CHAPTER XXVIII

THE REPUBLIC OF PANAMA

The Republic of Panama is one of the smallest countries in the world, its territory being about equal to that of the State of Indiana. It has no national debt, and has $7,000,000 invested in mortgages, on real estate in New York City.

When it received $10,000,000 from the United States, in payment for the rights under which the Panama Canal was built, it immediately invested about 75 per cent of it, using the remainder for paying the expenses of the revolution, and for setting the new government on its feet. It now receives $250,000 a year from the United States as rental for the Canal Zone, and this, with the $350,000 received as interest from its real estate mortgages in New York, gives it an annual income of $600,000 outside of money raised by the usual processes of taxation.

Under the treaty with the United States, Panama has its independence guaranteed, and recognizes the right of the United States to maintain order within its boundaries. This entirely does away with the necessity of maintaining an army and navy. The result is that with no appropriations required for military purposes, and with a $600,000 income from the Canal Zone.
Zone, it enjoys one of the lowest tax rates in the world.

Although the Republic of Panama has its Declaration of Independence and its Glorious Fourth, the former was written by a foreigner, and the latter occurs in November. There is some dispute as to who wrote the declaration of independence, but the best information points either to Philippe Bunau-Varilla, a Frenchman, or to William Nelson Cromwell, an American. These two gentlemen differ upon this subject, each claiming that he was the Thomas Jefferson of Panama.

When the $10,000,000 was paid to Panama by the United States, one of the first things done was to build a university, locally known as the National Institute. Some $800,000 was spent in the construction of the buildings, which are located near the line of the Canal Zone. But it so happens that Panama has few teachers qualified to hold university chairs, and fewer students qualified to pursue university courses; and the result is that the university is more a place of buildings than a seat of learning.

No other country in the world calls in another nation to superintend its elections. When the first presidential election was held the United States took the initiative and demanded the right to supervise the balloting. Before the second election was held the President became ambitious to succeed himself, although the constitution provided that he could not do so. He thereupon decided to resign for a period of six months, in favor of one of his partisans, thinking that this would allow him to live up to the letter of the constitution
even though he were violating its spirit in becoming a candidate for reelection. This situation was brought to the attention of the United States, and the President was politely but firmly informed that the subterfuge would not be permitted. When the election approached each side thought that the other was trying to win by fraud, and the United States was asked to referee the political battle.

The City of Panama is famous for its wickedness. Men who have seen the seamy side of life in all of the big cities of the world declare that Panama is as bad as the worst of them. Until a few years ago bull-fighting was permitted, but the bulls were so poor and the fighters were such butchers that the Government finally outlawed this form of entertainment. Cock-fighting persists, and numerous cockpits are popular resorts every Sunday. Nowhere else can one witness a greater frenzy in betting than at one of these cocking mains. The backers of the rival birds nod their heads and place their bets so rapidly that it is more bewildering to the onlooker than the bidding at an auctioneer's junk sale.

The prize ring has succeeded the bull ring in gratifying the Spaniard's thirst for gore, and scarcely a Sunday passes that there is not a prize fight in Panama. Few Americans who attend them come away without a feeling of disgust over the poor fighting, the brutality, and the trickery resorted to.

While the Americans have done so much for public cleanliness in Panama and Colon, the masses seem to know little more about sanitary living today than before the Americans came. The stenches which greet the visitor in the native quarters are no less odorous than those encoun-
tered in other cities of tropical America. The bathtub is an unknown quantity among the masses. Most of the natives who live in the cities are engaged in some line of small trade. It may be that a shop has only a platter of sweetmeats and a few bottles of soda on ice, and that another has only a bushel of different kinds of tropical fruits, but out of the small sales large families manage in some way to exist. The markets open early in the morning. There is no spirit of rivalry among the market men, and they act usually as if they were conferring a favor upon the buyer. At the markets many Indians are encountered who bring their wares from the interior and offer them for sale. These usually consist of pottery, net bags, charcoal and the like.

Life among the Panamans in the jungle is simple indeed. With his machete the householder may provide a thatched roof for his mud-floored hut, and he can raise enough beans, plantains and yams, and burn enough charcoal, and catch enough fish to meet all of his needs. In the kitchen the principal utensils are gourds and cocoanut shells. The most tempting morsel that the Panaman can get is the iguana, a lizard as big as a cat, whose meat is said to taste like spring chicken. It is about the ugliest creature in the animal world, and yet it means more to the native Panaman than does possum meat to the cotton-field darky of the South.

