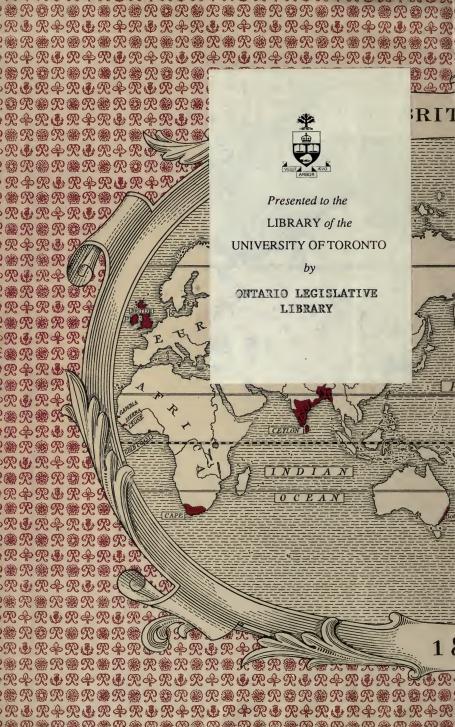
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THÉ BRITISH WEST INDIES

ALGERNON E. ASPINALL





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BEESTON LONG, ESQ.

One of the earliest Chairmen of the West India Committee.

From an engraving by S. W. Reynolds after the painting by William Owen, R. A., A.D. 1817.

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THE BRITISH WEST INDIES

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THEIR HISTORY, RESOURCES
AND PROGRESS

ALGERNON E. ASPINALL

AUTHOR OF "THE POCKET GUIDE TO THE WEST INDIES"



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HELLINE BILL



To K. A.



PREFACE

It has been said that a Preface should be as complete as possible, and also thoroughly explanatory, as it is sometimes the only part of a book which is read. I hope that this last will not be the fate of the following pages, which have been compiled with the object of giving the reader some insight into the history, resources, and progress of our valuable possessions in and adjoining the Caribbean Sea. I have avoided plunging into masses of statistics which are tiresome to many readers and so soon become obsolete, but I have endeavoured to deal with my subject as lightly as circumstances permit. The West Indies have a total population of over 2,000,000, or nearly half as much again as that of the Dominion of New Zealand and Newfoundland combined. Yet, in spite of this fact, they have not so far been invited to participate in the councils of the Empire by sending delegates to the Imperial Conference, as New Zealand and Newfoundland have been permitted to do. The reason why the West Indies have in this respect been left out in the cold no doubt hinges to some extent upon the lack of unity which characterised these scattered colonies in the past, and the moral which I have endeavoured to draw in the following pages is the need for greater uniformity in all that concerns the West Indies.

It was my good friend, Sir Charles Lucas, who said that while the nineteenth century had witnessed the distress of those colonies the twentieth would be the century of their regeneration—and as head of the West Indian Department at the Colonial Office for many years he had unique opportunity of feeling the trade pulse of the

PREFACE

West Indies. Provided they receive fair play and, at least, equality of opportunity in British markets, Sir Charles Lucas' prophecy should prove correct. The British West Indies are, as Mr. Asquith recently stated, already prospering, and when the Panama Canal is completed their wealth and importance will no doubt be added to very materially.

In concluding this Preface I must express my indebtedness to Miss Sherlock and Captain G. A. O. Lane for the loan of several photographs, and to Mr. N. Darnell Davis, C.M.G., and those gentlemen mentioned in the text who have kindly assisted me in the compilation of this book by furnishing me with much useful information.

ALGERNON E. ASPINALL.

16 ASHLEY GARDENS, LONDON, S.W.

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THE

BRITISH WEST INDIES

CHAPTER I

THE WEST INDIES-THEIR DISCOVERY

By Englishmen all the world over the very name West Indies should be held dear, for it was in those colonies—second only to Newfoundland in age—that the foundations of the British Empire were laid; it was in the waters which surround them that many of the most brilliant deeds of our navy were performed, and it was on their shores that so many of our brave soldiers spilt their life's blood in upholding the honour of their country in the troublous days of the eighteenth century. The tombstones in the graveyards and the tablets in the churches in even the smallest of the islands tell their story of the sacrifice and devotion to duty by which most of our West Indian possessions were acquired and retained.

What other colony can boast of such a varied and romantic history as that of the West Indies? Their very name conjures up memories of such great Elizabethan seafarers as Ralegh, Hawkins and Drake, and their achievements; of that cosmopolitan and picturesque gang of freebooters known, from the boucans on which they dried their meat, as the Buccaneers; of that infamous but interesting scoundrel "Blackbeard" Teach; of Henry Morgan, the hero of Porto Bello and Panama, who preyed in the interest of England on the Spanish treasure ships and galleons from Nombre de Dios and Cartagena, and lived to be Lieutenant-Governor of Jamaica.

Acquired as many of our West Indian colonies were by settlement or conquest nearly a century before the English flag was first unfurled over any of the lands which now constitute our Dominions, the West Indies would be entitled to respect for their age alone; but they have other and more powerful claims on the love of Englishmen, so closely is their history wrapped up with that of such heroes as Benbow, Rodney, Hood and Abercromby, whose deeds added lustre to the closing years of the eighteenth century, and of Nelson who chose his bride in Nevis and, in the *Victory*, the very ship that now lies peacefully at her moorings in Portsmouth harbour, pursued Villeneuve to the West Indies and back, a fitting prelude to the battle of Trafalgar.

In those far-off days the West Indies were exceedingly prosperous, so prosperous in fact, that the title "West Indian" stood for affluence and luxury. West Indian heiresses figured freely in the books and plays of the period, and a search of the pages of Burdett or Burke shows how the fortunes of many of our noble families were built up in those colonies. Since the abolition of slavery, which was the first of a series of crushing blows that the West Indian proprietors were compelled to face, the West Indies have, however, passed through many vicissitudes. The patience of the colonists was very sorely tried by the refusal of successive governments to give them the simple fair play, which was all they asked for, in their stubborn fight against slave-grown sugar after the abolition of slavery, and, later, against the bountyfed beet-root sugar with which the English market was flooded under the system inaugurated by Napoleon.

Now, happily, all that is over. The West Indies are again prospering, and the name of the Rt. Hon. J. Chamberlain will always be respected and honoured in those colonies as that of the statesman who was responsible for restoring to them equality of opportunity and

SOME ROYAL VISITORS

freedom from unfair competition in the markets of the mother country. Yes, the West Indies are prospering. and this has been admitted by the Prime Minister himself. At a banquet given by the West Indian Club to the representatives of those colonies at the Coronation of our present King, the Rt. Hon. H. H. Asquith in proposing "Prosperity to the West Indies," said that the toast might well be "Continued Prosperity to the West Indies." The West Indies were, he said, now independent of financial assistance from Imperial Funds, and for the attainment of that happy result the main share of the credit was due to those on the spot who persevered with courage, enterprise, and patience in the face of adverse circumstances. As for the planters and proprietors who bore the burden and heat of the day, it says much for their grit and perseverance that they have survived the long struggle with unequal odds, and that "in spite of all temptations to belong to other nations" they are still intensely loyal to the flag for which so many of their ancestors fought and died.

In connection with the loyalty of His Majesty's West Indian subjects, it may not be out of place to recall some of the visits which have been paid to the West Indies by members of our Royal House. The earliest recorded is that made by Prince Rupert, Count Palatine of the Rhine, third son of Elizabeth, Queen of Bohemia, and daughter of James I. This truculent Prince, who was called a "grand pirate" by Governor Searle, arrived off Barbados in 1652 with a small fleet, just after the island had been reduced to the obedience of the Parliament by Sir George Ayscue. He was joined there by his brother, Prince Maurice, and captured or destroyed a few ships at Nevis and St. Kitts; but the Defiance, which bore his brother, was lost in a storm off Anegada, and Prince Maurice perished with all his crew; and in the following year Prince Rupert returned to France.

In 1786 Prince William Henry, Duke of Clarence, afterwards King William IV, was appointed admiral in command of the West India station. He arrived at Antigua at the end of the year in the Pegasus, and John Luffman in one of his letters relates that "his appearance put this little community into a ferment." Addresses were, of course, at once presented to him by the legislative body and by the merchants, expressive of loyalty to his royal father and of the happiness and honour which were conferred on the island by his gracious visit. The Address of the legislature was read and presented by a Mr. John Bourke, Solicitor-General of the Leeward Islands and Speaker of the Assembly of Antigua, "but notwithstanding this gentleman had been for years hackneved at the bar, and is a bold orator; vet on this occasion, to the astonishment of every bystander, he was nearly bereft of his power of utterance." To the negroes the Prince was the "Grand Buccra," and the inhabitants appear to have been greatly elated at his frequently condescending to talk to them.

In the many expeditions which he made, the Prince was accompanied by Captain Nelson of the *Boreas*, to whom he acted as best man on the occasion of Nelson's marriage to Frances Herbert Nisbet in Nevis, an event which took place at Montpelier House in that island, on March 11th,

1787.

On his return to England the Prince brought his knowledge of the West Indies to bear on the discussions over the proposed abolition of the slave trade, and he became a warm advocate of the interests of the West India merchants. Thus in a letter to Mr. Beeston Long he wrote from Bushy House in 1804: "I am to request that you will assure these gentlemen [the West India merchants] of the high sense I feel for their approbation of my parliamentary conduct on a late occasion [when the bill for the abolition of the slave trade had been thrown

KING GEORGE IN BARBADOS

out by the House of Lords after the second reading], and that I shall at all times be both ready and happy to use my endeavours to support the interests of the West India colonies."

The name of the Sailor Prince who enjoyed such popularity in the West Indies is still commemorated in Clarence House, overlooking English Harbour in Antigua, which was specially built for him by English masons, and also in the names of streets in several of the islands.

In 1794 the Duke of Kent, father of Queen Victoria, took part as a Major-General of the British Army, under Sir Charles Grey, in the reduction of Martinique, and also in the storming of Morne Fortuné in St. Lucia, for which he was honourably mentioned in despatches, and received the thanks of Parliament.

King Edward VII never saw the West Indies himself, but in 1861 his brother, Prince Alfred, afterwards Duke of Edinburgh, visited those colonies in the *Euryalus*. It is still remembered how he spent several days in Barbados at Farley Hill, the residence of Sir T. Graham Briggs, and planted there a Norfolk Island pine, which, by the way, is now a very magnificent tree.

Our present King George V has paid the islands no less than three visits, in the *Bacchante*, in the *Thrush*, and in the *Canada*. Probably the one which dwells in his recollection most is his earliest one with his elder brother, Prince Albert Victor, in the winter 1879-1880. It is hardly necessary to say that the young princes were received with the utmost enthusiasm wherever they went. In Barbados, which they explored thoroughly under the auspices of Sir Walter Hely-Hutchinson, then Colonial Secretary, Prince George planted a palm tree at Codrington College, which has developed into a noble specimen, while the companion planted by his brother has perished. In his *Annals of Codrington College*, Archdeacon Bindley, Principal from 1890 to

5

1908, writes: "The two cabbage palms at the end of the avenue nearest to the belfry were planted on December 31st, 1879, by their Royal Highnesses, the Princes Edward and George, who visited the College from the Bacchante. Alas, that the statement runs so easily from the pen! For the one planted by the Duke of Clarence died and had to be replaced by a fresh one. When in 1892 the news of the death of the beloved Prince arrived, the negroes were not at all surprised. 'We knew Prince Eddy die soon,' was their superstitious lament, 'his cabbage die!'"

