the most common, and, like the maguey of Mexico, is the mainstay of the natives. The other woods of importance are the mahogany, ebony, cedar, acana, a tree with a hard reddish wood; gine-bra-

hacha, a kind of fir; guayacan, jigui, maranon, a tree which yields a gum resembling gum arabic; oak, pino de tea, a torch pine; evergreen oak, sabicu, ocuje, a wood much used for construction purposes; sabina, nogal, walnut, majagua, a tree from which very durable cordage is made; Brazilian wood, capeche wood, fustic, cocoa, banana and the magnificent cieba.

So plentiful and extravagantly used are mahogany and ebony that railroad ties and wharves are to be found made of these woods.

As to COST of LIVING and WAGES PAID.

Hotel Rates.

The following is a representative list of the leading hotels in the principal cities—Cuban rates:

Havana.—Ingleterra, $4; Roma Grand Continental, $3; Hotel Pasaje, $3; Gran Hotel Mascotte, $2.50 to $3.

Santiago.—Trenard's, $3; Telegrafo, $2; Café Venus, $3; Hispano-Americano, $2.

Matanzas.—Louvre, $4.

Cienfuegos.—Union, $4; La Mascota.

Cardenas.—Universal, $2; El Leon de Oro, La Marina.

Sagua la Grande.—Telegrafo, $3.

Puerto Principe.—El Telegrafo, $2.

Besides these hotels there are boarding houses (Casas de huespedes) in nearly all the towns of importance, where the rates run from $6 to $10 per week.

WAGES PAID.

Domestics.

Cooks, men	$17.00 to $40.00	per month
Cooks, women	8.00 to 15.00	per month
Porters	10.00 to 20.00	per month
Chambermaids	6.00 to 12.00	per month
Child nurses	8.00 to 12.00	per month
House boys or girls	6.00 to 8.00	per month

Various.

Office clerks	$20.00 to $100.00	per month
Store clerks	18.00 to 40.00	per month
Bakers	17.00 to 25.00	per month
Tailor cutters	3.00 to 8.00	per day
Sewers	1.00 to 2.00	per day
Stevedores	3.00 to 3.50	per day
Stevedore—helpers	2.00 to 2.25	per day
Cigarmakers	1.00 to 25.00	per 1,000

On Railroads.

Conductors	$75.00 to $125.00	per month
Engineers	75.00 to 130.00	per month
Brakemen	1.25 to 1.50	per day
Firemen	1.35 to 1.50	per day
Track walkers	1.00	per day
Station agents	40.00 to 100.00	per month
Telegraph operators	50.00 to 100.00	per month

MECHANICS.

Carpenters	$1.25 to	$2.50 per day
Apprentices	.60 to	1.00 per day
Plumbers	2.00 to	2.50 per day
Tinners	2.00 to	2.50 per day
Painters	2.00 to	2.50 per day
Plasterers	2.00 to	2.50 per day
Masons	2.00 to	2.50 per day
Machinists	2.00 to	3.50 per day
Engineers in general	2.50 to	3.00 per day
Blacksmiths	1.50 to	2.00 per day
Molders	3.00 to	3.25 per day

Note.—It must be understood that these wages are on the basis of the Cuban-Spanish money, a table of which is given herewith. The value of the gold coins given is their exchange value; the value of the silver coins is their local, current value, or was before the increasing introduction of American silver. At present Cuban silver is not worth more than 60 cents on the dollar and there is a heavy premium on American gold:

CUBAN GOLD COINS.

Ounce or doubloon (onza)	$17.00
Half doubloon (media onza)	8.50
Moneda	5.30
Quarter doubloon (doubloon)	4.25
Eighth doubloon (escudo)	2.12½

CUBAN SILVER COINS.

Peso (dollar)	$1.00
Medio peso (half dollar)	.50
Dos pesatas	.40
Pesata (franc)	.20
Real (dime)	.10

As to GOVERNMENT and LAWS.

Under the Spanish rule Cuba had representation in the Cortes, sending three Senators from the Province of Havana, two from each of the other five provinces, one from the Archbishopric of Santiago, one from the University of Havana and one from the Society of the Friends of the Country. Thirty deputies were sent to the House of Deputies, but as all the Senators were Pro-Spanish and twenty-six of the deputies elected in 1896 were natives of Spain, the Cubans really had no representation.

The supreme power in the island was the Captain-General, appointed by the Crown for three or five years, who was allowed a standing army of 13,000, who was Governor-General and the real head of the civil, ecclesiastical, military and naval organizations of the island. He had a council of administration of thirty members, fifteen appointed by the Crown and fifteen elected by the provinces, but the elections were so controlled as to give the Spanish Government a majority of 25 to 5. To make matters still safer, the Captain-General might suspend from one to fourteen

councillors at will or all, with the consent of a peculiar body called the Council of Authorities, composed of the Archbishop of Santiago, Bishop of Havana, the commanding officers of the army and navy, the Chief Justice of the Supreme Court of Havana, the Attorney-General, the head of the Department of Finance and the director of the local administration. This Council of Authorities held no regular sessions, but was called together as occasion might require, and its resolutions were put into effect by the Captain-General or not as he saw fit.

Each province had a governor, appointed by the Crown, but directly responsible to the Captain-General, and an elective assembly whose speaker was appointed by the Captain-General. The Provincial Governor might, however, preside and vote or prorogue the Assembly and report to the Captain-General, while the latter might suspend any of the provincial assemblies at will. Each Provincial Governor had a cabinet of five members, but as a matter of fact and despite their high sounding titles, the Provincial Government, Governor and all, were little more than our county boards.

So, too, the city governments, formed on the same general plan as the provincial, while they included an elected Board of Aldermen, with a mayor elected from their number, the Captain-General might put in his own mayor and override the ordinances at will.

In the judicial system of Cuba, too, the Captain-General was supreme. It included two superior courts (audiencias), one sitting at Puerto Principe for the two eastern provinces, and the other at Havana for the four western provinces. Inferior to these was a network of judicial districts and local

magistracies. How unimportant and unauthoritative the whole judicial system was may be gathered from the fact that under the decree of June 9, 1878, the Captain-General had authority to overrule any decision of any court, and, further than that, to suspend any law or order issued by the Madrid Government. In a word, the Captain-General was for the time being the Czar of Cuba.

The present government of Cuba is that of a military occupation by the United States, with Major-General Brooke as the Governor General. As a first experiment in Cuban autonomy the City of Havana has been placed in charge of the following civil and municipal officers: Frederico Mora, Civil Governor; Perfecto Lacoste, Mayor; Major-General Menocal, Chief of Police, and General De Cardenas, First Assistant. General Ludlow, however, remains Military Governor of Havana and General Chaffee has charge of the general policing of the island. The civil government of Havana includes also five assistant mayors and twenty-four city councillors. The city has been divided into twelve police precincts and six inspection precincts, with a force of 1,000 police. There is also an active street cleaning department.

Colonel Edgar Dudley, as Judge Advocate, has been charged with reorganizing the courts. He will administer, under the existing laws, as much as possible, doing his best to correct gross abuses. Neither habeas corpus or trial by jury was in force under the Spanish laws and the people are not ready for either. All the old Spanish laws have been translated into English. The Supreme Court of the island is the Audiencia, though it is really an Appellate Court.

One of the peculiar legal institutions of Cuba is the notaries, who really exercise the functions of referees and Masters in Chancery.

All of the affairs of the island, which formerly were under the direction of the secretary to the Governor-General, are now directed by five secretaries, who constitute General Brooke's cabinet.

The Civil Governors of provinces still exercise much the same powers as under Spain, but the power of the municipalities will be extended, the care of charities and public instruction being entrusted to them.

Colonel Tasker H. Bliss has been made chief of the Cuban customs.

As to INSTITUTIONS.

In the Matter of Education.

While the system of education in Cuba under the Spanish rule was lax and ill administered, it was not in such actual chaos as has been popularly supposed. The system being under the direction of the Governor General and director of the University of Havana, and both being natives of Spain and appointed by the Crown, it follows that little real interest was shown in the educational welfare of the native Cubans.

As in the case of other departments, the Spanish school statistics are incomplete and unreliable. The following table, compiled with much trouble from the records of 1897, the latest available year, gives a

fair idea of the educational status of Cuba at that time:

Provinces.	Colleges.	No. of Students.	Priv. Sc.	No. of Pupils.	Pub. Sc.	No. of Pupils.	All Schools.	Students and Pupils.
Pinar del Rio.....	1	145	46	1120	144	3565	195	4830
Havana.....	5	3504	364	965	216	14724	585	19193
Matanzas.....	3	536	116	1040	150	5327	269	6903
Santa Clara.....	1	345	104	2090	217	6917	322	9352
Puerto Principe....	1	144	37	345	40	1542	78	2031
Santiago.....	1	255	...	....	85	6031	86	6286
Totals.....	12	4929	667	5560	852	38106	1531	48595

Education in Santiago has been under the worst conditions of the island. The girls have been taught little more than embroidery and etiquette, and some time ago an edict was issued forbidding the education of children of Cuban parents in the United States, lest they should imbibe liberal ideas.