The unconscious cruelty of the average native is remarked by almost every visitor. He is usually too lazy to be conscious of cruelty, for that would require exertion. When he catches the iguana,
The frigate, he says, is one that is taken before being killed. Its short legs are twisted and crossed above its back, and the sharp claw of one foot is thrust through the fleshy part of the other, so as to hold them together without other fastening. The tail, being useless, is chopped off with the machete, and thus mutilated and unable to move, the lizard is kept captive until fat enough to eat.

The fruits of Panama are neither so numerous nor so plentiful as those of Nicaragua or Jamaica. The mamei is a curious pulpy fruit the size of a peach, with a skin like chamois and with a smooth pit the size of a peach-stone. The sapodilla is a plum-colored fruit with seeds in a gelatinous mass. One is usually introduced to this peculiar fruit with the remark that although its seeds may eaten, they have never been known to cause appendicitis.

Cedar is preferred to mahogany in Panama. The Indians make their cayucas out of mahogany logs, and it is not uncommon to see bridges 40 feet long and 5 feet thick made of mahogany wood which would be worth several thousands of dollars in an American lumber yard.

Panama is famous for its tropical flowers. Many of these are beautiful, but few are sweet smelling. Orchids abound, especially on the Atlantic side, and while the waters of the Chagres were being impounded in Gatun Lake, native boatmen would go out in their cayucas and gather orchids from the trees. One of the most beautiful of the orchids of Panama is the Holy Ghost orchid. It blooms biennially, and when its petals have fallen they reveal a likeness to a dove.
Some of the American women on the Canal Zone became enthusiastic collectors of tropical flowers. Among these were Mrs. David Du Bose Gaillard and Mrs. Harry Harwood Rousseau. Both of these ladies spent much time hunting orchids and other flowers for the verandas of their houses and for their gardens. Mrs. Rousseau made trips into several of the other countries of Central America in her quest for new orchids. The collections made by these two ladies represent the finest on the whole Isthmus of Panama.

The animal life of the Isthmus is not abundant, although some deer and a few tapirs are to be found. Alligators abound in the Chagres River and other streams of the Zone. Perhaps the most interesting form of animal life to be found on the Isthmus is the leaf-cutting ant. This ant seems to be nature's original fungus grower. As one walks around the American settlements, he frequently comes upon a long path filled with ants, passing back and forth. They resemble a sort of miniature yacht under full sail, except that the sails are green instead of white. Upon closer examination it is found that what seemed to be a sail is a triangular piece of leaf carried on the back of the ant, with its edges to the wind so as to overcome air resistance. The ants do not gather these leaves for food, but they store them in such a way that a fungus grows upon them. They eat the fungus, and when the leaves are no longer useful they are thrown out and new supplies brought in.

The native remedies used by the Panamans are many and interesting. For stomach troubles, which are very rare, they eat papaya.
THE PANAMA CANAL

is a sort of fruit which might be a cross between a cantaloupe, a watermelon and a pumpkin, except that it grows on trees. It has the rind of a green pumpkin, the meat of a cantaloupe, and the seeds of a watermelon. It is probably richer in vegetable pepsin than any other plant in existence — a pepsin which neutralizes either alkaline or acid conditions in the stomach. It is said that a tough steak, wrapped in the leaf of the papaya tree overnight, becomes tender as the result of the digestive action of the pepsin in it.

The Indians and Panamans who live in the jungle use the wood of the cacique, or "monkey cocoanut," to stop any flow of blood. In their materia medica they have a large number of tropical plants which they use for their ailments.

The way in which sanitary instruction may be made efficient is illustrated among some of the people of Panama. Upon one occasion the Canal Record carried a small diagram of how to make a sanitary drinking cup out of a sheet of paper. After that there were many Panamans who, although in a hundred ways indifferent to contagion, would no longer drink from common drinking cups, but would make their own sanitary cups. Even the Jamaican negroes employed around the offices of the commission in many instances would not think of using the common drinking glass at the office water-cooler.