It is much to be hoped that those already mentioned will not exhaust the list of Royal visitors to the West Indies. It may be that the career of the Prince of Wales is mapped out for him, and that, midshipman though he is, he will enter as a student at Oxford and Cambridge, therein following in the steps of his grandfather, King Edward VII. But a Prince's education will scarcely be thought to be complete nowadays without a tour of the world, and in such a tour the beautiful islands of the West Indies can hardly be omitted. It is to be hoped that opportunity may also be found to show Prince Albert and his younger brothers these islands of the Caribbean sea, so closely bound up with our naval history and our naval glory. That they would receive a loyal and cordial welcome there may be taken for granted.

The West Indian Islands which lie between 10° and 27° north latitude and 59° 30" and 85° west longitude, extend in a semicircle from the south of Florida to the north coast of South America, enclosing in their embrace the Caribbean sea. They owe their names to the fact that when they were discovered by Columbus, the Genoese navigator believed that he had achieved his ambition and had succeeded in reaching India by a western route. The name "West Indies" was once of wider application than it is now. By a Papal Bull, dated March

EXTENT OF THE WEST INDIES

2nd, 1493, such discoveries as might be made were divided between Spain and Portugal. An imaginary line was drawn from the North Pole to the South Pole, 100° west of the Azores, and it was decided that all new lands discovered to the east of that line were to belong to Spain, and those to the west of it to Portugal. This arrangement was subsequently modified by the Treaty of Tordesillas on June 7th, 1494, by which the earlier dividing line was moved 370 leagues west of the Azores. By this treaty the frontier of Northern Brazil was made to end at the river Oyapok, and beyond that the West Indies began. A large part of America thus became the "West Indies," but the term was eventually applied only to the islands in the Caribbean sea, and to adjacent parts of the mainland. The islands were also called the Antilles after Antillia or Antiglia, a mythical land which figures on old charts and maps 200 leagues to the West of the Azores or Western Islands.

The most northerly of the West Indies are the Bahamas. which have a total area of 4,466 square miles. Below them is the chain of large islands lying east and west, known as the Greater Antilles which consist of Cuba, an independent republic, by far the largest island in the West Indies, having an area of 44,000 square miles, with Jamaica (British, 4,207 square miles) just below its eastern end, Haiti or San Domingo (an island owned by independent republics, 29,830 square miles), and Porto Rico (American, 3,600 square miles). To the east of Porto Rico are the Lesser Antilles lying mainly north and south, which comprise St. Thomas (Danish, 33 square miles), St. Croix (Danish 74 square miles), the Virgin Islands (British, 58 square miles), and in sequence below them Anguilla (British, 35 square miles); St. Martin (Dutch and French, 38 square miles); St. Bartholomew (French, 8 square miles); Saba (Dutch, 5 square miles); Barbuda (British, 62 square miles); St. Eustatius

(Dutch, 8 square miles); St. Kitts (British, 68 square miles); Nevis (British, 50 square miles); Antigua (British, 108 square miles); Montserrat (British, 32½ square miles); Guadeloupe (French, 619 square miles); Marie Galante (French, 55 square miles); Dominica (British, 291 square miles); Martinique (French, 380 square miles); St. Lucia (British, 233 square miles); St. Vincent (British, 140 square miles); Barbados (British, 166 square miles); Grenada and the Grenadines (British, 123 square miles); Tobago (British, 114½ square miles); and lastly Trinidad (British, 1,754 square miles).

The Greater Antilles used to be called by the Spanish the Islas de Sotavento, or the Leeward Islands, owing to their being to leeward of the prevailing north-easterly trade winds, and, for the converse reason, the Lesser Antilles were known as the Islas de Barlovento, or Windward Islands, but these titles have been diverted to

two British groups of islands.

It will be seen from the above figures that the total area of the British West Indian Islands is less than a quarter of that of Cuba. For administrative purposes, however, British Guiana, our great colony on the north-east coast of South America, and British Honduras, on the coast of Central America, of which the areas are 90,277 square miles and 8,598 square miles respectively, are included in the West Indies, with the interests of which they have much in common, and consequently our West Indian possessions are larger than those of any other power.

The British West Indies are divided into eight colonies or groups, namely, the Bahamas, Barbados, British Guiana, British Honduras, Jamaica with its dependencies Turks and Caicos Islands and the Caymans, Trinidad and its ward Tobago, the Windward Islands, and the Leeward Islands. With the exception of some of the Bahama islands, all the West Indies are within the tropics; but the circumstances and the conditions of life in the several

CHRISTOPHER COLUMBUS

colonies vary greatly, and this, coupled with the great distances between them—Jamaica, for instance, is, as the crow flies, over 1,000 miles from Trinidad—has hitherto been one of the obstacles in the way of federation, a subject which is dealt with in a later chapter.

With the exception of Barbados, which is believed to have been first visited by some Portuguese in 1536, all the West Indian islands now under the British Flag

were discovered by Christopher Columbus.

That great navigator was the son of a wool-comber, Domenico Colombo, and was born at Genoa, in or about the year 1435, and educated at Pavia, where he developed a strong taste for geometry, geology, and astronomy. At the early age of fourteen he went to sea and he had made numerous voyages before he settled at Lisbon in 1470. While still a youth, Columbus had become fascinated with the legends of Cipango and Cathay, and believing, as he did, in the roundness of the earth and in the extension of Asia to the east, he was confident that it would be possible to reach that country by sailing due west.

Several circumstances also tended to strengthen his belief. After a long continuance of westerly winds, a curiously-wrought piece of wood had been found by Martin Vicente 450 leagues to the west of Cape St. Vincent. A similar piece was found off Puerto Santo by Columbus's brother-in-law, Pedro Correa, besides some large canes similar to those described by Ptolemy as growing in Egypt. Moreover, trees unlike any known in Europe had been driven on shore at the Azores by the westerly winds, and at Flores the bodies of two men, whose features were not those of Europeans, Moors or Negroes, were thrown up by the sea, as well as two strange canoes.

Eager to prove the correctness of his theory, Columbus applied to the government of his native city for assistance to enable him to make a voyage of discovery; but his proposals were not accepted, and he therefore approached

the King of Portugal. King John II referred the matter to a Junta of cosmographers, who pretending that they considered the proposals visionary, secretly advised the despatch of an expedition to anticipate Columbus's discoveries. A caravel was accordingly sent to the Cape Verde Islands with instructions to proceed on the route to the west indicated by Columbus. The pilots, however, soon lost heart and returned ridiculing Columbus's scheme.

Disgusted at this duplicity, Columbus left Lisbon and sent his brother Bartholomew to England to invoke the aid of King Henry VII. Meanwhile, he himself retired to Palos de Moguer, in Andalusia, and leaving his son at the monastery of La Rabida, proceeded to the court of Cordova. The Oueen's confessor suggested the formation of a Junta, but Columbus, profiting by the experience which he had gained, declined to lay his plans fully before one, and he was in consequence again rebuffed. Some of his detractors now said that it would take at least three years to sail round the world; others averred that our hemisphere was a small crown or girdle resting on a boundless sea, while others again said that if Columbus did indeed steer due west, he would certainly never be able to get back again as on his return he would have to sail uphill, and the sea would be too steep. After a five years' attendance at the Court Columbus was informed that Spain was engaged in so many wars that she could not possibly undertake any further expenditure at that time.

Columbus next approached the Dukes of Sidonia and Celi and solicited their assistance, but with no better results, and he decided therefore to proceed to England to find his brother. With this intention he went to La Rabida to fetch his son Diego, and this proved a fortunate step for him, for there in Juan Perez de Marchena he at last found a sympathetic listener who was so greatly impressed with the grandeur of Columbus's proposals, that he brought about a resumption of negotiations

FERDINAND AND ISABELLA

with the Court of Spain, with which he was in close touch. But failure still seemed to dog Columbus's footsteps, and although he offered to bear an eighth part of the expenses, his proposals were again negatived and in 1492 he set out for Cordova. Then it was that Luis de Santangel, the receiver of the ecclesiastical rents in Aragon, brought his influence to bear with the Queen in his favour. The views of this dignitary were endorsed by Quintilliana the Minister of Finance, and eventually Queen Isabella consented to undertake the entire enterprise herself on behalf of the Crown of Castile.

A messenger was hastily despatched in search of Columbus who, quite disheartened, had left the Court, and was overtaken at the Bridge of Pinas, two miles from Granada where he was received on his return with every sign of welcome and enthusiasm. Negotiations were immediately opened up, and on April 17th, 1492, an agreement was signed by Ferdinand and Isabella appointing Columbus admiral, viceroy and govenorgeneral in all the islands and continents which he might discover, and granting him a tithe of all things and merchandise which he found, and, if he contributed an eighth part to the expenses of the expedition, an eighth part of the profits.

Preparations for an immediate voyage of discovery were now hurried forward, and on August 3rd, 1492, after attending Mass, Columbus sailed from Palos in the Santa Maria, a vessel of 100 tons, accompanied by Martin Alonzo Pinzon in the Pinta and Yanez Pinzon in the Niña,

the vessels carrying 120 souls in all.

Off the Canaries the *Pinta* broke her rudder and the rigging of the *Niña* was altered, a delay of a month being thereby involved. On September 6th the small fleet sailed once more towards the west. Even at this early stage of the voyage the crews were already beginning to show some anxiety, and in order to reassure them,

Columbus kept two logs, one a secret and accurate one. and the other a modified log for public inspection. The variation of the compass required explanations by Columbus. On September 14th, the expedition first encountered that mass of floating weed, now known to all who travel to and from the West Indies as the "Sargasso Sea." which floats in a vast eddy of the Atlantic between the Gulf stream and the equatorial current. The sailors were greatly alarmed by this weed, fearing that the vessels were in imminent danger of running aground. On 25th, Alonzo Pinzon thought he saw land to the south-west, but it proved next day only to be clouds. The King had promised a substantial reward to the man who first sighted land, but Columbus intimated that the person who called out "land" would be excluded from the bounty, if land was not subsequently discovered. On October 7th the Niña hoisted a flag and fired a gun as a sign that land was sighted; but the hopes thus raised were again doomed to be shattered. By this time the attitude of the crew had become so threatening that in order to quiet the sailors Columbus and Pinzon had to promise to return to Spain if land were not indeed discovered within three days. On October 11th the hopes of the party were once more raised by a green rush, a plank, a carved stick, a piece of turf, and a thorn bush with red berries which were seen floating on the surface of the sea. and also by the appearance of a fish which was usually found among rocks by the shore and never in the open sea.

At about ten o'clock that night Columbus saw a light which appeared to him to be like a torch, and at two next morning, October 12th, land was actually sighted from the *Pinta* by Rodrigo de Triana, and the New World was discovered.

When day broke the delighted sailors saw a low island well watered and covered with bush, and those who have been fortunate enough to visit the West Indies will

THE LANDFALL OF COLUMBUS

appreciate how refreshing to the exhausted crew the delightful spicy perfume which is wafted from the shore must have been. Columbus, overjoyed, began to sing the Te Deum, and the whole of the crew joined in too, and saluted him as Viceroy and Admiral, earnestly craving his forgiveness. As the vessels approached the shore the beach was crowded with naked Indians. Columbus was the first to land. Then before him was borne the Royal Standard, and before the captains the standards of the expedition, which bore a green cross and the letters F and Y, the ciphers of Ferdinand and Isabella, each surmounted by a crown.

After returning thanks Columbus named the island, which was called by the natives Guanahani, "San Salvador," and erecting a crucifix, formally took possession of it for the crown of Castile.