Note.—The ratio of children attending the public school was one to forty-five, while the approximate ratio in the United States was one to 5.

The amount estimated for educational purposes, according to the last budget, was $137,760, but no part of this was in aid of the public school.

Education was made compulsory by law in 1880, but that again is an instance of the difference between law and fact, the law being nugatory when there is not the disposition or ability to provide school houses and teachers. Another drawback to the progress of education has been that the course of instruction in all schools was closely allied to religion. Grammar and the credo went hand in hand.

The fact is, too, that Cubans are little given to study. Havana has not only its public schools, but the higher forms of education and "accomplishments" are attended to by its university, institute, seminary, several theological and normal schools and an Academy of painting and sculpture.

The Royal University of Havana has five departments, viz., philosophy and letters, medicine, pharmacy, law and science. There is a collegiate institute in each of the six provinces empowered to confer the degree of bachelor or licentiate.

Outside of Havana there are many really excellent educational establishments. At Manzanillo, for example, there are four good colleges; at Sagua la Grande there are two private schools, eight municipal schools, two for colored children; at Nuevitas there are four public city schools, two for each sex; in the Province of Pinar del Rio there are forty-six private schools, 144 public school and one institute of art, while even at old Puerto Principe, where there is no hotel, there are good public schools. The City of Matanzas boasts of first and second class colleges, institutes of science, art and literature.

In the Matter of Churches.

Up to the successful close of Cuba's last war of independence the Roman Catholic was the only religion tolerated. Up to January, 1899, there was no Jewish or Protestant place of worship on the island, but in that month the M. E. Church (colored) established the first Protestant place of worship in Cuba, and, now that the restrictions on religion have been re-

moved, other denominations are at work on the establishment of branches of their respective churches.

Catholicism was supported by the general revenues of the island, all items of expense having been determined at Madrid. The amount estimated in the last Cuban budget was $385,588.

The principal churches are referred to in the descriptions of the cities in which they are to be found.

In the Matter of Theatres.

The Cubans are essentially a pleasure and amusement loving people, and it must be a very small and poor town indeed that does not possess a theatre. Havana has several, the principal being El Tacon, which rivals La Scala Aronson. Matanzas has its Esteban Theatre. There is a good one at Pinar del Rio, two at Sagua la Grande, two at Cardenas, a number at Santiago, one at Guantanamo and one at Puerto Principe.

In the Matter of Newspapers.

The common language of the country being Spanish, all the newspapers have been printed in that language. Half English editions are now printed by many journals and one or two American papers have been started.

As to CITIES.

HAVANA was founded in 1519; destroyed by French buccaneers in 1538, but soon restored by Hernando de Soto. It was repeatedly plundered by pirates from 1551 to 1555. It was captured by the English under Admiral Pococke and the Duke of Albemarle, August 14, 1762, after a two months' siege, but was restored to the Spaniards February 10, 1763, by the Treaty of Paris. From April 22 to August 12, 1898, it was blockaded by the American fleet and was formally delivered over to the United States January 1, 1899. Its civil control was given into the hands of the Cubans, under American military protection, in February, 1899.

Havana is the great centre of the island's social, commercial and military importance, and is actually more of a Spanish than a Cuban city.

While in reality not so divided, the city is commonly recognized as being in two parts: the intramural, or old town, lying between the bay and site of the ancient walls, and the extramural, or new town, lying beyond the walls.

In the old town the streets are very narrow, generally about 22 feet wide, with sidewalks barely wide enough for two pedestrians to pass. In the new town the streets are generally about 32 feet wide.

The principal business streets are O'Reilly, Obispo and Obrabia.

The prevailing style of architecture is that of the south of Spain, thick walls of gaily painted rubble being the prevailing material of construction. Most of the houses in the old town are of one story, with crude means of ventilation and little or no provision

of a sanitary nature. In the extramural town the houses are of a much more modern style.

The principal public edifices are the Cathedral, erected in 1724; the churches of Santa Catalina and San Juan, dating from the sixteenth century; the Governor's Palace, a yellow two-story edifice, with a handsome colonade; the University, and El Tacon, a theatre built in 1838, during the incumbency of Captain-General Tacon, seating about 3,000.

Few cities in the world have a larger number of parks than Havana, the principal one of the ten which adorn it being the Plaza de Armas, comprising four gardens, with palm bordered walks; La Alameda de Paula, bordering the bay; the Campa de Marte, remarkable for its four handsome gates; El Pasco de Taco, with its magnificent drive, and El Prado, the general promenade.

Havana has three lines of water supply, the Zanga, little more than an unprotected drain; the Aqueduct of Ferdinand VII., with a main of only 18 inches diameter, and that of Isabel II., or of the Vento, which, when completed, will furnish an ample supply of pure water.

At this date Havana has nothing approaching a good system of sewerage. The greater part of the drainage empties into the sea or harbor, and as there is little ebb and flow of tide, the harbor water is filthy and ill smelling.

The defences of Havana are numerous and extensive, the most important and picturesque being El Morro, built in 1589-1597. Most of the present fortifications were originated by the Count of Santa Clara, in whose honor the great Battery has been named. There are now fifteen fortifications in and about the

city, besides the uncompleted work, Las Animas, and the old sea wall bastions.

Between the Morro and Cabaña are many secret passages.

At the time of the war Havana had forty-three new guns, with an unknown number of old ones.

The city is surrounded by a hilly region covered with grass, crops and garden produce, well watered by streams and free from marsh, except about the bay itself. There is but little timber, and isolated trees, chiefly the royal palm and ceiba, are common. The face of the country is broken naturally by hills and wooded ravines and artificially by stone walls, hedges of cactus, wire fences, single houses and hamlets or towns. There are few streams of large size.

Many of the suburbs are quite pretty and contain a number of comfortable and well ordered villas, set in lovely gardens.

Besides the railroads and ferries, treated of elsewhere, four main roads (calzadas) lead to and from Havana, turnpikes of a few miles long, which soon dwindle off into dirt roads or more or less impassable trails.

MATANZAS is the second commercial city on the island and vies with Havana in wealth and culture. It has scientific, art and literary organizations, three churches, the Esteban Theatre, the Spanish Casino, custom house, hospital, jail, arena, post-office, colleges, promenades (paseos), a telegraph station, governor's palace and hospitals.

The wonderful Bellamar Caves lie three and a half miles east of Matanzas.

Matanzas was settled in 1693. It is separated by

two small rivers, the San Juan and the Yumuri, into three districts, the central, or Matanzas proper, lying between the streams; the Pueblo Nuevo, south of the San Juan, and Versalles, north of the Yumuri. Versalles is the healthiest of the three, because it is built on a bluff and from being nearest the open sea. Connecting Matanzas with Versalles is a fine bridge over the Yumuri, which cost $250,000. Pueblo Nuevo is generally low and poorly drained. Matanzas and Versalles have good natural drainage.

The streets are generally about thirty feet wide, few of them paved, but generally in good condition owing to their being close to the natural limestone rock. Most of the houses are built of this stone, and as a rule are better ventilated than those of Havana. The city has the reputation of having long annually suffered from yellow fever, but it is peculiarly open to improvement from good sanitary measures.

SANTIAGO is the most southern place of note on the island, being 682 miles from Havana. It is the residence of an Archbishop, has many notable buildings, including the Cathedral, erected in 1522, the city having been founded by Velazquez eight years previous.

Santiago is built upon a steep slope, the public square, or Campo de Marte, being 160 feet above the sea. As it is located on the inland pocket of a small harbor, however, the climate is always hot, while in July and August the heat is suffocating. It has many small local railroads and is the headquarters for three large mining plants, owned by United States citizens —the Juragua, the Spanish-American and the Sigua concerns, together representing an investment of about $8,000,000. Santiago has a number of tobacco

factories and exports large amounts of sugar, iron ore, manganese, mahogany, cedar, hides and wax.

CIENFUEGOS (hundred fires) was founded in 1819, destroyed by a hurricane and rebuilt in 1825. Commercially it is the most important port of entry on the southern coast. More than one-third of the town was formerly a mangrove swamp, but the town site slopes from the water front, which is three feet above the sea, to an elevation of about seventy-five feet. The drainage is consequently good. The streets are 40 feet wide, macadamized, but the houses are small, mostly of wood and low. The town boasts of the Terry Theatre, quite an imposing edifice. There is a water works, but it does not yet supply water, one-third of the population having cisterns and selling water to the other two-thirds.

Cienfuegos is subject to fierce northers, during which the temperature falls quite low, frost appearing on the high peaks of the San Juan mountains, which surround the bay. From December 1 until May the weather is quite pleasant, being dry and with a temperature that ranges from 60 to 78 degrees during the day and that falls several degrees during the night. For the rest of the year the temperature ranges from 75 to 93 degrees, with frequent and heavy rains and wind storms. Then yellow fever becomes epidemic.