Two tribes of Indians on the Isthmus have not mixed with the Caucasians or the negroes. They are the Chucunoques and the San Blas Indians. The latter tribe has never been known to allow a white man to remain in its territory after sun-
down. Even the higher officials of the Panaman Government are forced to respect this tradition when they treat with the San Blas chiefs.

Government land in Panama can be bought at the rate of $49.60 for 247 acres, with reductions for larger areas. The Government invites foreign capital, declaring that the United States stands as a perpetual guarantee against revolutions within and aggressions without.

The story of the early days in Panaman history is a strange admixture of romance and cruelty. The Isthmus was discovered in 1500, and first settled by an adventurer who had been the Royal Carver in the king's household at Madrid. Balboa, carrying with him a small force of men and a lot of bloodhounds, one of them a dog of mighty prowess, known as Lioncico, or "Little Lion," which drew a captain's pay because of its fighting qualities, crossed the Isthmus in 1513 and discovered the Pacific Ocean. After him came a new governor of the Isthmus, who put Balboa to death.

The Spaniards were unspeakably cruel to the Indians. Even those who received them kindly were tortured and roasted to death, because they did not produce enough gold. One governor rode a mule, which was noted for the frequency of its braying. The Indians were taught that the mule was asking for gold, and in meeting these demands they not only had to give what they possessed, but were forced to rob the graves of their ancestors as well. Upon one occasion the Indians, having captured a number of Spaniards, melted a lot of the yellow metal and poured it down their throats,
telling them to drink until their thirst for gold was quenched.

After the Spaniards had established themselves upon the Isthmus, the English buccaneers, Drake and Morgan, fell upon their cities and despoiled them. The ruins at Old Panama, which once was a city of 30,000 inhabitants, to-day tell the story of the effective work of Henry Morgan when he raided it and captured its treasure.

While the Spanish conquerors, the French filibusters, and the English buccaneers, who took their turns in pillaging Panama, were cruel beyond imagination, they were always famous for their outward evidences of religion and piety. The Spanish were always chanting hymns and honoring the saints; the French would shoot down their own soldiers for irreverent behavior during mass; the English pirate captains never failed to hold divine services on Sunday, and often prohibited profanity and gambling.

Where once Spaniards tortured Indians and British buccaneers raided Spaniards, where once revolution after revolution left a poor and desolate country, to-day the gates of Panama are open to the world, and its trade is invited again to pass that way. The people of the Isthmus believe that the glory which departed when Morgan sacked Old Panama, forcing the Pacific trade to seek the Strait of Magellan, will return with the opening of the Panama Canal, and that their capital, whose walls cost so much that the Spanish king thought he could see them from his chamber window in Madrid, will retrieve its ancient glory.
CHAPTER XXIX

OTHER GREAT CANALS

WHILE the Panama Canal seems destined to endure for all time as the greatest artificial shipway in the world, there are other waterways, while small in comparison, that are in themselves wonderful works of engineering. In point of traffic the greatest canal in the world is the Sault Ste. Marie Canal, popularly called the "Soo." In point of economy of distance and world-affecting consequence the Suez Canal ranks with, or next to, Panama.

The Suez Canal was built while the Civil War was raging in the United States, and was opened for the passage of vessels on November 17, 1869. It is about twice as long as the Panama Canal, the distance from Port Said, at the Mediterranean terminus, to Suez at the Red Sea end, being approximately 100 miles. When constructed its depth was 26 feet, 3 inches, and its bottom width 72 feet. The maximum vessel draft permitted was 24 feet 7 inches. The canal was in operation for 11 years before vessels of this draft presented themselves for passage.

During the first dozen years of its operation various curves were straightened, the turning-out places where vessels passed one another were enlarged, and their number increased to 13. This
work of straightening curves and widening the canal has continued from that time until the present, and to-day vessels may pass one another through a large part of its length. The policy increasing the general dimensions of the canal was begun in 1887. By 1890 its depth had been increased to 29\(\frac{1}{2}\) feet, so that it could accommodate ships having a draft of 26 feet 3 inches. The work of deepening continued, and when the United States began to build the Panama Canal this work was speeded up, so that by 1908 a depth of 32\(\frac{3}{4}\) feet was attained and vessels of 28 feet draft could be accommodated. In 1909 it was decided that it would be necessary to make the canal still deeper, and a project, which will not be completed until 1915, was then undertaken, calling for a depth of 36 feet 1 inch. By 1898 the width of the canal had been increased from 72 feet to 98\(\frac{1}{2}\) feet. This is now being still further increased to 134\(\frac{1}{2}\) feet. Even when this project is completed in 1915, the Panama Canal still can accommodate ships of 5 feet greater draft than the Suez Canal.