The honour of being the first landfall of Columbus has been claimed for several islands in the Bahamas. In an article which appeared in the Nineteenth Century, Sir Henry Blake, Governor of Jamaica from 1888 to 1898, has shown how the island on which the Royal Standard of Spain was unfurled on October 12th, 1492, has been variously identified with Mayaguana by Varnhagen in 1864; with Samana by Fox in 1880; with Grand Turk by Navarrete in 1825; with Cat Island by Washington Irving in 1828, and by Baron Humboldt who accepted Irving's conclusions, in 1836; and with Watling's Island by Muñoz in 1798, Becher in 1856, Peschell in 1857, Major in 1871 and Markham in 1892. Attempts have been made to define the position of the landfall by tracing the course of Columbus's vessels across the Atlantic from the Canary Islands on charts, and also by following his course between "Guanahani" and Cuba in the reverse direction, but they have failed to throw much light on the subject, and Sir Henry Blake, who certainly had the advantage, which other writers had

not, of having visited all the islands, concluded: "Place Columbus where we like, at any island on the fringes of the Great and Little Bahama Banks, the Turks and Caicos group, or the outlying islands, and with one exception there is not, from Florida to Haiti, any island which answers to his description of Guanahani. That exception is Watling's Island, or San Salvador, which answers the description to the minutest particular."

After a stay of three days Columbus's expedition again set sail, and in succession the islands which he called Santa Maria de la Concepcion (now identified with Rum Cay), Fernandina and Isabella (now Long and Crooked Islands) were discovered. Columbus was still bent on making his way to Cipango, and on October 27th he landed on Cuba, which he called Juana. This he believed to be the land for which he was seeking, but he still pursued his voyage and next discovered Haiti which, from its resemblance to the country of Spain, he called Hispaniola. Leaving a nucleus of a colony there he set sail for home in the Niña in January, 1493. After encountering a terrible storm and suffering great discomfort—the size of the vessel was only forty tons he landed on March 15th at Palos, where he had a triumphant welcome. He then proceeded to Barcelona, where he was received in state by Ferdinand and Isabella.

On September 25th, 1493, Columbus left Cadiz on a second expedition with seventeen vessels, of which fourteen were caravels, and 1,500 souls. It was on this voyage that most of the islands which are now British were discovered. On Sunday morning, November 3rd, after a voyage of three weeks from the Canary Islands, he reached an island "so covered with trees, that they could not see so much as an ell space of bare earth or stony ground," and this he named Dominica because of the day—Sunday—on which he discovered it. Next day another island was found and called Marigalante

"THE GARDEN OF THE QUEEN"

after his own ship. After a few days' rest the small fleet proceeded to another island which the admiral named Guadaloupe in fulfilment of a vow to the monks of the sanctuary of our Lady of Guadaloupe in Estremadura. Martinique, which was called Madanino or Matinino, was next discovered and then Montserrate, Santa Maria la Redonda, Sancta Maria de la Antigua and San Martin in rapid succession. The island which the natives called Ay-Ay, but which was christened Santa Cruz, was next visited for water, and the crew had a disagreeable experience of the warlike propensities of the Caribs, who fearlessly attacked them, shooting envenomed arrows at them from their bows with great accuracy of aim. The archipelago of small islands, now known as the Virgin Islands, were next discovered and named after St. Ursula and her 11,000 virgins. The larger island of Borinquen which was named San Bautista, afterwards Puerto Rico, and Xamayca, now Jamaica, were the remaining discoveries of importance on this voyage. Columbus's objective was Hispaniola. Finding the fort which he had erected there destroyed, he sailed on westward, and it was on May 2nd, 1494, that Jamaica was first sighted, and three days later he anchored off its north coast in a bay now identified with Saint Ann's Bay which, owing to its beauty, he called Santa Gloria. He named the island Santiago, and on leaving it he passed through a labyrinth of islands, supposed to be the Morant Cays, which he called "The Garden of the Queen."

Sickness, mutinies, and hardships characterised Columbus's second voyage, and, exhausted, the great navigator left Hispaniola in the *Niña* on March 10th, 1496, and arrived at Cadiz after a tempestuous voyage on June 11th.

On May 30th, 1498, Columbus sailed from San Lucar de Barrameda on his third voyage with only six vessels. He was now in indifferent health and most of his crew were

also sick; and as the Cape de Verde islands belied their name and were brown through drought, he at once pressed forward, steering a more southerly course than on his previous voyages. For seventeen days a fair wind was encountered, and the voyage was propitious, for on July 31st Alonzo Perez sighted three mountains above the horizon. The crew burst into a hymn of thanksgiving, and Columbus, in accordance with a yow, named the island Trinidad, after the Trinity. At the hour of Compline they neared a cape which Columbus named La Galera—now Cape Galeota—from its likeness to a ship. He then sailed along the west, entered the Gulf of Paria, which he called Golfo de la Balena, by the Boca del Sierpe, or Serpent's Mouth, and on August 1st for the first time Europeans set foot on Trinidad, the actual landfall being at Punta del Arenal. Here a party of Indians came off to the ship and for their amusement some boys were instructed to dance on the poop, but the sound of the tambourines frightened them to such an extent that they made off again. Eventually Columbus sailed out of the Gulf by one of the channels which he named, from their formidable appearance, Bocas del Dragones, or the Dragons' Mouths, and on his voyage to Hispaniola he discovered Tobago, Grenada, which he called Concepcion and Margarita.

Meanwhile, popular feeling at home had turned against Columbus, and in July, 1500, Ferdinand sent out Francisco Bovadilla to supersede him and to bring him back in irons, and in irons the great discoverer returned to Cadiz. The people of that city were, however, greatly indignant and sympathy soon veered round in his favour again. Indeed, so high did the feeling run that Ferdinand himself disclaimed all responsibility for the ill-treatment of the discoverer, who was once more received with every sign of favour and distinction.

Aged, but still enthusiastic, Columbus started on

THE DEATH OF COLUMBUS

May 9th, 1502, on his fourth, and what proved to be his last, voyage with four vessels and sufficient provisions to last two years. His object now was to search for a passage to the south seas, which he hoped to find near the Isthmus of Darien. It was on this voyage that he discovered St. Lucia and the country which is now British Honduras. On this occasion he was forbidden to land at Hispaniola, and his vessel was nearly wrecked by a hurricane, which did destroy the richest homeward bound fleet that had yet left the island. After a long stay in Jamaica, where he landed at Don Christopher's Cove, he eventually set sail for Spain and reached San Lucar at the end of 1504, to hear for the first time of the death of his patroness Isabella.

Columbus, worn out with anxiety, was now very ill, and on May 20th, 1506, the great discoverer died. His remains were transferred to Seville and laid by those of his son Diego. The bodies of father and son were exhumed in 1542, and laid with due solemnity in an ornate tomb which can still be seen in the Cathedral of San Domingo. There they rested until 1795 when the island was ceded to the French and they were transferred to Havana. Subsequent to the American war the remains of Columbus once again crossed the Atlantic and were deposited with fitting ceremonial in the Cathedral of Seville, where they now lie.

CHAPTER II

THE HISTORY OF THE WEST INDIES

THE history of all the British West Indian colonies has, to adapt the words used in the epitaph on the tomb of Sir Thomas Warner, the founder of St. Kitts, been written with sword's point. Of all the important islands Barbados alone has been in the undisputed possession of

England from the time of its first settlement.

Barbados has the distinction of being the only British island in the West Indies over which no foreign flag has ever flown. About sixty years after its discovery by the Portuguese, the Oliph Blossome, an English vessel fitted out by Sir Oliph Leigh, which, to be exact, sailed from Woolwich on April 14th, 1605, with colonists and stores for a settlement on the Oyapok in Guiana, put in there, being far out of her course through careless reckoning. Finding the island uninhabited, the men landed at the spot where Holetown now stands and, erecting a cross, they inscribed on a tree near by "James K. of E. and of this island." They then coasted round to the place afterwards called Indian River and repeated the ceremony. After taking in a supply of wood and water, and perhaps of hogsfor the Portuguese left numbers on the island when they first discovered it—they proceeded on their voyage, and Barbados was for many years after left undisturbed by Europeans, though it was probably visited from time to time by Caribs from St. Vincent.

About twenty years later some Dutch vessels touched at the island, and the glowing account which their masters gave of it on their return to Zeeland reached the ears of a wealthy merchant, Sir William Courteen, who had for some time been trading with the New World.

OWNERSHIP OF BARBADOS

These favourable accounts of the island were soon afterwards confirmed by the sailors of one of Sir William Courteen's own vessels which was driven to it by foul weather on her return voyage from Pernambuco. The enterprising merchant thereupon decided to send out settlers, and with this object in view he secured the protection of Lord Leigh, afterwards the Earl of Marlborough, and the Lord High Treasurer, who had obtained a grant of the island from James I. An expedition was accordingly equipped, and in 1625 the William and John, commanded by John Powell, set out for Barbados with about forty Englishmen and seven or eight negroes. They reached their destination early in 1626 and disembarked very near the place where the sailors of the Oliph Blossome landed, and here they laid the foundation of the town which they loyally called Jamestown after their King, and appointed Captain William Dean their Governor. Captain Powell then proceeded to Essequibo in Guiana, where he obtained from a Dutchman, who resided there, seeds and plants of cassava, vams, Indian corn, sweet potatoes, plantains, oranges, limes, pineapples, sugar-cane, tobacco, cotton and annatto, with which he returned to Barbados. He also took back with him an Arrawak Indian to show the settlers how they should be cultivated.

Tobacco, indigo, and cotton were planted, and these with fustic wood, of which there was an abundance on the island, became the staple commodities. Meanwhile, complications regarding the ownership of the island arose. A commission covering all the islands of the Caribbean had been given to James Hay, Earl of Carlisle. This was opposed by the Earl of Marlborough and tedious litigation ensued. Eventually, however, a compromise was arrival at, the Earl of Carlisle agreeing to pay to the Earl of Marlborough and his heirs for ever an annuity of £300 in consideration of the latter relinquishing his claim, and

the Earl of Carlisle was confirmed as sole proprietor of Barbados and the other Caribee islands. This agreement was honourably observed; but while Lord Carlisle was absent on a mission, Sir William Courteen induced the Earl of Pembroke to claim the island, and it was granted to him in trust for its first coloniser.

At this juncture Lord Carlisle returned from abroad, and as the outcome of a vigorous protest, Lord Pembroke's patent was revoked, and he recovered possession of the island. In order to strengthen his position he made an offer of land to adventurers on the condition that each person availing himself of it should pay him 40 lbs. of cotton annually. Ten thousand acres were granted to a society of London merchants, who selected Charles Wolferstone to manage their affairs. Wolferstone, who was a Bermudian, took out with him settlers in a vessel which dropped anchor in the bay, ever since called Carlisle Bay, and founded the town called the Bridge, now Bridgetown. They found Courteen's settlers too flourishing for their liking, and Wolferstone declaring that they were usurpers, summoned them to appear before him, and a bitter feud arose. Lord Carlisle's men assumed the title of the Windward men, while the first settlers at Jamestown became known as the Leeward men, and a struggle for the mastery ensued between the two groups of settlers, which ended by the Leeward men being overpowered. Lord Carlisle died, deeply involved, in 1636, leaving the Caribee Islands in trust for the payment of his debts, with remainder to his son and heir. In about 1647 his son entered into negotiations with Francis, Lord Willoughby of Parham, to whom he transferred his interest for a period of twenty-one years.

When Charles I was impeached and beheaded in 1649, the people of Barbados remained attached to the Royalist cause, and proclaimed Charles II their lawful sovereign. Lord Willoughby, himself a Royalist, was compelled to



A PALM-FRINGED BEACH, BARBADOS



THE ROUNDHEAD OR CAVALIER

make his way to the island secretly, but he arrived there in 1650 and assumed the government. Many Royalist families and divines sought refuge in Barbados, and so tense was the political feeling that anyone who mentioned the words Roundhead or Cavalier was compelled to give to all who heard him a "shot" (a young pig) and a turkey—"which sometimes," says Ligon, "was done purposely, that they might enjoy the company of one another; and sometimes this Shot and this Turky would draw a dozen dishes more."