PUERTO PRINCIPE.—Though called the principal port, Puerto Principe is really the most inland city on the island, being thirty-four miles from the northern and forty-five miles from the southern coast. Its southern port of entry is Santa Cruz and its northern port Nuevitas. With the latter place it is connected

by railroad, but between it and Santa Cruz there is only a bad wagon road.

The original Puerto Principe was at Nuevitas, having been founded there by Velazquez in 1515, but was moved in the following year to its present site, a broad, sandy savannah at a considerable elevation. It is the quaintest and most antiquated town in Cuba, a relic of the Middle Ages, with narrow, rambling streets and mediæval houses of stone and hoary churches. Through it runs a river and around it stretches out the best grazing country of the island. No such thing as a hotel is known.

SANTA CLARA, also known as Villa Clara, was founded in 1664. It is situated at a considerable elevation and it is blessed with such a dry air and soil that it ought to be one of the healthiest places in Cuba. But malarial fevers and dysentery are endemic. It has broad streets, is well built, has an electric light plant, a theatre, telegraph station and railroad communication with Havana, being the eastern terminus of the main trunk railroad. There is a coal oil well a mile and a quarter from the city, which should yield abundantly; while in its vicinity are an asphalt mine, from which 10,000 tons are taken annually, and mines of graphite, gold, plumbago and copper. The tobacco of the neighborhood is among the best of the island.

GUANABACOA was founded in 1555. It is practically a suburb of Havana, and, being built on a hill, 130 to 160 feet high, is wind swept and has good drainage. But its streets are ill kept and the houses dirty. It has an abundance of good drinking water, a theatre,

telegraph station and communication with Havana by rail and ferry.

CARDENAS was settled in 1828, and, owing to the large number of Americans engaged in business there, is one of the most flourishing cities on the island. It has many fine buildings, two theatres, banks, factories, etc., and is lighted with electricity and gas. The sanitary conditions are still bad, owing to the site of the town having been a mangrove swamp.

SANCTI SPIRITUS, like Trinidad, was founded by Diego Velazquez in 1514. It has two ports—Zaza, situated on the River Zaza, and Las Tunas, a seaport on the coast—a railroad running between the three points, about twenty-five miles in length. The town itself is situated on the River Yayabo, which empties into the Zaza. Its streets are narrow and its climate is not healthful on account of the dampness of the soil.

SAGUA LA GRANDE was founded in 1817. It is in daily communication by rail with Santa Clara, Cienfuegos and Havana and with its port of Isabela de Sagua (La Boca), ten miles distant. It has wide streets, machine shops, lumber yards, a town hall, private schools, ten municipal schools, clubs, two theatres, a hospital, a magnificent church, a large sugar export trade and is generally an unusually clean and healthy town.

TRINIDAD is an ancient city, having been founded by Velazquez in 1514. It lies on the slope of a remarkable saddle-shaped mountain, three miles from the

seashore, has a mean altitude of 220 feet, is open to the breezes of the sea and mountain and is reported to be the most healthful town upon the island. The Mountain Vijia, upon which it is situated, rises to a height of 900 feet. One peculiarity of its position is, that while its streets are narrow and tortuous, they are at such a pitch that the heavier it rains the cleaner they become.

It has an important commerce and two ports—the harbor of Casilda, three miles distant, and the River Guaurabo, which is navigable to within a mile of the city. There is a railroad to Casilda, which a steamer line touches.

CAIBARIEN is a modern town, having been founded in 1822. It is a port, with considerable coasting trade, is situated at the mouth of the Caibarien river, and, like so many other Cuban ports, has been built on the site of a mangrove swamp. Notwithstanding its low level, it is a healthy place, yellow fever appearing but rarely. It is connected by railroad with San Andres and with Cardenas by a steamship line. It has a large sugar export business, notwithstanding the shallowness of its roadstead; has many large sugar warehouses, churches, brick houses, with tile roofs, and a general air of business bustle.

MANZANILLO.—Founded in 1784, Manzanillo is the seaport of Bayamo and Jigunae. It has hospitals, colleges, weekly papers, eight sugar mills, telephone and telegraph service, and is the centre of the lumber trade of the island. It lies on flat ground, is laid out in wide rectangular streets and needs a good water system.

As to GENERAL DESCRIPTION.

The island is traversed by mountain chains whose highest elevations are in the extreme eastern and western provinces. Most of the surface consists of undulating and well-watered plains, covered with luxuriant forests and plantations. The coast is alternately of low, marshy stretches and abrupt cliffs. It has 250 rivers, most of them, however, unnavigable except in the rainy season. No other island of its size in the world has so many desirable harbors. There are 220 of them, of which 37 on the north and 13 on the south are accessible to ocean-going vessels.

A description by provinces follows:

Province of Pinar del Rio.

The northern portions of the Province of Pinar del Rio are mountainous, the southern generally low and marshy. The principal mountain ridge is that of the Cordillera de los Organos, which rises to the Pan de Guajaibon, 2,000 feet high.

The interior is what may be called a topographical contradiction, for while it contains moor wastes, salty marshes and boggy pools, it also contains "the Vuelta Abajo," the garden spot and the most fertile and prosperous section of the island.

The rivers of Pinar del Rio are not long, but in the wet season are of considerable volume. Only a few of them are navigable.

The outline of the coast is generally high and bold. Portions of it, however, are sheltered by archipelagoes, or screened by shoals, reefs or islands, making

navigation difficult. Where the coast is high there are fine harbors. Where it is low a landing is practically impossible.

The Province of Havana.

Havana is the smallest but the most thickly populated province of the island. It yields all the various products of the island, of forestry, mineral and agricultural. This province is the principal manufacturing centre of the island, containing as it does numerous large factories for the manufacture of tobacco, cement, ropes, confectioneries and jellies. Distributed through the province are foundries, tanneries, saw mills and distilleries. The staple manufacture is tobacco.

There are three lakes in the southwestern part of the province—Caimito, Guanamen and Herrera—of considerable size and differing from the general characteristics of the swamp lakes of the southern coast, which are but torrid quagmires.

Off and along the coast of this province lie many archipelagoes, made up of sand cays and islets, traversed by networks of channels. The principal archipelago is that of Los Canarreos, to the south, in the Gulf of Matamanó, which separates the province from the Isle of Pines.

There are few mountains of importance in this province, the northern part being hilly and the southern sloping gradually to the low coast line.

Havana is well watered by a number of small rivers and streams, none of them, however, being of commercial importance.

The most important part of the coast line is that which lies around and about the Bay of Havana. This bay makes one of the finest harbors in the world, easy of access, spacious enough to contain 1,000 vessels, deep enough to allow them to come up to the wharves, and, except in the case of hurricanes, well protected on all sides. Within, the bay breaks up into three distinct arms, named respectively Regla, Guanabacoa and Atares.

Province of Matanzas.

The Province of Matanzas is shaped like a wedge, the height of land being along the northern shore and the rivers flowing southward to valleys and marshes, the coast line of the province extending only along its northern boundary.

The highlands on the northern coast rise to the Pan de Matanzas, 1,300 feet high. In the extreme northwest is the rocky range of the Sierra de Camarones. In the central portion lies the great plain extending from Cardenas to Holguin, broken by low mountains, small lakes and river courses.

On the southern coast, on the north bank of the River Hatiguanico, is the greater half of an immense swamp, called Gran Ciénaga Occidental de Zapata. This swamp played a conspicuous part in the late Cuban war. The insurrectionists, knowing its intricacies, carried their wounded there. The moment they touched the borders of this swamp they were in safety.

The northern part of Matanzas is in the most fertile and productive zone of the island and is noted for

its picturesque landscapes. It is also the richest and most advanced province of the island. Its industries are the raising of sugar and tobacco and distilling liquor, the mining of copper, some gold and silver, rock salt and pit coal. It has cattle farms and lime kilns, but its most important industry is the raising of sugar.

Its commerce is extensive and favored by the harbors, rivers and railways. The City of Matanzas, the capital of the province, is the second commercial city in the island.

Province of Santa Clara.

The Province of Santa Clara stands next to that of Matanzas as one of the richest as well as one of the best settled parts of the island. Its rich soil yields in abundance all the special products of the Antilles, and the fruits of the temperate zone thrive on the elevated slopes of its mountain ranges. It is rich, too, in minerals.

Its chief industries in common with the other provinces are the raising of sugar and tobacco and the cultivation of fruits. Gold is extracted from the sandy shores of the Rio Arimao. Silver, copper and asphalt are mined. Cattle are raised.

Its commerce consists in the importation and exportation of the above mentioned products. This commerce is carried on by means of its fine ports on both the northern and southern coasts.

The general aspect of the interior of this province is gently undulating, like that of England. Through it runs the Santa Clara range of mountains, the domi-

nating peak of which is El Pico del Potrillo, which has an altitude of 3,000 feet. Outside of the immediate neighborhood of this mountainous region, however, its general topographical features are made up of a few ranges, interspersed with an infinite number of lomas (hills), nestling down between which are innumerable small lakes and chains of lakes.

The province is well watered, its rivers including the Sagua la Grande, which flows through the north central part of the province and which is the largest river of the entire north coast of the island, being ninety miles in length and navigable for twenty miles; the Jatibonico del Sur, navigable for six or eight miles, and the Zaza, some ninety miles in length.