The maximum draft of ships permitted to use the Suez Canal is demanded in comparatively few instances. A recent report showed that 94 per cent of the ships using the canal had a draft of less than 26\(\frac{1}{2}\) feet, and that only 1 per cent had a draft of 28 feet. The increase in the depth of the canal, therefore, was made largely in anticipation of future shipping requirements.

When the canal was completed it required 49 hours for a ship to pass through it. The growth in its dimensions, together with the increase in the number and size of passing stations, the straighten-
ing of curves, and the improvement of facilities, have brought down to 17 hours the average length of time required for the transit. Ships not equipped with electric searchlights are not permitted to pass through at night. The improvements being made on the canal are being paid for mainly from the revenues derived from tolls.

The Suez Canal was constructed, and has been enlarged and managed, by a private corporation which has invested from the beginning of the construction up to the present time about $127,000,000 of which approximately two-thirds has been secured from the sale of securities, and one-third from the earnings. The original capital of the Suez Canal Company, issued in 1859, was 400,000 shares of $100 each. These shares partake of the nature of both bonds and stock, for they are entitled to interest of 5 per cent as well as to participation in the company’s profits. Provision is made for their redemption, but when redeemed they continue to share in the profits and merely lose the interest-bearing feature. On December 31, 1911, 378,231 of these shares were in circulation.

In 1875 the British Government, through Lord Beaconsfield, purchased the 176,602 shares held by the Khedive of Egypt, paying some $20,000,000 for them. The British Government does not own a majority of the shares, and the Suez Canal is controlled and operated by a French company. The annual dividends have increased from 4.7 per cent to 33 per cent. The shares are closely held and trading in them is light. The stock sells at a premium of over 1,000 per cent. When the work of building the canal was undertaken, 100,000
shares were given to the founders. These shares are not stock, but are, rather, certificates of obligation, requiring the company to pay 10 per cent of its profits to the promoters and founders of the original company and their heirs and assigns. The net profits of the canal amount to about $17,000,000 a year. Of this the stockholders get $12,000,000, the Egyptian Government $2,500,000, the founders of the company $1,500,000 and the administrative officers and the employees divide $100,000 among them.

The traffic of the Suez Canal during the first two years was relatively small, for the reason that the canal is not a practicable one for sailing vessels, and steam vessels had to be built. These, being much less efficient than freight steamers are to-day, were slow in securing the trade that had been enjoyed by the sailing vessels. The rate of tolls charged by the Suez Canal Company has declined steadily since the canal went into operation. On January 1, 1912, they approximated $1.30 a ton, with a reduction of nearly a third for vessels in ballast. On January 1, 1913, the rate was made approximately $1.20 a ton, the fraction of a cent higher than the rate at Panama. The passenger tolls are $2 for passengers above 12 years and $1 for children from 3 to 12 years of age; children below 3 years are carried free. The highest toll charged on the Suez Canal was in 1874 when it was $2.51 a ton.

The Suez Canal has proved highly profitable to its owners. No one believes that the Panama Canal will yield as great a return on the capital invested. The cost of the Panama Canal will be
four times the cost of Suez, and it is doubted by traffic authorities whether the Panama Canal will ever handle as much business.

The Manchester Ship Canal, which connects Manchester with Liverpool, was constructed only after years of preliminary agitation. There was opposition by the railways, and from the industrial and commercial centers with which Manchester competes. Over 300 petitions were presented to Parliament before its consent was obtained for the construction of the canal. Work was begun in November, 1887, at which time it was estimated that the canal would cost $42,000,000. It was opened for traffic January 1, 1894, after $75,000,000 had been spent in building it. Of this about $60,000,000 went into actual construction work. The Manchester Canal is 35½ miles long. It extends from Eastham, about 6 miles from Liverpool, to Manchester. Its original depth was 26 feet, but this has been increased to 28 feet. Ships with a length of 550 feet, a beam of 61 feet, a height of 70 feet, and a draft of 27 feet can use the canal. There is a difference of 58 feet 6 inches in level between Eastham and Manchester, and this is overcome by five sets of locks. The highest lift is 16 feet.