Sir George Ayscue was sent out by the Protector with a strong squadron to reduce the island, and he arrived off Barbados on October 10th, 1651, but it was not until the following January that he brought the loyal colonists to submission, Colonel Thomas Modyford, a cousin of General Monk, and a large body of colonists deciding to accept good terms from Ayscue rather than see their island ruined. In arriving at this decision they were no doubt greatly influenced by the effect of the Navigation Act, which was intended to destroy the Dutch carrying trade. On the 17th of January, 1652, a charter was signed by Lord Willoughby and the Commissioners of the Commonwealth. The most important article of it provided that "no taxes, customs, imports, loans or excise shall be laid, nor levy made on any of the inhabitants of this island, without their consent in a General Assembly." Lord Willoughby was ordered to return home, and other prominent residents were banished; and Ayscue left Barbados on March 29th, reaching Plymouth in the following June with thirty-six prizes.

Immediately after the Restoration Lord Willoughby applied to Charles II for a renewal of his Commission, and was reinstated, being appointed Governor of Barbados as well as Captain-General and Governor-in-Chief of the Caribee Islands; in order to reward the inhabitants who had remained faithful to the Crown, seven prominent

residents received the honour of a baronetcy and six were

knighted.

On June 13th, 1663, the Privy Council reviewed Lord Willoughby's claims, and decided that the half of the annual profits derived from Barbados should go to him for the rest of his lease, with remainder to the Government. and half towards the discharge of the Marlborough claim and to the payment of £500 a year to the heirs of Lord Carlisle. After the discharge of all liabilities, the heirs of Lord Carlisle were to be granted £1,000 per annum. In order to raise this money a duty of 4½ % was imposed on all produce exported from the island. This proved a source of grievance to the inhabitants for many years. Pamphlets were issued with such titles as "The Groans of the Plantations," petitions were constantly sent forward, and deputations waited upon ministers. By 1832 it was claimed that the island had paid away no less a sum than six million pounds sterling in this export tax. In 1834 the Legislature of Barbados passed an act remitting the duty, but the Imperial Government did not finally relieve the people of Barbados of their liability until 1838.

In 1672 Richard Blome described Barbados as a "potent colony, being able, as occasion requireth, to arm 10,000 fighting men, which [sic], with the strength that nature hath bestowed on it, it is able to bid defiance to the strongest foe, having been several times (but in vain) assaulted by the Spaniards."

The colonisation of Jamaica dates from 1509, when Esquimel was sent by Diego, the son of Columbus, to assert his rights there, and to form a settlement. Esquimel landed at St. Ann's Bay, as Columbus did, and founded the town of Sevilla Nueva or New Seville.

The island was raided by the English as far back as 1596-7. On January 29th in that year, Sir Anthony Shirley dropped anchor in Kingston Harbour, and landing

THE CAPTURE OF JAMAICA

at Passage Fort marched to St. Iago de la Vega, now Spanish Town, which he attacked and plundered. 1638 the island was again invaded, Colonel Jackson landing with about 500 men whom he had got together in the Windward Islands; but on this occasion the Spanish showed their teeth, and it was only after a sharp fight. in which he lost forty men, that he gained a victory. After extracting a ransom from the inhabitants of St. Iago de la Vega he withdrew, and the island was left in comparative peace until 1655. In that year an expedition under the joint command of Admiral Penn and General Venables was sent out by the Protector to capture Haiti. Their attempt on Haiti ended in disaster, and they suffered severe losses at the hands of the Spanish, while hunger and disease played havoc with the troops. Penn and Venables, dreading the reproaches which would be heaped on their heads if they returned home defeated, then decided to endeavour to retrieve their honour by taking another Spanish island and sail was accordingly set for Jamaica. On May 3rd the British fleet rounded Port Royal and the Palisadoes and anchored off Passage Fort. The undisciplined troops were landed, and probably much to their astonishment, the colonists who had been collected to oppose them retreated to St. Iago de la Vega. No attempt was made to defend the city, and on May 11th, Articles of Capitulation were signed and Jamaica became a British Colony, which it has since remained.

In 1657 Don Antonio Sasi, the last Spanish Governor, endeavoured to regain possession of the island for Spain, but he was defeated by Governor Doyley at Ocho Rios.

The Cayman Islands which, when they were first discovered by Columbus were called Las Tortugas, were taken possession of by the English soon after the conquest of Jamaica, and they were mainly colonised from that island, the population being strengthened from time to time by shipwrecked sailors.

The history of Turks and Caicos Islands is practically the same as that of the Bahamas, of which they are units geographically, although politically they are under the wing of Jamaica. The islands remained uninhabited until the end of the seventeenth century, when Turks Islands began to be visited every year by salt rakers from the Bermudas. In 1710 these pioneers were expelled by the Spaniards, but they soon returned and carried on their salt industry intermittently for about forty years. In 1799 the islands were included for administrative purposes with the Bahamas, but in 1848 they were placed under the Governor of Jamaica.

Trinidad remained a Spanish possession for almost 300 years after its discovery by Columbus, in 1498, though its capital San José de Oruña was sacked by Sir Walter Ralegh in 1595. No definite attempt appears, however, to have been made to settle the island until the arrival of Don Antonio Sedeño as Governor in 1532. He it was who founded the former capital, now the small town of

St. Joseph, seven miles from Port of Spain.

After visiting La Brea, where he caulked his ships, Ralegh proceeded to Port of Spain, then "Puerto de los Espannoles or Conquerabia." He found deer and wild pigs on the island and "fruits, fish and foules" besides "sufficient maiz, cassaui, and of those roots and fruites which are common everywhere in the West Indies." He described the soil as excellent and added that it "will beare suger, ginger, or any other commoditie that the Indies yeeld."

At Port of Spain he was visited by some Spaniards whom he entertained and feasted, eliciting from them when a few "draughts" had "made them merrie," a good deal of information about Guiana and its riches, and he also ascertained from an Indian Cacique what the strength of the Spanish was, being anxious to take revenge on Don Antonio de Berreo, the Governor, for

DON DE BERREO'S CRUELTY

having betrayed eight Englishmen in 1594. His warlike spirit was further roused by hearing of de Berreo's cruelties; how that Governor kept the Indians as slaves in chains; how he dropped burning bacon on their naked bodies, and otherwise tormented them.

Ralegh accordingly "so as both to be revenged of the former wrong, as also considering that to enter Guiana by small boats, to depart 400 or 500 miles from my ships, and to leave a garison in my backe interrested in the same enterprize, who also dayly expected supplies out of Spaine, I should have savoured very much of the asse," set upon the guard and captured San José at daybreak. He then set fire to the city, took Berreo and his companions back to the ships in triumph and set sail for Guiana where he explored the Orinoco with the assistance of his prisoner, who was already acquainted with that country.

Much distress was caused in the colony in 1723 through the failure of the cacao crop, which resulted in many colonists leaving the island, and in 1740 the inhabitants complained that they could only attend Mass once a year and then only in clothes borrowed from one another.

In 1780 at the instance of a M. St. Laurent, a Frenchman from Grenada, who had been much impressed by the possibilities of the island, a decree was issued encouraging foreigners to settle in Trinidad, and in 1783, as the outcome of a further proclamation calling attention to the fertile soil of Trinidad, a considerable influx of new settlers took place. Don Josef Maria Chacon was sent out as Governor, and the population rose rapidly from 300 in 1783 to 18,000 in 1797, and as most of the settlers were French, the island, though nominally Spanish, became practically a French one in its aspirations.

The circumstances which led to our taking Trinidad began in 1796. On a certain day in May in that year Captain Vaughan of the *Alarm*, hearing that some French

privateers were annoying British merchantmen in the Gulf of Paria, proceeded to the Bocas and sent the Zebra sloop of war forward to Port of Spain to ask permission to attack and destroy them in the neutral waters.

Captain Skinner, of the Zebra, arrived at Port of Spain at night, anchored off the town and interviewed the Governor Chacon, who expressed the hope that the rights of neutrality might be respected. He weighed anchor next morning, and as she neared the Bocas the Zebra was mistaken by the privateers for an English merchantman, the Mary, and a violent engagement ensued during which the whole fleet of privateers was destroyed, though many of the crews got ashore and made their way to Port of Spain vowing vengeance against the English.

Captain Vaughan at once proceeded to Port of Spain to pay his respects to Chacon, and one evening while a party of his officers were visiting a Welsh lady in a house in what is now Frederick Street, some of the men from the privateers insulted an English sailor from the Alarm and a general fight took place, the privateers' men using such arms as they could collect, and the Alarm's crew retaliating with oars, boat-hooks, etc. The officers rushed out drawing their swords, and a mêlée ensued.

The Alarm's men managed to fight their way back to their boats and next morning Captain Vaughan landed an armed force and marched upon Port of Spain with colours flying and the drums and fifes playing "Britons strike home." Fortunately bloodshed was averted for the moment, and Vaughan was persuaded to withdraw; but the incident formed one of the counts on which Spain declared war against England a few months afterwards, and on February 12th, 1797, a formidable expedition under the command of Sir Ralph Abercromby set out from Martinique to reduce the island.

Their task proved an easy one, as the Spaniards offered no resistance. Indeed, they fired their own ships which

THE CAPTURE OF TRINIDAD

were lying under the shelter of the forts on Gaspar Grande, the island in Chaguaramas Bay, Apodaca, their Admiral, himself helping to strew rosin, sulphur and combustibles on the deck of his own three-decker.

On the following day Abercromby landed at Port of Spain and Chacon surrendered the island without a fight. Trinidad thus passed under the British flag, and in 1802 our ownership of the island was confirmed by the Peace of Amiens.

The history of Tobago has been far more varied than that of its larger neighbour Trinidad, of which it is now a "ward." The island, although uninhabited for years after its discovery by Columbus, appears to have been a happy hunting-ground of the warlike Caribs from Trinidad and the Main, who for years effectively checked every attempt which was made to colonise it.

Some writers assert that Tobago was first colonised in 1580; but it is more probable that the earliest settlers were those who arrived there from Barbados in 1639, but were, however, soon driven off by the Caribs, the survivors of the party escaping to New Providence. Tobago was included in the grant made in 1628 by Charles I to the Earl of Montgomery, and, soon after, 200 Zeelanders from Flushing landed and called the island New Walcheren. They, too, were, however, attacked and driven off by the Caribs, who on this occasion were aided and abetted by the Spaniards.

In 1641 James Duke of Courland sent out two shiploads of settlers, who were followed in 1654 by a party of Dutch colonists, collected by two merchants from Flushing named Adrian and Cornelius Lampsius, and they established themselves on the southern coast. After a while, a quarrel arose between the Courlanders and the Dutch, and the former being overpowered, the Netherlanders remained in undisputed possession of the entire island until 1662. In that year, the notice of the French

West India Company having been drawn to Tobago through some French settlers who had settled there, the founders of the Dutch settlement applied to Louis XIV for rights over the island, and Cornelius Lampsius was created Baron of Tobago and proprietor of the island under the Crown of France.

The grant of the island to the Duke of Courland was renewed in 1664, but the Dutch, who still considered Tobago a dependency, refused to recognise the claim of that nobleman. An appeal being made by them to the King of England, Charles II decided in favour of the Duke of Courland, to whom he awarded the island.

At the beginning of 1666 Tobago was captured by English privateers from Jamaica, who left behind them a garrison of fifty men. Within a year, however, the small garrison was compelled to surrender to a mere handful of Frenchmen from Grenada, who were mistaken for a much larger force; but they in turn abandoned the island in 1667 and left the Dutch in processing.

in 1667 and left the Dutch in possession.