The whole northern coast of Santa Clara is one immense archipelago, filled with cays and shoals, while off the southern coast are many other groups of sand and coral islands.

Province of Puerto Principe.

Puerto Principe is the most extensive and least populated of all the provinces. Its area is 11,428 square miles and its population but 67,789.

Plantations of sugar and tobacco of some magnitude occupy the fertile country surrounding the quaint old capital of Puerto Principe; fine pasturage is afforded the numerous flocks and herds for which this province was formerly noted, but which have been greatly decimated as results of the late war. A limited amount of vegetables is cultivated and considerable fruit is grown.

The most extensive forests of the island are here

located. The preserving of fruit, the mining of copper and other metals and of marble, etc., the cutting of wood for building purposes, and cattle raising are the chief industries. The commerce of the province consists mainly in the exportation of these articles and of meat and the importation of foreign comestibles and manufactured goods, carried on from the ports of Nuevitas, Morón, Guanajay and Santa Cruz del Sur. Fishing is good on the coasts.

There are few mountain ranges in Puerto Principe, only detached groups appearing here and there, the ranges gradually dipping into the plains.

The soil of the interior is rich, the coasts low and marshy and broken by lagoons, reefs and shoals. There are but two lakes of importance in the province, but it is peculiarly rich in rivers, both with a northward and southward course.

Province of Santiago de Cuba.

The Province of Santiago de Cuba occupies the extreme eastern end of the island, and, because of its remoteness from the capital and of its extremely broken and precipitous character, is less known than any of the other political divisions. Numerous cascades and cataracts are found in the interior and along the high coasts. The mountains are interspersed with tracts of great fertility. Shoals, sand banks, reefs, cays and peninsulas, creeks and marshes are all constituents of the topography and geography of Santiago de Cuba.

In Santiago are situated the highest mountains and largest rivers of the island.

The principal rivers of the province are the Cauto, which flows twelve miles north of Manzanillo and is navigable for sixty miles, the Moa and the Gibara.

From Cape Maisi to Cape Cruz a mountain chain passes close to the seacoast, then turning abruptly west it passes along the middle of the island, breaking away now and then to the north or to the south, creating an intricate system of verdure-clad elevations cut into sharp ridges. The Sierra Maestra, the best defined mountain chain on the island, rises in a succession of terraces, soon attaining an altitude of 5,140 feet; an increase of elevation follows till the Blue Peak (Turquino) of 8,320 feet is reached. From Turquino the mountain continues under the name of Sierra de Cobre. Here are the noted copper mines of the province. In the Cobre range, resting on a pyramidal peak 3,300 feet high, is the "Gran Piedra," a huge boulder 150 feet in length and 45 feet wide.

The province is rich in vegetation, and in it are found all the productions of the island. The exploiting of mines, the manufacture of sugar, tobacco, cocoanut oil, chocolate, soap, ice, petroleum and liquors, cattle raising and the exploitation of forests are among its multifarious industries.

Trade is carried on chiefly from the port of Santiago, which is one of the best in the world.

As to SCENIC INTEREST.

To the lover of natural beauties, the explorer and the archæologist Cuba offers a wonderful field of interest. Many of the island's varied attractions have

been referred to in the chapters given to Cities and General Description and the balance of the more remarkable is catalogued as follows:

Near Candelaria are to be found some remarkable mineral springs and a cataract 98 feet high on the Manantiales.

Three and a half miles east of Matanzas are the celebrated Bellamar Caves, whose crystals are the admiration of all strangers.

At Vinales, sixteen miles from Pinar del Rio, are curative mineral baths.

Twenty miles southwest of Cardenas are the excellent hot sulphur springs of San Miguel de los Baños.

At Jiguani, a little town twenty-one miles from Bayamo, is to be seen a remarkable example of an ancient castle, said to have the strongest interior work of any fort in Cuba.

The Cubitas range is noted for its great caves, these caverns having been the seat of the Insurgent Government in 1896.

Important cascades are found on the Hanabanilla, some of them being 430 feet high.

Twenty miles southwest of Havana is Lake Ariguanabo, with a surface of about six miles, and abounding in fish.

Madruga is a little watering place, with a season from March to October, during which time several hotels are open. It has good baths, sulphur springs and is a pleasant, healthy place, fifty-two miles from Havana.

All along the coasts where there are beaches, shells and seaweed are to be found, beautiful and entirely peculiar to these coasts, while the waters display hues lovely beyond the most fanciful imagination.

Cuba is also remarkable for its many streams which apparently sink into the earth, reappearing under a succession of natural bridges. Among these disappearing streams is the San Antonio. It disappears beneath a large, spreading ceiba in San Antonio de los Baños.

Near Baracoa is Maisi Cave, noted for its relics of a primitive age.

All over the island are scattered individual lakes and chains of lakes. There are square leagues of unexplored forests and chains of untrodden mountains.

As to Its HISTORY.

Cuba was discovered October 28, 1492, by Christopher Columbus and was called in succession Juana, Fernandina and Ave Maria; its present name being that given it by the natives. The first settlement was made at Santiago, 1514.

Insurrections have been almost perpetual since the latter part of the eighteenth century. The most important have been these: That of 1827-29, planned by Cuban refugees in Mexico and the United States and known as the "Black Eagles;" that of 1844, really a revolt of the slaves; that of 1854, ended by the betrayal of the leader; that of 1868-78, known as the Ten Years' War, and that of 1894-98, which resulted in independence.

Our active interest in the affairs of Cuba dates back to 1848, when President Polk made a proposition to buy the island for $100,000,000. In 1873, that is dur-

ing the Ten Years' War, the American ship Virginius was captured by the Spaniards, her cargo confiscated and many of her passengers executed as revolutionists. This act nearly brought on war between Spain and the United States. On February 15, 1898, the United States battleship Maine was blown up in Havana harbor. By act of Congress, April 25, 1898, it was declared that war had existed between the United States and Spain since April 21. On August 12 Spain asked for terms of peace. Santiago was occupied by the United States forces on July 17, 1898; Havana and the balance of the island January 1, 1899, the Treaty of Peace having been signed in Paris December 10, 1898.

THE ISLE OF PINES.

Cuba, as has been said, is surrounded by clusters of islets, a catalogue of which would fill pages. The principal of these is the Isle of Pines, lying in the Antilles Sea, sixty miles from Batabano, from which place a steamer now runs once or twice a week. Communication with the main island will, however, soon be increased as its extreme salubrity and many other natural advantages have already attracted the attention of American investors.

The Chicago Isle of Pines Colony, a co-operative agricultural community, has been formed, with the object of raising fruits and early vegetables for northern markets. General Fitzhugh Lee has found it a comfortable retiring spot and certain Washington in-

vestors contemplate converting the isle into a pleasure resort.

The island is forty-five miles from east to west and thirty-three miles from north to south. Generally speaking, the island is high and rolling, with low coasts, except a portion of the north coast, where a range of hills comes down to the sea. There are mountains which are over 1,500 feet above the sea level. To the west and south is a long sweep of low coast line, indented here and there by the mouth of a river; of these La Nueva is the best river entrance of the island. The other important rivers are Las Nuevas, Casas and Santa Fé, all navigable.

The Ciénaga or swamp divides the island into two unequal parts. It is said to be impassable for horses, but the natives pass through it, at times wading to their armpits in water. At one place there is a causeway, by means of which it is possible to cross on dry land. The Ciénaga is infested with alligators; large quantities of fish and turtle are caught in the different bays. There are no venomous insects or reptiles on the island.

Nueva Gerona is the largest town on the island and the capital of the place. It was the residence of the Governor and garrison. It is a small town of 400 to 500 people, built on the Casas river. The houses are chiefly of stone or rubble, common in Cuba, the streets wide and straight.

In general the soil of the island is poor, sandy and in places gritty, but rich spots are found in the stream bottoms, and upon these corn, cane and vegetables are raised. Probably potatoes would thrive here. Some fruits are grown, which are smaller though of richer flavor than those of Cuba, the oranges being said to

be the best in the world. Bananas are cultivated and many fruits are found growing wild, such as guava, caimito, papaya and such mangoes as it would be hard to find elsewhere in the world, whole groves of them, making a mountain of color impossible to describe.

The island has many varieties of wood, such as mahogany, cedar and hard woods, but the chief growth is the pine. Pines everywhere, but of a heavy kind, full of resin, and even less valuable than the yellow pine of the south. In addition to its woods, the resources of the island are its marble quarries and mineral springs. The medical value of the mineral springs near Santa Fé is acknowledged, and some say that they are the best in the world for all troubles of the stomach.

As to health, the island has a high reputation. The inhabitants say that yellow fever is unknown, and the records of the military hospital show no exemption comparable to this at any other place in Cuba. Strangers who come here do not have to pass through the term of acclimatization usual in Cuba. The atmosphere seems dryer and more bracing than that of Cuba, and it also seems cooler. People here have a good appetite, and altogether it is said there is not a more healthful spot in this quarter of the globe than the Isle of Pines.