The Manchester Canal Company owns the Bridgewater Canal and makes connections with 13 other barge canals. It handles about 6,000,000 tons of freight a year, of which the bulk is sea-borne. Although it connects with 13 barge canals, the amount of barge traffic handled is less to-day than it was a decade ago. From the beginning the Manchester Canal has had to compete with the
railroads, and they cut their rates to such a basis that they get the business and force the canal company to operate as a losing venture to its stockholders.

In spite of the competition of the railroads, the canal has managed to increase its business at about the same rate that traffic through the Suez Canal has increased, and a little more rapidly than it has been estimated that traffic through the Panama Canal will grow. The shareholders have not yet received any dividends, but it seems probable that in the course of a few years all of the securities will earn an annual income. Many shareholders have been more than compensated for their subscriptions by the collateral benefits they have received from the canal.

The Government of Germany constructed a canal connecting its Baltic and North Sea ports, and named it the Kaiser-Wilhelm Canal. The natural route from the Baltic to the North Sea around Denmark is circuitous, dangerous because of storms, and is guarded by foreign powers. The canal was begun in 1887 and completed in 1895, and was constructed primarily for military and naval purposes, although it has proved to be of great value to the commerce of Germany. It connects Brunsbuttel Harbor on the Elbe with Holtenau on Kiel Bay. It passes through low lands and lakes and along river valleys. It is 61 miles long and, as it was first constructed, had a width of 72 feet and a depth of 29 ½ feet. The total cost of the canal was approximately $37,000,000. It was in operation only 12 years until it was found necessary to enlarge it. The reconstruction
of the canal was authorized by the German Government in 1907, and the work, which is expected to be completed in 1914, was started in 1909. When this work is completed the canal will be 144 feet wide and 36 feet deep. At 10 places it will be widened so as to permit ships to pass. New twin locks, built for the regulation of the tides — for the canal itself is at sea level — will be 82 feet longer and 37 feet wider than the Panama locks. The maximum depth of these locks will be 45 feet, although at low tide they will be a little less than 40 feet.

During a recent year commercial vessels with an aggregate net register of over 7,000,000 tons used the Kiel Canal. The increase of business during the first decade of the present century amounted to 70 per cent, or a little more than the estimated increase for each decade at Panama. The net receipts from the operation of the canal are not sufficient to pay interest on the investment. No effort is made to levy tolls that will provide for interest charges, or for the amortization of the principal. The canal does not connect regions of enormous traffic, nor does it greatly shorten ocean routes. The longest route is cut down only 429 miles. The German Empire was so well pleased with the success of the Kaiser-Wilhelm Canal that the enlargement it is now making represents an expenditure one and a half times the original cost.

The Amsterdam Canal was built to connect Amsterdam with the sea. Formerly, ocean-going vessels were small and the Zuider Zee River was then a stream of considerable depth. Gradually, however, the Zuider Zee became shallower and the
size of ocean vessels larger, so that the commercial supremacy of Amsterdam was threatened by the competition of Rotterdam and Antwerp and north German ports. In 1818 a corporation constructed what was known as the “North Holland Canal,” which was large enough to accommodate ships employed in the East India trade. It had a minimum depth of 20 feet and a minimum width of 100 feet. This canal, however, had numerous curves and it was constructed by a roundabout route of 52 miles from Amsterdam northward to the North Sea, while Amsterdam is less than 17 miles from the sea by direct route.

In 1863 a concession for the construction of the North Sea Canal was granted and two years later active work began. It was finished in 1876. There were no serious engineering difficulties to be met, there being no rivers to be crossed, no towns to block the way, and only three bridges to be built. The work consisted mainly of building embankments, draining and reclaiming land, and dredging the channel. The canal was not completed according to the original plan. Extensive enlargements and improvements were decided on, and a larger additional lock was undertaken in 1889 and completed in 1896. At that time it was the largest canal lock in the world. Plans are now being considered for building another new lock, which will be larger than those at Panama. The bottom width of the canal is now 164 feet. It can accommodate vessels 721 feet long, with a 79-foot beam and of 30 feet draft. The construction of the canal cost $16,000,000. Improvements have brought the total amount up to about $24,000,000.