In 1672 the Dutch settlement was destroyed by Sir Tobias Bridges, who was sent against it by Lord Willoughby with 600 Barbadian troops. The Dutch returned, however, only to be defeated by a French fleet under Count D'Estrées in 1677 after one unsuccessful attack. The French did not long retain their hold of Tobago; the Duke of Courland once again claimed it, and in 1682 transferred his title to a company of London merchants. Attempts were again made to colonise the island, though without much success, in spite of the efforts of an enthusiast named Captain John Poyntz, who in 1683 published a highly-coloured account of the island, entitled "The Present Prospect of the Famous and Fertile Island of Tobago: with a Description of the Situation, Growth, Fertility, and Manufacture of the said Island. To which is Added, Proposals, for the Encouragement of all those that are minded to settle there."

EASILY-MADE FORTUNES

Poyntz, who appears to have been imbued with the true company promoting spirit, mentions in his preface that he purchased "a grant of 120,000 acres of the said island for myself and company, upon very advantageous conditions" (in spite of the total area of the island being only 73,313 acres), and otherwise drew the long-bow in a most amiable fashion. The "advantageous conditions" were that the land was to be leased rent free for seven years, and at 2d. per acre thereafter, and this enabled Poyntz to offer most generous terms to prospective settlers who could acquire as much land "as they themselves please, either by lease or purchase," on condition of their putting one white man on every fifteen acres.

Under the heading, "Directions for Improvement in the Island of Tobago," Poyntz showed conclusively how "a man that has an £100 sterling" and was "minded to transport himself and family, consisting of eleven in number, to this Island of Tobago" and laid out £100 could at the end of the seventh year clear £5,000 from fifty acres of land. The settlers were also promised credit from crop to crop, etc., etc., but history does not relate whether many called at "Mr. Nathaniel Morin's at the Blew Anchor in Finch-Lane, . . . and at Jones's Coffee-house in Ship-yard in Bartholomew Lane and at the Amsterdam Coffee House," where they were told that they would receive "more particular satisfaction" and could meet some of the proprietors.

Tobago was included among the islands declared neutral by the Treaty of Aix-la-Chapelle in 1748; but in 1762 the island was captured by the English, to whom it was ceded in the following year. Now for the first time development steadily proceeded, and it was not until the disastrous year of 1781, which saw the downfall of so many English colonies in the West Indies, that the peace of the island was again disturbed. In that year it was captured by Marquis de Bouillé, and in 1783 it was

ceded to France. Ten years later it was retaken by the English, only to be restored to the French at the Peace of Amiens in 1802. In the following year it was recaptured by Hood and it was definitely ceded to us by the Treaty of Paris in 1814, since when Tobago has remained a British colony.

Such is the remarkable history of Tobago down to the year in which it finally became British. It has, however, other potent claims on the notice of Englishmen, as it is the island described by Defoe in his immortal work, *Robinson Crusoe*. Though the story of that book is based on the adventures of Alexander Selkirk, who was marooned on the island of Juan Fernandez, it is a generally accepted fact that Tobago was the island which Defoe had in his mind when he wrote his graphic descriptions of the tropical

island on which poor Crusoe was wrecked.

An abortive attempt to found a colony in Grenada was made by some London merchants in 1609, but they were driven off by the Caribs, who were instigated by the Spaniards in Trinidad, and it was left to the French to settle the island. In 1650, Du Parquet, the Governor of Martinique and a nephew of d'Esnambuc, the founder of the French colony in St. Kitts, took formal possession of the island, built a fort and left 200 settlers there. The Caribs, however, soon began to give trouble, but with the aid of reinforcements from Martinique they were exterminated, the few survivors leaping into the sea to escape from their enemies, at the spot now known as the Morne des Sauteurs, or the Leapers' Hill. Parquet sold the island to Count de Cerillac in 1656. Count in turn disposed of it to the French West India Company in 1665, and on the dissolution of that organisation it passed to the French Crown, in whose possession it remained until 1762, when it capitulated to the English under Commodore Swanton, to whom it was ceded in the following year. Grenada was recaptured by France in

ROBESPIERRE AND HUGUES

1779 in spite of the gallant resistance of the Governor, Lord Macartney, but finally restored to England in 1783 by the Treaty of Versailles.

During the wars of the Revolution, the position of Grenada was very critical, and we were within an ace of losing the island. Victor Hugues, the friend of Robespierre, stirred up an insurrection of the French inhabitants and slaves, which broke out on March 2nd, when a coloured insurgent, Julien Fédon, entered Grenville and massacred the inhabitants. Simultaneously an attack was made on Charlottetown, or Gouyave, and Lieut.-Governor Ninian Home, who was returning round the north side of the island in a boat was, on putting ashore, captured by the rebels. After suffering great hardships the unfortunate man was massacred with forty-seven other persons during an attack which was made by the English on Fédon's camp. It was not until June in the following year that the rising was suppressed by Sir Ralph Abercromby. Nearly all the ringleaders were captured, with the exception of Fédon, who escaped to the woods and was never seen again. Thirty-eight of the rebels were executed, among them being Baptiste. Mr. Ninian Home's murderer, the remainder, with numbers of slaves who had taken part in the rebellion, being deported to Honduras.

The French power in the island was now shattered, the leading French residents being either killed or banished and their properties confiscated. No further attempt has since been made on Grenada, whose subsequent history has been one of varying prosperity. After the emancipation of the slaves, sugar was gradually replaced by cacao, and in 1856 no less than forty-seven sugar estates had been abandoned. From that time the export of cacao gradually rose, till at the present day, Grenada is one of the most prosperous of the West Indian islands.



St. Vincent was another stronghold of the Caribs, and for this reason all attempts to settle it failed for many years. In 1660 it was declared neutral, but eight years later Lord Willoughby secured the adhesion of the Caribs to a treaty under which they acknowledged themselves to be subjects of the King of England. Still, however, no colonisation was effected and the Caribs. driven out of the neighbouring islands, took refuge in St. Vincent: but the Indians soon had to face trouble from within, for some of them having married shipwrecked negroes, a new race sprang up, known as the black Caribs, as distinct from the pure-blooded Indians, who were known as the yellow Caribs. The black Caribs eventually predominated. The Duke of Montague, who received a grant of the island from George I in 1722, sent out a party of settlers; but the French protested, and the neutrality of the island was recognised by the Treaty of Aix-la-Chapelle in 1748. General Monckton captured St. Vincent in 1762, and colonisation then proceeded on normal lines. The General himself obtained a grant of 4,000 acres of land which he subsequently sold for £30,000. The Caribs now again refused allegiance to the king, and troops had to be introduced from America to subdue them. After some desultory fighting, a treaty was concluded through the efforts of Major-General Dalrymple in 1773. A definite tract of land in the north of the island was granted to the Caribs, who acknowledged the supremacy of the English.

St. Vincent was captured by the French in 1779, but restored to England by the Treaty of Versailles in 1783. In 1795 this island suffered the same fate as Grenada and St. Lucia, an insurrection being stirred up by the emissaries of Victor Hugues, which at length assumed the proportions of a war, which is known to history as the Brigands' War. The Caribs rose under Chatoyer and Duvallé and pillaged the island, murdering many of the



FORT DUVERNETTE, OFF ST. VINCENT



THE "BRIGANDS' WAR"

colonists, the survivors of whom were besieged in Kingstown, the capital. For nearly a year this state of affairs continued, and then Sir Ralph Abercromby arrived from St. Lucia, and succeeded in bringing the Caribs to submission. Many of them were deported to Ruatan, in the Bay of Honduras, their lands being seized and sold.

With the other islands St. Vincent suffered severely from the ruinous competition of bounty-fed sugar, which reduced her sugar industry almost to vanishing point. The island has also been swept by several hurricanes of more than common violence, the two worst being those of 1780 and 1898. The eruptions of the Soufrière in 1812 and 1902 also caused much devastation, but fortunately, even from such appalling visitations as these, tropical islands speedily recover. Their recuperative powers are quite extraordinary, and with the introduction of sea island cotton cultivation, St. Vincent soon began again to enjoy a fair measure of prosperity.

The ownership of St. Lucia was more bitterly contested than that of any other West Indian island. This was no doubt due to its having such a magnificent land-locked and sheltered harbour as that of Castries, the strategic value of which in the eighteenth century was immense. After visiting Barbados Sir William Courteen's vessel, the *Oliph Blossome*, touched at St. Lucia in 1605, and a temporary settlement was effected in 1638 by Captain Judlee with an expedition from Bermuda and St. Kitts, but the Caribs soon succeeded in driving the new-comers

off the island.

Two Frenchmen, Messieurs Houel and Du Parquet, purchased the island in 1650, and a colony was founded by forty settlers under Rousselan, who ingratiated himself with the natives by marrying a Carib wife. When he died, however, the Caribs killed three of his successors who failed to take the same precaution, before the treaty of 1660 was settled, which secured the Caribs from

interference in Dominica and St. Vincent, provided that they maintained the peace elsewhere. In 1664 Lord Willoughby sent an expedition against the island from Barbados, defraying the expenses out of the 4½ % export duty with which these islands were taxed, and the French were overpowered, but by 1666 the English, overwhelmed by sickness and constant wars with the Caribs, had left the island. In 1718 St. Lucia was granted to Marshal d'Estrées, but English protests were upheld. The Duke of Montague, fortified with a grant from George I, sent Captain Uring to effect a settlement, which he attempted to do, but he was frustrated by the arrival of a powerful French force from Martinique. Both nations then agreed that the island should remain neutral, and its neutrality was recognised by the Treaty of Aix-la-Chapelle in 1748. St. Lucia was, however, too valuable an island to remain no man's land for long, and in 1762, Rodney and General Monckton captured it, though it remained ours for scarcely a year, being restored to France in 1763. With what seems now bewildering frequency St. Lucia changed hands between France and England.

War broke out with France in 1778, and Rodneystrongly urged upon the government the desirability of acquiring St. Lucia. They fell in with his views, and troops were landed at Grand Cul-de-Sac Bay. Count d'Estaing endeavoured to drive them off, but they succeeded in capturing the island, and in spite of an attempt to retake it in 1781, it remained British until the end of the war.

Rodney's estimate of the strategetic value of St. Lucia proved correct and it was from Gros Islet Bay, at the north-east corner of the island, that he sailed with his fleet in 1782, and inflicted a crushing defeat on Count de Grasse, whose movements he had been closely watching from Pigeon Island, in the battle of the Saintes off Dominica. The sentiment and sympathies of the island were, however, still French, and notwithstanding its

ST. LUCIA THE FAITHFUL

value it was restored to France by the Treaty of Versailles

in the following year.

During the French revolution St. Lucia was called "the Faithful" by the National Convention, as a reward for the prominent part which its inhabitants took in giving effect to the revolutionary doctrines. The slaves rose and the guillotine was set up and used in the market-place. In 1799, Admiral Sir John Jervis, who afterwards became Lord St. Vincent, after taking Martinique, captured St. Lucia, the Morne Fortuné being successfully stormed by the Duke of Kent, the great-grandfather of our present King George V, who hoisted the English colours on its summit.

The slaves had, however, tasted blood, and with their assistance Victor Hugues retook St. Lucia. Abercromby and General—afterwards Sir John—Moore were sent out to recover the island. Moore's health broke down, and he was invalided home, but the work begun by him was completed by General Drummond, and St. Lucia was subdued in 1797. The island was again restored to France by the Treaty of Amiens, in 1802; but when war broke out once more in the following year, our troops again captured the Morne, and the island ceded to England by the Treaty of Amiens in 1802.