PORTO RICO

AND ADJACENT ISLES.

As to AREA.

The Island of Porto (Puerto) Rico is from 35 to 43 miles broad and from 95 to 108 miles long. Its area is 3,668 square miles.

For comparison:

Connecticut.	4,990	square miles
Delaware and Rhode Island.....	3,370	" "
Jamaica.	4,424	" "

Compared with Cuba, Porto Rico is geographically clean cut, its shores not being fringed with such chains of keys and islets. It has, however, a number of tributary islands, all of which were acquired by the United States at the time it took possession of Porto Rico. Of these islands the principal are Vieque, Culebra, Mona, Ratones, Roncador and Moneta. A fuller reference to Vieque will be found at the end of this chapter.

As to POPULATION.

(Census of 1887.)

Total population	813,937
Whites	485,860
Mulattoes	263,567
Negroes	64,510

Porto Rico has not, however, been subjected to the decimating wars which Cuba has had to endure. Its population has had a natural increase and is estimated to-day at nearly 1,000,000. Of these fully 400,000 have a greater or less admixture of negro or Indian blood.

For comparison:

(Census 1890.)

	Population.
Connecticut	746,258
Delaware and Rhode Island	513,999

It will be seen from these figures that Porto Rico is quite thickly peopled.

The estimated present population of Porto Rico's principal cities and towns is as follows:

San Juan	30,000
Mayaguez	20,000
Ponce	15,000
(Including Playa)	20,000
Fajardo	8,779
Arecibo	7,000

Aguadilla.	5,000
Humaco.	4,000
Naguabo.	2,000
Ucareo.	1,500
Arroyo.	1,200

As to CLIMATE.

On account of its being out of the direct sweep of the Gulf Stream, of not being hedged about by neighboring lands as is Cuba, and of being clearly exposed to the swift currents of fresh air blowing from the Atlantic into the hot Caribbean Sea, Porto Rico enjoys the best climate of the West Indies. While tropical, the weather is not so humid and depressing as is that of Cuba. The towns of the elevated interior enjoy a delightful climate and even the seaports are not uncomfortable.

The climate of San Juan is warm but agreeable for three months of the year, when trade winds blow strong and fresh.

At Ponce, because of the sea breezes during the day and the land breezes at night, the weather is never oppressive.

The climate of Mayaguez is excellent, the temperature never rising above 90 degrees.

Aguadilla's weather is hot but healthy and that of Fajardo is quite temperate.

Strangers visiting Porto Rico are, of course, subject to the discomforts of acclimatization, but the process is not nearly so debilitating and dangerous

as it is in Cuba. Yellow fever is endemic to Porto Rico, as it is to all of the islands of the West Indian archipelago, but it is not the ever present foe that has to be grappled with by every visitor. Porto Rico is, however, a danger spot to those afflicted by or subject to pulmonary complaints, while, on account of the sudden changes of temperature, even the native is given to colds and catarrhs.

February and March are the dryest months. Heavy rains begin in May, a month earlier than in Cuba, and continue, with a slight weakening in June and October, until the end of the year.

No official meteorological records have been kept in Porto Rico, but Captain Arthur C. Hansard, manager of the Hacienda Perla, Province of Numacao, furnishes the following observations for 1898 which may be considered typical of the island:

IN THE MATTER OF TEMPERATURE.

Month.	Average.	Highest.	Lowest.
January.	74	86	61
February.	72	85	61
March.	74	85	64
April.	75	87	65
May.	78	95	69
June.	79	92	70
July.	77	89	66
August.	79	92	67
September.	79	93	70
October.	79	93	70
November.	76	86	65
December.	74	85	65
Annual.	76	95	61

Note—Concerning the maximum temperature, Captain Hansard remarks: "The highest, 95 degrees, during May, 1898, was phenomenal and occurred only on two days. In fact, I have only noted 92 degrees on two other days and 93 degrees on one other day.

IN THE MATTER OF RAINFALL.

Month.	Total rainfall, inches.	No. of rainy days, inches.	Record of wettest day, inches.
January.	8.17	26	6.20
February.	2.90	14	0.83
March.	4.38	17	1.37
April.	7.35	16	2.80
May.	16.98	21	4.13
June.	6.87	18	3.49
July.	14.06	27	3.65
August.	12.49	20	8.70
September.	10.85	22	2.71
October.	9.04	22	2
November.	19.62	28	5.45
December.	10.68	26	1.24
Annual.	123.39	257	....

Note.—It will be observed that Captain Hansard's term, "dryest month," really means least wet month.

The Hacienda Perla is at an elevation of some 200 feet and the range of temperature in the coast towns can safely be counted upon as being somewhat higher. A temperature of 117 degrees has, for in-

stance, been observed in San Juan. A fall of 10 or 12 degrees at night is usual.

As to DISTANCES.

(Reckoned in statute miles to San Juan.)

From New York	1,420	miles
From Charleston, S. C	1,200	"
From Key West, Fla	1,050	"
From Havana	1,000	"

As to COST and TIME in GETTING THERE.

At present there is only one direct steamship line trading to and from Porto Rico, and, of course, all travel to Porto Rico must be conducted wholly by sea, unless one takes the very roundabout way of going to Cuba by rail and steamer and thence taking steamer.

The New York and Porto Rico Steamship Company has a fleet of three passenger and freight steamers and one exclusively freight steamer, which leave the Empire Stores, Brooklyn, near Fulton Ferry, three times a month, stopping alternately at San Juan and Ponce.

The trip to San Juan takes five or six days; that to Ponce seven or eight days.

In connection with these steamers is the small steamer Salacia, which makes trips around the island for the delivery of both freight and passengers.

All these steamers carry United States mail.

The passenger rate varies from $45 to $50 on the Arkadia and Winifred to from $50 to $60 on the St. Marcos.

The St. Marcos also makes round trips of twenty-eight days, during which she discharges and loads cargo at San Juan, Arecibo, Aguadilla, Mayaguez, Ponce, Arroyo, Humacao, Vieque and Fajardo. Tickets for the round voyage, including board and berth, are from $130 to $160, while passengers remaining ashore for any number of days are entitled to a rebate of $3 a day.

The Red "D" Line steamers also call at Porto Rico now, en route for Venezuela, landing passengers and mail. These steamers leave New York every two weeks, the fare to Porto Rico being $60 to $70.

The Quebec Steamship Company, plying between New York and the West Indies, also calls at Porto Rico.

The Herrera Line of coasting steamers, which makes the tour of the Cuban ports, also calls at those of Porto Rico.

As to MAIL and CABLE SERVICE.

Mails are dispatched to Porto Rico by every steamer that either sails to or touches at the island, clear-

ances being effected now every two or three days. The rate for letters is five cents per half ounce.

Cable communication from New York can be had over three companies' lines, the United States and Hayti Telegraph and Cable Company, the International Ocean Telegraph Company and the West Indian Telegraph Company, the rate per word being the same over all three cables—$1.17 per word for commercial messages, 40 cents per word for press messages.

Cables also run from San Juan to St. Thomas and Jamaica.

On the island there are 470 miles of telegraph lines, connecting the capital with the principal ports west and south, and a system of postal delivery is well under way.

San Juan, Ponce and Mayaguez have quite good telephone systems, there being already over 200 stations at Ponce.

As to TRADE

According to a general Treasury statement, the values of the foreign trade of Porto Rico in 1896 were as follows:

Imports	$18,945,793
Exports	17,295,535
Total	$36,241,328

Of this trade, that with Spain was valued at $11,259,702; that with the United States at $1,988,888.

The latest available detailed returns of Porto Rico's commerce are those of the Estadistica General del Commercio for 1897, and they only give the trade of the island for 1895. According to this work, these are the figures of the

IMPORTS INTO PORTO RICO.

Articles.	Value in U. S. Currency.
Coal	$119,403
Iron	224,206
Soap	238,525
Meat and lard	1,223,104
Jerked beef	133,616
Fish	1,591,418
Rice	2,180,004
Flour	982,222
Vegetables	192,918
Olive oil	327,801
Wine	305,656
Cheese	324,137
Other provisions	171,322
Tobacco (manufactured)	663,464
Other articles	7,477,260
Total imports	$16,155,056

The countries from which Porto Rico took these imports, with values, are as follows:

Countries.	Values.
Spain.	$8,572,549
Cuba.	526,730
United States.	1,833,544
England.	1,765,574
France.	251,984
Germany.	1,368,595
Italy.	19,619
Holland.	325,301
Denmark.	26,565
British West Indies.	1,709,117
Danish West Indies.	600
French West Indies.	55
Total imports.	$16,155,056

EXPORTS FROM PORTO RICO.

Articles.	Value.
Coffee.	$8,789,788
Tobacco.	646,556
Sugar.	3,747,891
Honey.	517,746
Other articles (largely molasses, cattle, timber and hides).	927,513
Total exports.	$14,629,494

The countries to which Porto Rico sent these exports, with values, are as follows:

Countries.	Values.
Spain	$4,164,964
Cuba	3,802,261
United States	1,506,512
England	1,144,555
France	1,376,087
Germany	1,181,396
Italy	589,045
Holland	3,240
Denmark	236,418
British West Indies	521,649
Danish West Indies	40,434
French West Indies	62,927
Total exports	$14,629,494

Turning now to what Spain has lost and what the United States may gain, these figures show the trade of the United States with Porto Rico from 1891 to 1897 inclusive:

IMPORTS.