To the little island of St. Christopher, or St. Kitts, which now forms with Nevis a presidency of the Leeward Islands, belongs the honour of being the "Mother Colony" of the British West Indies, for though Barbados was nominally taken possession of in 1605, that island was not definitely settled until 1626, while St. Kitts was colonised in 1623. Its coloniser was Thomas Warner, a "worthy industrious gentleman" who went out to the island at the suggestion of Captain Thomas Painton, a seaman "as enthusiastic as he was experienced," and believing that "it would be a very convenient place for ye planting of tobaccoes, which then was a rich

commoditie," decided to establish a settlement there. He accordingly returned to England, and supported by Sir Ralph Merrifield, who arranged and financed the undertaking, he left again for St. Kitts with a number of settlers under the protection of the Earl of Carlisle, having obtained a commission granting to him "St. Christopher alias Merwars Hope" (a name obviously compounded from the first syllables of the surnames of the first coloniser and of his protector), Nevis and Montserrat. Soon after the landing of Warner with his settlers, Sieur D'Esnambuc, a French privateering sailor from Dieppe, reaching the island, was welcomed by the English who were expecting an attack from the warlike Caribs, and eventually the English settled in the middle of the island, and the French at either end. The Caribs were at first friendly to the colonists; but it was not long before they showed their warlike propensities, and attacked the new settlers. The French and English however, in the face of a common foe, stood shoulder to shoulder, and in a sharp encounter overcame their antagonists and massacred most of them, chasing the few survivors into the sea. The settlers soon had a more stubborn foe to face. for the Spaniards, resenting what they considered the intrusion of foreigners, attacked the island with a fleet of thirty-eight ships under Admiral Frederigo de Toledo in 1629.

The colonists were nearly annihilated, and the majority of the French survivers left for Antigua, while the English were deported. Some of the Frenchmen remained hidden in the woods, however, and as soon as the Spanish fleet withdrew they re-established their settlements. During the war with France the French attacked their English neighbours, and though the timid English governor was assisted by Colonel Morgan, the uncle and father-in-law of the intrepid buccaneer, Sir Henry Morgan, the French became masters of the entire island.

BRIMSTONE HILL, ST. KITTS

But this was only for a short time, for by the Treaty of Breda in 1667, the English were reinstated.

In 1689 the English were again dispossessed, but in the following year Sir Timothy Thornhill landed at Frigate Bay and captured the whole of St. Kitts. For seven years the English remained in undisputed possession, and the French had their part of the island restored to them by the treaty of Ryswick in 1697. For the third time the English, under General Hamilton, took the whole island in 1702, and in spite of a further attempt by the French, it was ceded to them by the Treaty of Utrecht in 1713.

The French once more besieged St. Kitts in 1782. The Marquis de Bouillé, supported by Count de Grasse, landed 8,000 men on the island, and in spite of a spirited defence by General Fraser and Governor Shirley, and in spite, too, of Sir Samuel Hood's brilliant feat in out-manœuvring de Grasse and capturing the anchorage at Basseterre, the garrison which had withdrawn to a grand old fortress known as Brimstone Hill, was compelled to capitulate. The island was, however, restored to England after Rodney's great victory over de Grasse on April 12th, 1782, by the Treaty of Versailles in the following year.

Nevis, which was included in the grant to James Hay, Earl of Carlisle in 1672, was colonised by some English from St. Kitts in the following year. In 1609 the settlement was nearly destroyed by the Spaniards, and in 1706 it was ravaged by the French, who destroyed property to the value of half a million sterling and carried off between three and four thousand slaves. On April 30th, 1680, Jamestown, the first capital, was engulfed with its inhabitants; in 1737 cultivation was destroyed by a blight, and in 1772 the island was visited by a devastating hurricane; but in spite of an occasional setback it prospered exceedingly, being made the slave market of the Leeward Islands by the Royal African Company, while for a short period it was the seat of

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government of this group. In 1782 the island was invaded by the French. Alexander Hamilton, the statesman who drafted the constitution of the United States, was born in Nevis on January 11th, 1757, and the island also has the distinction of having given Nelson his bride. On March 11th, 1787, Horatio Nelson, then captain of the Boreas, was married at Montpelier House to Frances Herbert Nisbet, the widow of Dr. Nisbet and daughter of William Woolward. Prince William Henry, Duke of Clarence, afterwards King William IV, who was at the time in command of the West India station, as already stated, attended the bridegroom as best man. The register in which the marriage is recorded is treasured at Fig Tree Church, and a tablet affixed in 1911, at the instance of Mr. T. L. Roxburgh, the Administrator of St. Kitts-Nevis, to the gate posts, which are almost all that is left of Montpelier House, reminds the passer-by of the historic connection of Nevis with the hero of Trafalgar.

The settlement of Antigua dates from 1632, when some English from St. Kitts settled there under Captain Edward Warner, the eldest son of Sir Thomas Warner. They began to cultivate tobacco, but the plantations were destroyed by a hurricane in the following September. Nothing daunted, however, the colonists planted another crop, which was successfully reaped and exported in 1624. In 1640 a fierce encounter took place between the English settlers and the Caribs, who had for several years been harassing them, and though the Governor's wife and her two children were abducted, the English managed to repel the invaders. More settlers arrived in 1647, and the history of the island became one of steadily increasing prosperity, a further attack by the Caribs in 1654 being beaten off. During the Commonwealth, the island remained loyal to the Crown, and was in consequence included in the Act of 1650, which prohibited trade with Virginia, Barbados and Bermuda, on

CARIB STRONGHOLDS

account of their rebellious attitude. Antigua, however, in 1655 levied troops to join the intended expedition of Admiral Penn and General Venables to San Domingo, but when those two commanders arrived, the Governor represented the state of the island to be so disastrous that they only stayed two days and did not after all impress any men. During the war with France in 1666, Antigua was reduced by the French, who, reinforced by Irish and Caribs, landed at Five Islands Bay, but the island was ceded to England by the Treaty of Breda in the following year, the government being entrusted to Lord Willoughby of Parham.

In 1689 the population of Antigua was swelled by the arrival of a number of refugees from Anguilla, who were expelled from that island by the Irish and French. The French also endeavoured to invade Antigua, but they

were driven off by Sir Timothy Thornhill.

The history of Montserrat is less eventful than that of several of its neighbours. It was settled by colonists—most of whom were Irish and Roman catholics—from St. Kitts under Sir Thomas Warner. In 1664 the island was captured by the French; but it was restored four years later to England, in whose possession it remained until 1782, when it was again taken by the French. It was, however, ceded to England in the following year by the Treaty of Versailles.

Dominica was the chief stronghold of the warlike Caribs in the Leeward Islands, and as every attempt to subdue them failed, it was, with St. Vincent and St. Lucia in the Windward group, declared "neutral" by the Treaty of Aix-la-Chapelle in 1748. It was agreed that the Caribs should be left in undisturbed possession of the island, but the French, attracted by its great fertility, soon settled in it, and established plantations. They were, however, dispossessed by the English in 1759, and in 1763 the island was ceded to England by the Treaty of

Paris. In 1778 Dominica was invaded by the French under the Marquis de Bouillé; after a stubborn resistance the garrison capitulated, and it was not until the peace of 1783 that the island was restored to England. During the French Revolution it was invaded by Victor Hugues and a force from Guadeloupe in 1795, and a further attempt was made on it in 1805, when General La Grange landed and compelled the Governor, Brigadier-General Prevost, to withdraw to Prince Rupert's Bay. After burning Roseau and exacting a payment of £12,000 from the inhabitants, La Grange withdrew, and since then no further attempt has been made on the island. This trying period is still spoken of in Dominica as "La Grange," and the centenary of the gallant defence was celebrated in 1905, when an exchange of courtesies took place between the officers of the Duke of Cornwall's light infantry, which formed part of the defending force, and the Administrator.

The Virgin Islands owe their settlement to the Buccaneers. Dutch filibusters (or flibustiers, so called from the flyboats in which they sailed) settled in Tortola in 1648; but they were driven out, and it was Englishmen of the same profession who colonised the islands in 1666. The Virgins were annexed to the Leeward Islands by a commission granted by Charles II to Sir William Stapleton.

In spite of the fact that the Bahamas were the first part of the New World to be discovered by Columbus, the Spaniards did not settle there, finding it more profitable to use the islands as a source of labour supply for the mines and pearl fisheries of the wealthier island of Hispaniola, or Santo Domingo. Ponce de Leon, the discoverer of Florida, visited the archipelago during his search for the island of Bimini and the Fountain of Perpetual Youth, but it was not until the seventeenth century that the Bahamas were much frequented by Europeans. Then it was that

THE PIRATE "BLACKBEARD"

vessels began to visit them from the Bermudas, with the object of collecting salt at Eleuthera, which was settled by Bermudians in 1646. Settlers from Bermuda also colonised the island which was called New Providence, by Sayle, who was driven there by stress of weather when on his way to Carolina in the following year, and established

tobacco and cotton plantations upon it.

In 1670 six of the proprietors of Carolina, including the Duke of Albermarle and Lord Ashley, afterwards the Earl of Shaftesbury, obtained a grant of all the islands from Charles II, and proceeded to colonise them. Captain Johnson Wentworth was appointed to be first Governor by the colonists, and in the following year a governor's commissioner was sent out, and the Governor and Council were directed to take steps to form a parliament. 1684 New Providence was plundered by the Spaniards. It was, however, resettled in 1690, only to be devastated again in 1703 by the French and Spaniards, who drove out the English and destroyed their fort. In 1708 the settlement was deserted and New Providence now became a resort of pirates, who became such a menace to trade that, nine years later, a royal proclamation was issued to the effect that "the usual retreat and general receptacle for pirates is at Providence" and that "His Majesty has been further graciously pleased to give directions for dislodging those pirates who have taken shelter in the said islands, as well as for securing those islands and making settlements, and a fortification there for the safety and benefit of trade and navigation in those seas for the future." Not the least formidable of these pirates was the famous Edward Teach, or "Blackbeard," whose name has also been associated with the island of St. Thomas, where a "Castle," which he certainly never inhabited, is shown to the guileless visitor. This picturesque ruffian used to grow his beard a foot long and plaited in three strands. We have the authority of Tom

Cringle's Log for the fact that he always wore a full dress purple velvet coat, under which bristled three brace of pistols and two naked stilettos over eighteen inches long, and that he generally had a lighted match in his cocked hat with which he lighted his pipe or fired off a cannon, according to his pleasure. "One of his favourite amusements, when he got half slewed, was to adjourn to the hold with his compotators, and, kindling some brimstone matches, to dance and roar, as if he had been the devil himself, until his allies were nearly suffocated. At another time he would blow out the candles in the cabin, and blaze away with his loaded pistols at random, right and left. He was kind to his fourteen wives as long as he was sober, and never murdered above three of them."

This amiable individual was finally hunted down by two frigates, the *Lime* and the *Pearl*, to an inlet in North Carolina, where, with thirty men in an eight-gun schooner, he made a desperate struggle for life, killing and wounding more men than his own crew consisted of, and fighting furiously till he fainted from loss of blood, and, falling on his back, died where he fell, overcome by numbers alone.

In 1718 Captain Woodes Rogers, who had rescued Alexander Selkirk from Juan Fernandez, was sent out as Governor of the Bahamas, with instructions to suppress piracy, and a sufficient force to enable him to do so. Rogers was himself of piratical disposition, and being accustomed to deal with such gentry as the buccaneers, he soon succeeded in restoring law and order.

New Providence was taken by a revolutionary squadron under Commodore Hopkins from Philadelphia in 1776; but no garrison was left behind, and during the American war many loyalist families fled to the Bahamas from Georgia and Carolina and added to the wealth of those islands.

AN AMERICAN INVASION

The Spanish took New Providence in 1781, but two years later it was recaptured by American loyalists under Colonel Devaux. Now the islands are annually invaded by Americans, who, like the loyalists, add greatly to their wealth. The invasion is, however, a friendly one, the Bahamas having become a fashionable winter resort, and during the winter months American visitors predominate in these delightful islands.

British Guiana was one of the first countries in which Englishmen attempted to effect a settlement. The name "Guiana" is, according to Sir Robert Schomburgk, derived from the name of a small river, a tributary of the Orinoco, presumably the Waini or Guainia River. Columbus in 1498, when on his third voyage, after sighting Trinidad, passed the mouth of the Orinoco. In the following year Alonzo de Ojeda and Amerigo Vespucci coasted along Guiana, and in 1500 Vincente Pinzon, after discovering the mouth of the Amazon, passed along the whole coast of Guiana to the Orinoco. In 1595 Sir Walter Ralegh visited the country in search of El Dorado, the mythical city of gold, in the existence of which the Spanish had believed for nearly a century. The origin of the tradition is attributed to the stories of a Spanish soldier, who was marooned by his companions when on a voyage of exploration up the Orinoco River, and on his return, some months later, told stirring tales of how he had been conducted by the Indians to an immense inland lake surrounded with golden sands, on which there was a city roofed with gold.

Between the date of the discovery of Guiana and 1648, Dutch and Spanish traders occupied portions of the territory, the earliest Dutch settlement being established on a small island at the confluence of the Cuyuni and Mazaruni Rivers, where a fort was built, the place being called, from its commanding situation, "Kyk-over-al," or Look over all. A settlement was also formed on Fort

Island near the mouth of the Essequibo River, which became the seat of government of the colony of Essequibo. Various Dutch companies, which were merged in the great West India Company, had established several settlements before 1614, and, by the Treaty of Munster in 1648, the Dutch were confirmed in their possession of the country. In 1624 the colony of Berbice was founded by Van Peere under licence from the company, while the central colony of Demerara, which was settled from Essequibo, was not established until 1745.

About the middle of the eighteenth century, settlers from many other nations began to turn their attention to Guiana, and the Dutch were outnumbered; in 1781, soon after an outbreak of hostilities, the Dutch colonies in Guiana were captured by the English, who, however, in the following year, had in turn to yield to the French, by whom they were restored in 1783 to their former owners. Until 1796 the Dutch remained in undisputed possession, but in that year the three colonies were again seized by the English. They were again restored to the Dutch by the Treaty of Amiens in 1802, but in the following year they were once again captured by England, to whom the colonies of Essequibo, Demerara, and Berbice were definitely ceded in 1814.

In 1835, the British Government made a grant to the Royal Geographical Society, with the object of encouraging the exploration of British Guiana, and Mr., afterwards Sir, Robert Schomburgk, was selected for this work. After conducting some preliminary explorations, he urged upon the Government in July, 1839, the necessity of an early demarcation of the boundaries of the colony, and in 1840 he was instructed to revisit British Guiana and to carry this out.

This was the origin of the "Schomburgk Line," to which reference was made so frequently in the boundary

THE SCHOMBURGK LINE

disputes between Venezuela and Great Britain in the succeeding years. When the Dutch owned British Guiana they claimed the whole watershed of the Demerara River; Venezuela, on the other hand, declared that the Spanish province of Guayana had extended to the left bank of the Essequibo River.

In 1886 Great Britain announced that she would exercise jurisdiction up to and within a boundary which was known as "the modified Schomburgk." Police were placed as outposts at various points along this boundary, and they were faced by Venezuela soldiers. In 1895 a crisis arose through the action of the Venezuelan authorities in arresting two Inspectors-Barnes and Baker—of the British Guiana police on the Cuyuni River, on the charge that they were illegally exercising the functions of British officials in Venezuelan territory. Venezuela invoked the aid of the United States, and on December 18th, 1895, President Cleveland sent his memorable message to Congress, in which he practically said that any attempt on the part of the British Government to enforce its claims against Venezuela on the boundary question without resort to arbitration would be considered a casus belli. The greatest excitement prevailed in Caracas, the capital of Venezuela, and a violent slump occurred in American securities, to the holders of which the news came as a complete surprise.

On June 18th, 1896, the Crown Surveyor of British Guiana having been arrested by Venezuelans, a few days before, the British and American Governments agreed to submit the matter to arbitration, and Lord Herschell and Mr. Justice Henn Collins were appointed British members of the Tribunal to decide the boundary question. An arbitration treaty was signed by Sir Julian Pauncefote and Senhor Andrade at Washington on February 2nd, 1897, and diplomatic relations between Great Britain

and Venezuela, which had been broken off in 1887, were renewed in the same year.

The arbitration tribunal met in Paris on July 25th, 1899. Lord Russell of Killowen had meanwhile succeeded Lord Herschell, who had died, and the British case was ably stated by Sir Richard Webster, the present Lord Alverstone. The decision was given on October 3rd, 1899, and was in favour of a line coinciding in the main with the Schomburgk line, but awarding to Venezuela Point Barima and the immediately adjacent land, as well as a small district in the upper reaches of the Cuyuni.

Meanwhile further trouble had arisen regarding the boundary between British Guiana and Brazil, and this also was submitted to arbitration, the arbitrator in this case being the King of Italy, who gave his decision on June 6th, 1904. In this instance the area in dispute was conceded to British Guiana.

The earliest settlement of the country which is now British Honduras is said to have been made from Jamaica, in about the year 1638, by a party of adventurers who had been attracted by the possibilities of the timber, and notably the logwood and mahogany, which grew on the Hondo and other rivers. They established their head-quarters at St. George's Cay. Willis, the notorious buccaneer, was the first Englishman to settle on the Belize River, to which, according to Bridges in his Annals of Jamaica, he gave his name, the Spaniards calling the river Walis, which the corrupting influence of time softened to Belize.

An earlier settlement had been effected on the small islands off the Mosquito coast by a chartered company, of which the Earl of Warwick was chairman, and John Pym the Treasurer, in 1630. The territory of the Mosquito Indians extended first, from the east of Cape Honduras to Cape Gracias à Dios, and then from the south of that cape to the San Juan River.

BATTLE OF ST. GEORGE'S CAY

The Indians were particularly friendly to the English and faithful allies of the settlers, and as they soon excelled in the use of fire-arms, they were helpful in opposing the Spaniards. In 1687 they sought the protection of the British Crown, the son of their king visited England, and for some years the Governor of Jamaica exercised a supervision over the affairs of the settlement. 1739 the native king resigned his country to Great Britain. and a few years later an agent was sent from Jamaica to the Mosquito coast, and a fort was built and a garrison placed on the small island of Ruatan, which was, however, abandoned in 1749, an officer being formally appointed in the same year to superintend the settlement. By the Treaty of Paris, in 1763, it was agreed to dismantle the forts and withdraw the garrisons; but the settlers remained, and successfully resisted every attempt on the part of the Spaniards to drive them out.

The last attempt on the settlement was made in 1798, when the Spaniards were defeated in the memorable Battle of St. George's Cay, the anniversary of which is still celebrated every year in British Honduras. On September 10th of that year a fleet arrived from Campeché with 2,000 men on board under the command of General O'Neil, the Governor of Yucatan, and a desperate fight ensued between them and the mere handful of colonists, who opposed them with one English sloop-of-war, the *Merlin*, and successfully drove them off. The settlers burned their houses lest they should fall into the hands of the foe, and removed the beacons which might have guided the enemy through the shoals, and, after three hours' engagement, the enemy was completely defeated and withdrew in confusion.

Encouraged by this victory, the Baymen, as the settlers were called, built forts, and they were never again molested. It was not, however, until 1862 that the "settlement" of Honduras was recognised as a British colony, the

Governor being the Governor of Jamaica, represented locally by a Lieutenant-Governor who replaced a "Superintendent." In 1870, however, the colony was made a Crown Colony at the request of the Legislative Assembly, and in 1884 its connection with Jamaica, which for some years had only been nominal, ceased, and a Governor of British Honduras, under the immediate

control of the Colonial Office, was appointed.

The above is merely an outline of the history of our West Indian colonies down to the time in which they became, finally, let us hope, British. To deal with their subsequent history would require a larger volume than this. It will have been seen that 1782 was a critical year, when we lost nearly every colony, and when Jamaica itself was in serious danger of being captured by the French, but was saved by Lord Rodney's brilliant victory over Count de Grasse in the Battle of the Saintes off Dominica. There was, however, also another year which was scarcely less critical, and that was 1804, when Villeneuve and his fleet were pursued to the West Indies and back by Lord Nelson immediately before the battle of Trafalgar.

In 1803, on the renewed outbreak of hostilities with France, Nelson was appointed to the command of the Mediterranean, and instructed to proceed to Toulon to take or destroy the French fleet. On May 18th he hoisted his flag on the *Victory* and joined the fleet off Toulon on July 8th. While the blockade of that port was proceeding, war was declared with Spain, and on January 19th in the following year, when Nelson was at Maddalena Island, the news reached him that the French fleet had left Toulon and were proceeding southwards. He surmised that they had either gone to Egypt or had put back to Toulon, disabled by the westerly gales. The latter conjecture proved correct, and he learnt at Malta, after a visit to Egypt, that the French had put back to

NELSON ENTERS THE BOCAS

Toulon in a crippled state. On May 4th, 1805, while the British fleet were in the Mediterranean, news was received that Villeneuve had again put to sea. Nelson made up his mind that this time they must have gone to the West Indies, and in a letter to the Admiralty he wrote: "If nothing is heard of them from Lisbon or from the Frigates I may find off Cape St. Vincent's, I shall probably think that the rumours which are spread are true, that their destination is the West Indies, and in that case think it my duty to follow them, or to the Antipodes, should I believe that to be their destination." On May 10th he decided to pursue them, writing to Sir Alexander J. Ball: "My lot is cast, and I am going to the West Indies, where, although I am late, yet chance may have given them a bad passage, and me a good one: I must hope the best."

Villeneuve, who had been joined at Cadiz by Admiral Gravina and the Spanish squadron, arrived at Martinique on May 14th, exactly a week after Nelson, with ten sail of the line and three frigates, had started in pursuit of him. Nelson reached Carlisle Bay, Barbados, at noon on June 4th. 1805. There he found Admiral Cochrane with two ships, and learnt that the French fleet was indeed in the West Indies, and had been seen from St. Lucia standing to the southward. He lost no time, and on June 5th made sail to the south, after embarking 2,000 troops, and arrived off Tobago on June 6th. Next morning he entered the Bocas of Trinidad with his vessels cleared for action, believing that the island was already in the hands of the French, for apart from the information which he had received he had seen a martello tower blown up on the north coast. It subsequently appeared, however, that the officer commanding it had mistaken Nelson's vessels for those of the combined fleet, and had set off to Port of Spain, spreading the news that an attack was momentarily to be expected. Martial law was

proclaimed in the town, and though the militia was called up, Governor Hislop decided that Port of Spain was untenable. Provisions, valuable property, and the books of the merchants were sent in haste to Fort George, and the troops of the line, volunteers, and militia, marched up to the batteries, leaving the town at the mercy of the supposed enemy; then, for the first time, it was discovered that a mutual mistake had been made, that the fleet was British, and that the colony was, after all, not in the possession of the enemy. Nelson, without a word of explanation, and without even allowing an officer or man to land, put his ships about, and sailing out of the Bocas, continued his search for Villeneuve and his fleet.