	Free.	Dutiable.	Total.
1891..	$1,856,955	$1,307,155	$3,164,110
1892..	3,236,337	11,670	3,248,007
1893..	3,994,673	13,950	4,008,623
1894..	3,126,895	8,739	3,135,634
1895..	375,864	1,131,148	1,506,512
1896..	48,608	2,248,045	2,296,653
1897..	101,711	2,079,313	2,181,024

EXPORTS.

	Domestic.	Foreign.	Total.
1891..	$2,112,334	$42,900	$2,155,234
1892..	2,808,631	47,372	2,856,003
1893..	2,502,788	7,819	2,510,607
1894..	2,705,646	14,862	2,720,508
1895..	1,820,203	13,341	1,833,544
1896..	2,080,400	21,694	2,102,094
1897..	1,964,850	24,038	1,988,888

The commerce of Spain with Porto Rico from 1891-1896 inclusive was:

IMPORTS FROM PORTO RICO.

1891.	$3,260,650
1892.	4,428,891
1893.	4,108,654
1894.	4,164,964
1895.	5,824,694
1896.	5,423,760

EXPORTS TO PORTO RICO.

1891.	$3,305,243
1892.	3,929,186
1893.	4,653,023
1894.	5,535,027
1895.	8,572,549
1896.	7,328,880

The value of the total imports for 1895, it has been shown, was $16,155,056, as against $18,316,971 for 1896. The exports were valued at $14,629,494, against $17,295,535 in 1896. The principal increases in imports, as compared with the preceding year, were in meat, fish, olive oil and tobacco. Decreases were noted in flour, vegetables and wine. The exportation of coffee diminished and that of sugar and honey increased.

In imports of coal, petroleum and wood the United States leads. Porcelain and earthenware, drugs and chemicals, paper and leather come mostly from Spain, although some paper is also imported from the United States. Galvanized iron roofing comes from England. Cotton and hemp, woolen goods and silks come from Spain, Germany and England. Great Britain and Germany furnish the machinery used in the island, with the exception of the items of boilers and scales. The principal articles exported to the United States are sugar and molasses.

As to BUSINESS CHANCES and PRODUCTS.

Following the American occupation, there has already been effected a large change in the social and commercial conditions of Porto Rico, but much more remains to be done. The smallness of Porto Rico, as compared with Cuba, will naturally form a bar to the development of industries on so extended a scale as is possible on the larger island; but it must not be

overlooked that between the populations of the two islands there is not much difference, and that while a large proportion of Cuba is unexplored and unavailable, nearly the whole of Porto Rico is known and can be turned to some agricultural or other industrial advantage.

The island is rapidly taking on new life, and those business men who have looked the island over pronounce it rich and possessing golden prospects for the future.

The three great industries of the island are the raising of tobacco, coffee and sugar, the values of the exports of these three articles being given under the head of "As to Trade." Owing to the troubled state of affairs in Cuba, prices of tobacco have increased enormously in Porto Rico. A large amount has been planted and the crop promises well. From the tables under the "Trade" heading also can be gathered the countries from which the island has derived its supplies.

There is very little manufacturing done in Porto Rico. Across the bay from San Juan the Standard Oil Company has a small refinery and in the city there are small broom, soap, match and trunk factories. At Mayaguez there are three manufactories of chocolate and several coffee drying houses, as there are also at Aguadilla.

Practically all of the machinery used in Porto Rico has come from Europe, but the total amount has been small, the Porto Ricans clinging to the old-fashioned hand work wherever possible. On February 26 a model sugar plant was sent from New York to Porto Rico as an object lesson, and it is only a matter of time and push for this country to supplant all

of the antiquated affairs with Yankee, up-to-date labor-saving devices.

As our information concerning Porto Rico grows, so apparently do the island's possibilities. It is unusually fertile, and its dominant industries are agriculture and lumbering. In elevated regions the vegetation of the temperate zone is not unknown. There are more than 500 varieties of trees found in the forests, and the plains are full of palm, orange and other trees; while the principal crops are sugar, coffee, tobacco, cotton and maize, bananas, rice, pineapples and many other fruits are important products.

The principal minerals found in Porto Rico are gold, carbonates and sulphides of copper and magnetic oxide of iron in large quantities. Lignite is found at Utuado and Moca, and also yellow amber. A large variety of marbles, limestones and other building stones are deposited on the island, but these resources are very undeveloped. There are salt works at Guanica and Salinac, on the south coast, and at Cape Rojo, on the west, and these constitute the principal mineral industry in Porto Rico.

In a recent report Mr. Robert P. Porter states that while the actual sugar production of Porto Rico is now 50,000 tons under American impulse, it could be raised to 150,000 tons.

As to COST of LIVING and WAGES PAID.

Both these matters are in an unsettled condition at present, due to the change of rates and values at-

tending the process of reconstruction. As a general thing, though, the cost of living is a trifle less in Porto Rico than it is in Cuba, while the wages paid is somewhat higher.

Hotel rates range from $1.50 to $2 a day, Spanish money, and there are many excellent boarding houses in most of the large towns. Restaurants furnish good meals for from 25 cents to 50 cents and the indigenous fruits and vegetables of the country are wonderfully cheap. Imported articles of food, merchandise and manufacture are naturally high, but the prices of these have been much lessened since the American occupation. A list of the best hotels on the island is as follows:

San Juan.—Grand Hotel and Restaurant Inglaterra, Grand Hotel de Francia. Grand Café Central, Hotel Marina, Mt. Vernon Hotel, the Mayflower Hotel.

Ponce.—The Chamberlin Hotel, Hotel Arcadia, Hotel Washington.

Arecibo—Cristobal Colon.

Guaco.—American Victory Hotel, Twenty-fifth Day of July Hotel.

Guayama.—Hotel Francis.

The peso is the monetary unit of the island and its value, together with that of the other coins current there until the involved subject of currency has been settled, has been fixed as follows:

GOLD COINS.

Alphonsinos (25-peseta piece)	$4.82
Louis (20-franc piece)	3.86

SILVER COINS.

The peso	$0.60
Medio peso	.30
Peseta	.12
Real	.06
Medio real	.03

Bronze and copper coins are received at their face value in payments not exceeding one peseta.

As to GOVERNMENT, LAWS and INSTITUTIONS.

The island of Porto Rico was ceded outright to the United States and is at present "under the military control of this country, pending such legislation by Congress as shall determine its future government."

Gen. Guy V. Henry is the Military Governor of the island, assisted by an advisory board, under the name of Insular Cabinet.

The work of building up a new and better order of things on the ruins of the old Spanish rule, and using such of that material as is possible in the process of reconstruction, is slowly going on.

Railroads are in their infancy, and outside of the celebrated military road across the island, said to be one of the most beautiful in the world, the means and paths of travel are very deficient. These single-track railroads are in some sort of operation:

From Aguadilla to San German	32 miles
From Ponce to Coamo	26 "
From San Juan to Arroyo	48 "

A company has been formed at Providence, R. I., in which New York and Boston capitalists are interested, for the purpose of buying, building and operating steam or electric railroads in Porto Rico, as well as to establish a steamship line, with fortnightly service, between Providence and Ponce. One of its first enterprises is announced to be the construction of an electric road from Ponce to San Juan.

Because of years of oppression and repression, the people are ignorant and poor in a land of plenty. The monetary system needs entire revision. The Spanish merchants have drained the agricultural classes dry; the courts have been maladministered; the school system has been a farce; sanitation was unknown, and it is to the gradual amelioration, and, when necessary, eradication of these things that the new government is giving its patient attention.

The so-called system of *public schools* was divided into the elementary, supported by the municipalities, and two higher grades, supported by the Insular Government. There were mighty few text books, one "flourishing" school of seventy pupils having a total of six books. The school census has been a farce, and so deficient has a common education been that when the people were numbered in 1887 it was found that out of a population of 806,708 only 11,380 could read or write.

General John Eaton was appointed school superintendent of Porto Rico by the President January 25. He found that the municipalities took little or no interest in scholastic matters; that most of the country schools were closed for want of funds, and that the most prominent school on the island had thirty pupils.

To remedy all this, General Eaton has diligently set himself to work, but he is hampered by lack of funds. English-Spanish speaking teachers are wanted, and, pending our Government's direct aid to education, General Henry has offered to pay teachers $50 a month American money, twelve months in the year.

School libraries are being founded, the post-office is getting into good trim, the filth is being removed and daylight is being let into the dark roads.

Religious intolerance has not prevailed to such an extent in Porto Rico as it has in Cuba, and Ponce has boasted for some time of its Protestant church, then said to be the only one in the Spanish West Indies. Active steps are being taken in this country to add others to that solitary church. The Chicago Episcopal Diocese has appointed the Rev. Geo. B. Pratt as special missionary to the island and most of the religious agencies are sending workers to Porto Rico.

There are newspapers in San Juan and Ponce, published in English and displaying quite an amount of enterprise.

As to Its CITIES.

San Juan, the capital, is situated on a long and narrow island, separated from the main island at one end by a shallow arm of the sea, over which is a bridge connecting it with the mainland, which runs out at this point in a long sand spit, some nine miles in length, apparently to meet the smaller island; at

the other end the island ends in a rugged bluff or promontory, some hundred feet high. This promontory is crowned by Morro Castle, the principal fortification of the town. At this end of the island is the entrance to the harbor, with a narrow channel and rocky bottom, so close under the headland that one can almost leap ashore from a passing vessel. The water here is some thirty feet deep. To a mariner unacquainted with the locality, or when a norther is blowing, this entrance is one of difficulty and danger.

After rounding the bluff one finds a broad and beautiful bay, landlocked and with a good depth of water, which is being increased by dredging. It is by far the best harbor in Porto Rico, and probably as good a one as can be found in the West Indies.

The island upon which the city stands is shaped much like an arm and hand. The greatest width is a little over half a mile in the portion representing the hand, which also contains the major part of the city.

San Juan is a perfect specimen of a walled town, with portcullis, moat, gates and battlements. Built over two hundred and fifty years ago, it is still in good condition and repair. The walls are picturesque and represent a stupendous work and cost in themselves. Inside the walls the city is laid off in regular squares, six parallel streets running in the direction of the length of the island and seven at right angles. The houses are closely and compactly built of brick, usually of two stories, stuccoed on the outside and painted in a variety of colors. The upper floors are occupied by the better-to-do people, while the ground floors, almost without exception, are given up to negroes and the poorer class.

There is no running water in the town. The entire population depends upon rain water, caught upon the flat roofs of the buildings and conducted to the cistern, which occupies the greater part of the inner courtyard that is an essential part of Spanish houses the world over. There is no sewerage, except for surface water and sinks. The streets are wider than in the older part of Havana and will admit two carriages abreast. The sidewalks are narrow and in places will accommodate but one person. The pavements are of a composition manufactured in England from slag, pleasant and even and durable when no heavy strain is brought to bear upon them, but easily broken and unfit for heavy traffic. From its topographical situation the town should be healthy. The soil under the city is clay, mixed with lime, so hard as to be almost like rock. It is consequently impervious to water and furnishes a good natural drainage. The trade wind blows strong and fresh and through the harbor runs a stream of sea water at a speed of not less than three miles an hour. With these conditions no contagious diseases, if properly taken care of, could exist.

Besides the town within the walls, there are small portions just outside, called the Marina and Puerta de Tierra, containing two or three thousand inhabitants each. There are also two suburbs, one, San Turce, approached by the only road leading out of the city, and the other, Cataño, across the bay, reached by ferry. The Marina and the two suburbs are situated on sandy points or spits, and the latter are surrounded by mangrove swamps.

The full name of the city is San Juan de Bautista and it was founded by Ponce de Leon.

Ponce is situated on a plain, about two miles from the seaboard. It is regularly built—the central part almost exclusively of brick houses and the suburbs of wood. It was the residence of the military commander and the seat of an official chamber of commerce. There is an appellate criminal court, besides other courts; two churches, two hospitals, a home of refuge for the old and poor, a well-equipped fire department, a bank, a theatre, three first-class hotels and gas works. The city has an ice machine and there are 115 vehicles for public conveyance.

The inhabitants are principally occupied in mercantile pursuits, but carpenters, bricklayers, joiners, tailors, shoemakers and barbers find good employment. Commercially Ponce is the second city of importance on the island. A fine road leads to the port (Playa), where all the import and export trade is transacted and where are situated the custom house, the office of the captain of the port and all the consular offices. The port is spacious and will hold vessels of twenty-five feet draft. Water for all purposes, including the fire department, is amply supplied by an aqueduct.

Mayaguez, the third city in importance of the island, is situated in the west part, facing the Mona Channel. Mayaguez is the second port for coffee, the average annual export being 170,000 hundredweights. The quality is of the best, ranging in price with Java and other first-rate brands. About 50,000 bags of flour are imported into this port every year from the United States out of the 180,000 bags that are consumed in the whole island. The city is con-

nected by trains with the neighboring town of Aguadilla, with a partially constructed extension to San German, one of the large interior towns.

Aguadilla is the principal town and the port of Aguadilla District, in the northwest portion of the island. The industries in the vicinity consist of the cultivation of sugar cane, coffee, tobacco and cocoanuts and the distillation of rum.

Arecibo is situated on the north coast, facing the Atlantic Ocean and some fifty miles from San Juan. It is similar to all Spanish towns, with a plaza surrounded by the church and other public buildings in the centre, and streets running from it in right angles, forming regular squares. The buildings are constructed of wood and brick. The harbor is poor, being nothing more than an open roadstead, exposed to the full force of the ocean, in which vessels during northerly winds can hardly lie in safety. Into this harbor empties a narrow and shallow stream called the Rio Grande de Arecibo. Goods are conveyed on this river to and from the town in flat-bottomed boats, with the aid of long poles and by dint of much pushing and patience. At the bar of the river everything is again transferred into lighters and thence to vessels. It is a tedious and expensive process. However, Arecibo is quite an important port and has tributary to it a large district of some 30,000 inhabitants.

Fajardo lies on the east coast. The port is handsome, the town being about one and a quarter miles from the bay. The only important industry of the

district is the manufacture of muscovado sugar, to which most of the planters devote themselves.

Arroyo, in the district of Guayama (southeast portion), is a small seaport whose annual exports to the United States average 7,000 to 10,000 hogsheads of sugar, 2,000 to 5,000 casks of molasses and 50 to 150 casks and barrels of bay rum.

Altogether there are about seventy towns and villages of considerable size on the island.

As to GENERAL DESCRIPTION.

The parallelogram-shaped island of Porto Rico is the most eastern of the Greater Antilles. It is separated from the Danish island of St. Thomas by a reef-studded passage fifty miles across and from Hayti on the west by the Mona Passage, seventy miles across.

The island is traversed from east to west by a mountain range, dividing it into two unequal portions, by far the longest slope being on the north, so that the rivers on that coast are much the longer. From this chain several branches diverge toward the north coast, giving it a rugged appearance. Most of the population is situated on the lowlands at the sea front of the hills. For lack of roads, the interior is accessible only by mule trails or saddle paths, and it is covered with vast forests.

Rivers and brooks are numerous, forty-seven very considerable rivers having been enumerated. They

are short and rapid, especially on the Caribbean slopes, which are steep and abrupt. The mountains intercept the northeast trade winds blowing from the Atlantic and wring their moisture from them, so that the rainfall of the north section is very copious. South of the mountains several droughts occur and agriculture demands irrigation, but such work is unsystematically carried on.

The northeast coast is broken and forbidding; that of the south safer. The chief port on the north coast is the capital, San Juan. On the west is the important harbor of Mayaguez. On the south side are Guanica, Ponce and Guayama.

As to SCENIC INTEREST.

Until there are better means of communication within the island, the interior of Porto Rico will be a fairer field for the explorer than for the excursionist. The conditions of the railroads and highways has already been referred to, and in the section devoted to the cities there will be found references to many points of interest.

The luxuriance of the vegetation, the equability of the climate, the great plantations, the indolent character of the native life, the antiquity of its cities and churches, the wildness of its mountain scenery and the peaceful aspect of its sylvan lowlands, the tropical beauties along the river banks and the varied cliff and beach of its coast, will all combine to make

Porto Rico one of the most charming resorts in the Antilles.

As to HISTORY.

Porto Rico was discovered by Columbus in 1493 and invaded by the Spaniards, under Ponce de Leon, who in a few years exterminated the natives, then 600,000 or 800,000 in number.

Slavery was abolished by the Spanish Cortes in March, 1873.

The United States Army, under General Miles, landed at Guanicaon and the town surrendered immediately, Ponce following July 28, 1898. When the armistice was proclaimed, August 12, the American troops were prepared for a definitive campaign. The evacuation of Porto Rico began September 20th, our army and navy taking formal possession of the island at San Juan, October 18, 1898.

THE ISLAND OF VIEQUE.

The island of Vieque, situated thirteen miles east of Porto Rico, is twenty-one miles long and six miles wide. Its land is very fertile and adapted to the cultivation of almost all the fruits and vegetables that grow in the West Indies. Cattle are raised and sugar cultivated. It has a population of some 6,000.

The town, Isabel Segunda, is on the north, and the port is unsafe in times of northerly wind, like all the anchorages on that side; the few ports on the south are better, the best being Punta Arenas.

Not long ago there were two importing and exporting houses on the island of Vieque; but, on account of the long period of drought and the high duties on foreign imported goods, trade has decreased to local consumption only. All supplies are brought from San Juan, the majority being of American origin. The climate is fine and there have never been any contagious diseases.

PAGE INDEX.

Ph. = Philippines. H. I. = Hawaiian Islands.
C. = Cuba. P. R. = Porto Rico.

R.

S.

T.

12mo, cloth, $1.25

KLONDIKE

A Manual for Gold Seekers

By CHARLES A. BRAMBLE

"About all that can be told will be found in the present volume of 313 pages, a map included."—*Philadelphia Inquirer.*

"Mr. Bramble is a member of the editorial staff of the Engineering and Mining Journal and was late crown lands surveyor of the Dominion of Canada. His experience in the Northwest Territories has enabled him to select only what is valuable and reliable.—*Toledo Blade.*

"This is the best book on the subject that we have yet seen. It strikes us the moment we open the book that we are in possession of reliable information. The volume has a number of illustrations, which enable the reader to understand the conditions of life in the gold regions.—*New York Commercial Advertiser.*

"It contains an answer for almost any question that one can ask about the Klondike or kindred subjects. The last chapters are on the mounted police of the Dominion Government and the Canadian mining laws.—*Providence Journal.*

"The reading matter is in large type and printed on good white paper. The book is more of a library book than a pocket edition."—*Seattle Post-Intelligence.*

"The publishers deserve credit for the manner in which they have gotten out this valuable book." *New Orleans Sunday States.*

NEW YORK

R. F. FENNO & COMPANY

12mo, cloth, $1.25

Betrayal of John Fordham

By B. L. FARJEON

"The plot is well constructed, the story is well told, and there is enough of mystery to satisfy the most exacting reader."—*Saturday Evening Gazette*

"'The Betrayal of John Fordham' is a new story by B. L. Farjeon. It is of the detective order, full of murder and innumerable wrongs that become, at length, righted, and the much abused hero comes to happiness as the curtain falls. The working out of the plot, combined with peculiar incidents makes the story worth reading, especially if one likes a detective story. Almost everyone does, for a change."—*Boston Times.*

"Running through the story are the threads of one or two affairs of the heart, which are woven into pleasant conclusions. Some of the scenes are stirringly dramatic."—*San Francisco Chronicle.*

"A new book, which, like the preceding ones from the pen of the same author, is a strong story and which promises to be extensively read, is B. L. Farjeon's new novel, 'The Betrayal of John Fordham.'"—*New Haven Journal.*

"The plot is intricate and deeply involved and dramatically and skillfully worked out."—*Brooklyn Eagle.*

NEW YORK

R. F. FENNO & COMPANY

12mo, cloth, $1.25

"WHAT CHEER?"

By W. CLARK RUSSELL

"Clark Russell is easily the Fenimore Cooper and Captain Marryatt of his time rolled into one. His work is, however, upon different lines from that of the two great writers mentioned. Russell deals with modern conditions—with the sea of to-day. The ocean has not altered, but its environments have within the century. To say that 'What Cheer?' is one of Russell's best stories is its highest praise."—*Army and Navy Register.*

"'What Cheer?' will be found to be eminently readable."—*Philadelphia Inquirer.*

"W. Clark Russell's sea stories are read by thousands and thousands of people who will be glad to know that another has been published by R. F. Fenno & Co. of New York. This latest novel is entitled 'What Cheer?' In this particular kind of writing there is no other author like Mr. Russell, and 'What Cheer'? will be found worth reading." —*Boston Globe.*

"There is something new about the plot of this story and it is good reading from beginning to end."—*Milwaukee Journal.*

"The author of this book proved his capacity for writing good marine stories in the "Wreck of the Grosvenor,' and all who enjoyed that tale will be glad that there is a new one by the same pen. The writer is specially strong in his descriptive powers of sea scenes and sailors. He knows and loves well the ocean, and his pages are full of beautiful word paintings about it."—*San Francisco Call.*

NEW YORK

R. F. FENNO & COMPANY

12mo, cloth, illustrated, $1.25

Crime of the Boulevard

By JULES CLARETIE

"'The Crime of the Boulevard,' is worked up in a masterly manner, and it is the constructive power, the scenic arrangements, which are managed so nicely."—*New York Times.*

"A thrillingly interesting Paris detective story, that will reveal to the unimitated a tale of the inside workings of the police methods of the French Capital, that must be given the credit of much ingenuity and originally."—*Boston Courier.*

"This story is well told with the indefiable fascination of the French novel."—*Detroit Free Press.*

"The book quivers with movement from end to end."—*Detroit Tribune.*

"Jules Claretie is a famous man of letters. He is a member of the French Academy. He is a lucid and brilliant writer. His novels are packed with incident and vibrant with life."—*N. Y. World.*

"This is a strong story and one that will well repay reading."—*Brooklyn Eagle.*

"Jules Claretie's new story will keep your attention rivited from its first page to the last."—*New Orleans States.*

NEW YORK
R. F. FENNO & COMPANY

12mo, cloth, $1.25

SOME WOMEN'S WAYS

By MARY ANGELO DICKENS

"We can especially recommend this volume to all those who have a story which embraces all the elements of a full-fledged novel compressed in a few pages."—*Lebanon Courier.*

"These nine stories are terse and dramatic, seizing some salient point in social life and making the plot of the story hinge upon it."—*Toledo Blade.*

"This excellent book is printed in large-faced type, upon good paper, and is bound in an ornamental cloth cover."—*Rutherford American.*

"These are the kind of stories a reader welcomes when dull and tired."—*The Butlook.*

"These sketches are delightful reading."—*Boston Times.*

"The stories are worth reading, and indicative of the inherited talent of a great daughter of Charles Dickens."—*Buffalo Commercial.*

"They are emotionally intense and morally irreproachable—a combination which is uuusual enough in current fiction to call for commendation."—*St. Paul Daily Globe.*

"The smooth, scholarly style is a pleasure to read in this day of crudity and raw short tales."—*New York Commercial Advertiser.*

NEW YORK

R. F. FENNO & COMPANY

12mo, cloth, $1.25

The Professor's Experiment

By MRS. HUNGERFORD
(THE DUCHESS)

"It has become necessary, in these days, to indicate the exceptional and welcome fact that this is a pure story; painting cheery pictures of normal domestic life, and opening no side doors to encourage the stealthy adventures of a prurient fancy. It is a novel, strictly speaking, involving neither sermon nor stump speech. It offers entertainment only, but it gives what it offers; resting the tired brain and leaving no poison in the blood."—*The Watchman.*

"'The Professor's Experiment' is the title of a new book by Mrs. Hungerford [The Dutchess]. It is of a somewhat more elaborate and ambitious character than this writer's recent stories, and shows a return to her earlier manner. The heroine is the impulsive, warm-hearted young Irish girl with whom all Mrs. Hungerford's readers are wel acquainted, but of whom, in her various phases and reappearances they do not tire."—*Indianapolis Journal.*

NEW YORK

R. F. FENNO & COMPANY

12mo, cloth, $1.25

BEYOND THE PALE

By B. M. CROKER.

"'Beyond the Pale,' is a tale of Ireland written with uncommon vigor and spirit."—*Syracuse Standard.*

"A delightful story of modern life in Ireland."—*Army and Navy Register.*

"The action of this story is free and rapid, the tone clean, and the story well managed."—*Public Opinion.*

"This is a bright and interesting story by an always popular author."—*Albany Times-Union.*

"The tale is told very straightforwardly and agreeably, with many genuinely dramatic episodes and with much simple, honest humor and sympathy."—*Boston Transcript.*

"This is a well-told story with strong local color, and fully worthy of a pen from which we always expect work that is wisely conceived and skillfully and artistically executed."—*Southern Star.*

"It is a stirring narrative which moves with the spring of a race horse from the start."—*Brooklyn Eagle.*

NEW YORK

R. F. FENNO & COMPANY

Small 12mo, 75 cents.

THE STORY OF A GENIUS

From the German of Ossip Schubin.

The International in a recent issue had this to say concerning this talented authoress: "'Ossip Schubin' is the pseudonym of Aloysia Kirschmer, an Austrian authoress of growing popularity. She was born in Prague, in June, 1854, and her early youth was spent on a country estate of her parents. Since her eighteenth year she has travelled extensively, spending her winters in some one of the large cities, Rome, Paris or Brussels, and her work shows the keen observation and cool judgment of a cosmopolitan writer. She is well liked in England." The story under consideration is infinitely sad, beautiful, exalting. At one moment you are rejoicing at the idyllic happiness of the lover, the bright promise of a glorious future. Then the scene changes, and your heart is bleeding with unutterable anguish at the mute grief that follows the irreparable loss of his love, which carries in its train lost ambition, talent, manhood. Just let us quote one passage: "There is a suffering so painful that no hand is tender enough to touch it, and so deep that no heart is brave enough to fathom it. Dumbly we sink the head, as before something sacred. Never could he reproach her lying there before him, clad in the blue dress, of which every fold, so dear to him, cried 'forgive!' Not to our desecrated love do I appeal, but to our sweet caressing friendship,—forgive the sister what the bride has done!' How could he reproach her, with her parting kiss still on his lips?"

R. F. FENNO & COMPANY

9 and 11 EAST 16TH STREET : NEW YORK