Meanwhile the French were spreading consternation through the colonies, though the only success which they achieved was the capture of Diamond Rock, at the south of Martinique, which had been garrisoned for nearly eighteen months by Lieutenant J. W. Maurice and 120 men and boys, at the suggestion of Commodore Hood, who had observed how the French vessels constantly escaped him by running between the rock and the Point du Diamant. It was only through want of ammunition that the gallant little force was eventually compelled to surrender to a French squadron of two seventy-fours, a frigate, a schooner and eleven gunboats, upon which it had inflicted severe loss.

From Trinidad Nelson proceeded to Grenada, (where he found that all was safe), St. Vincent, and St. Lucia. On June 11th he reached Dominica, five days after Villeneuve, and from there he sailed to Antigua. From that island he wrote to the Duke of Clarence: "Your Royal Highness will easily conceive the misery I am feeling, at hitherto having missed the French Fleet; and entirely owing to false information sent from St. Lucia, which arrived at Barbados the evening of June

NELSON'S RETURN TO EUROPE

3rd. This caused me to embark Sir William Myers and 2,000 troops, and to proceed to Tobago and Trinidad. But for that false information, I should have been at Port Royal, as they were putting to sea; and our Battle. most probably, would have been fought on the spot where the brave Rodney beat De Grasse. I am rather inclined to believe they are pushing for Europe to get out of our way: and the moment my mind is made up, I shall stand for the Straits' mouth. But I must not move, after having saved these Colonies and 200 and upwards of sugar-laden ships, until I feel sure they are gone. We saw, about 200 leagues to the Westward of Madeira, a Vessel which I took to be a French Corvette, that watched us two days; but we could not take her. She, I hear, gave Gravina notice of our approach, and that probably hastened his movements; however, I feel I have done my duty to the very utmost of my abilities. The Combined Squadron passed to the leeward of Antigua on Saturday the 8th, standing to the Northward. My heart is almost broke, and, with my very serious complaints, I cannot expect long to go on. I am, etc., Nelson & Bronte."

On the 13th Nelson assumed that Villeneuve must be on his way back to Europe, and in hot haste he again crossed the Atlantic, having saved the West Indian Islands from capture. "The joy and exultation which prevailed in the British islands at this period," says the Annual Register of 1805, "may easily be conceived. Abandoned of all hope, they had seen their successive and entire destruction, in the arrival of one of the most formidable fleets that had ever been witnessed in that quarter of the globe, without any force adequate to even the chance of effectual resistance. From this gloom of despair they were roused by the appearance of the British fleet . . . and that fleet commanded by Lord Nelson. From that moment, not a doubt remained of relief:

the inferiority of force was never once taken into consideration; for Nelson and victory were inseparable."

The gratitude of the West Indian communities for the protection afforded to their islands was expressed in a resolution in the following terms, adopted at a meeting of the West India Committee, held at the Marine Society's office on August 23rd, 1805, Sir Richard Neave, Bart., in the chair: "That the prompt determination of Lord Nelson to quit the Mediterranean in search of the French fleet; his sagacity in judging of and ascertaining their course; his bold and unwearied pursuit of the combined French and Spanish Squadrons to the West Indies and back again to Europe, have been very instrumental to the safety of the West India Islands in general, and well deserve the grateful acknowledgments of every individual connected with those colonies."

A deputation, consisting of the Chairman, Mr. Beeston Long, Mr. Samuel Long, Mr. Manning, Mr. Blackman and Mr. Samuel Turner, was appointed to wait upon Lord Nelson, and, at a further meeting, held on October 18th, Mr. Beeston Long, who was in the chair, reported that they had done so, and that the following letter dated London, August 28th, 1805, had been received by Sir Richard Neave:

"Sir,

"I beg leave to express to you, and the Committee of West India Merchants, the great satisfaction which I feel in their approbation of my conduct. It was, I conceived, perfectly clear that the Combined Squadrons were gone to the West Indies, and therefore it became my duty to follow them.

"But I assure you from the state of defence in which our large Islands are placed, with the number of Regular Troops, and numerous, well-disciplined, and zealous Militia, I was confident, not any Troops which their

THE VICTORY OF TRAFALGAR

Combined Squadron could carry, would make any impression upon any of our large Islands, before a very superior force would arrive for their relief.

"I have the honour to remain,
"Sir, and Gentlemen,
"With the highest respect,
"Your most obliged
"and obedient Servant,
"Nelson & Bronte."

News in those days travelled slowly, and it was not until December 20th, 1805, that tidings of Lord Nelson's glorious victory over the combined fleets of France and Spain off Trafalgar on October 21st, and of his death in the hour of triumph, reached the West Indies. The joy of the inhabitants of those colonies was only equalled in intensity by their grief at the death of the hero, and it is claimed that the first statue to be erected to the memory of Nelson was the one which now stands opposite the Public Buildings in Bridgetown, Barbados.

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CHAPTER III

PHYSICAL FEATURES AND GENERAL ASPECT

THE chief physical features of the West Indies are their mountains. With the exception of Barbados and part of Antigua, the islands are very mountainous, most being traversed by definite ranges with spurs branching from either side of them down to the coast. many parts these mountains are still clothed with the virgin forest; but in others they have been entirely deforested with that utter disregard for consequences which used to characterise the early settlers. The rivers, save in the two above-mentioned islands, are also, generally speaking, numerous, though of not much consequence. Indeed, many of the rivers are dry for the greater part of their length, except in the rainy season and after heavy rains, when they rush down with great violence and become for a time quite unfordable. Near the mouths of the rivers, the river beds are of great width, and the difficulty of bridging them becomes in consequence very considerable.

The only lakes are those which occupy the craters of quiescent volcanoes and the lagoons formed by the silting up of the rivers at their mouths. Examples of the former are the Grand Etang and Lake Antoine in Grenada. The Nariva swamp near Port of Spain in Trinidad, and the river mouth at Annotto Bay, Jamaica, demonstrate the worst features of the lagoons, which form a breeding place for the mosquitoes that infest their neighbourhoods.

The West Indies have many natural harbours, of one at least of which—the Gulf of Paria—it might be fairly said that it would be capable of sheltering the navies of the world. The harbours of Kingston (Jamaica), Castries (St. Lucia), St. John's, English and Falmouth in Antigua, and the Carenage, in Grenada, are also notable; but with

THE LESSON OF SANTIAGO

the advent of the Dreadnought class of battleship and since a lesson was taught by the bottling up of Admiral Cervera in Santiago Harbour during the Spanish-American war, they have been less valued strategically than they were in the days of the old wooden walls and their earlier successors.

It is certainly a matter for regret that no systematic geological survey of the British West Indies as a whole has ever been undertaken. In 1855 Sir William Molesworth, the then Secretary of State for the Colonies, induced the Treasury to provide the funds for a general survey of the economic geology of Trinidad, and it was intended that the work should eventually be extended to the other West Indian colonies, but it was, unfortunately, never completed.

Mr. G. P. Wall of the Government School of Mines, who had been attached temporarily to the Geological Survey of England for training in geological field work, and Mr. J. G. Sawkins, who had already gained much experience in Mexico and Cuba, were selected for the purpose of the proposed survey by Sir Roderick Murchison, the Director-General of the Government School of Mines, and these two gentlemen left for Trinidad in 1855. The salary of the surveyor was defrayed from Imperial funds, and the local Legislatures were asked and agreed to pay his personal and travelling allowances so long as his services were retained in their particular colony.

The geological survey was accordingly begun in Trinidad, and it was carried on with energy for two years, when difficulties arose. Only twelve months more were required for the completion of the work, and Messrs. Wall and Sawkins were anxious to explore the coal formation of the island and to follow up the seams at different places. To do this men were wanted to carry tools and provisions through the dense forest, and the geologists found that they could not continue

the survey without further assistance. This, unfortunately, was refused. The survey was in consequence never completed, and a valuable report, which was issued in 1858 as the "First of a series of geological treatises illustrative of our West Indian possessions, the colonial government defraying one-half of the cost" was only succeeded by one more.

Mr. Sawkins was subsequently associated with valuable geological work in Jamaica and British Guiana, and the result of his services in the former colony in co-operation with Mr. Lucas Barrett, Mr. G. P. Wall and Mr. C. Barrington Brown, is recorded in a report which forms Part II of the West Indian Survey. Included in it is a report on Anguilla and its adjacent Cays. Though the scheme for making a geological survey of the West Indies as a whole fell through, Mr. R. T. Hill, Mr. J. W. Spencer, Mr. C. Barrington Brown, Professor J. B. Harrison and Mr. A. J. Jukes-Browne, Mr. E. H. Cunningham Craig and others have contributed to our knowledge of the geological formation of the West Indian Islands and British Guiana. Mr. Cunningham Craig, who held the post of Government Geologist of Trinidad and Tobago from November, 1903, to May, 1907, has, moreover, made a detailed geological survey of some 500 square miles of Trinidad, which has proved of immense value.

In Barbados, Professor J. B. Harrison, working in conjunction with Mr. A. J. Jukes-Browne of the Geological Survey of England made a geological examination of the whole island and their map which was issued in 1890 still remains the only standard one of reference, so far as geological matters are concerned, for the colony. Mr. Cunningham Craig and Professor John Cadman, in a preliminary report on the oil resources of Barbados in 1910, advocated a geological survey of the island, and in July in the following year the House of Assembly voted the necessary funds, recommending that they should

THE CARIBBEAN ANDES

be raised by levying an ownership tax on lands liable to

pay parochial taxes.

Dealing with the West Indies as a whole, Edward Suess, the Austrian Geologist, in Das Antlitz der Erde, divides the Antilles into three zones: (1) The first, or interior zone of volcanic origin and with many recent cones, which is confined to the lesser Antilles extending from Saba and St. Kitts to Grenada and the Grenadines. and including the western part of Guadeloupe; (2) The second zone consisting chiefly of cretaceous and early tertiary rocks, which includes the whole of the Greater Antilles in the west, but is restricted in the east to a narrow belt comprising the Virgin Islands (Anegada excepted), Anguilla, St. Bartholomew, Antigua, the eastern part of Guadeloupe and part of Barbados; (3) The third and outermost zone, which is formed of Miocene and later beds. The islands composing it are all flat and low. It includes the Bahamas, Anegada, Sombrero, Barbuda and part of Barbados. Trinidad and the islands off the coast of Venezuela, including Margarita, Curação, etc., belong to none of these zones, being geologically part of the mainland of South America. It is generally recognised that the West Indian Islands are the summits of a submerged chain of mountains—the Caribbean Andes -which divides in Haiti, one branch passing through Jamaica and the other through Cuba, and it is believed that at one time the greater Antilles were almost entirely submerged.

Coming now to the individual islands and colonies, it will be convenient to take the larger islands in alphabetical order, and then the Windward and Leeward Islands, British Guiana and British Honduras, an arrangement which has already been followed in the chapter devoted to their history.

Barbados, the most easterly of the West Indian Islands, which is situated in 13° 4′ north latitude, and 59° 37′ west

longitude is about 21 miles by 14 miles broad at its widest part and has a total area of 166 square miles. It is of purely coral formation and is almost encircled by coral reefs. The island is very flat, but it rises in terraces to a ridge in the parish of St. Andrew, the highest point being Mount Hillaby, 1,105 feet. It has no natural harbour like those in the islands of volcanic formation; but its open roadstead, Carlisle Bay, is well sheltered, and there is also a harbour or careenage for small vessels, which is protected by a mole of masonry. Owing to the porous nature of the coral rock, there are no streams or rivers to speak of, the water being rapidly absorbed and forming subterranean channels and wells of unique interest.

There are no volcanic rocks in the island, and Professor J. B. Harrison and Mr. Jukes-Browne repudiated the idea that a core of coral rock was exposed in the north-eastern part of the island and that a peculiar ridge encircling the part of the island, called from its resemblance to parts of Scotland, the "Scotland district," was the rim of a partially destroyed volcanic crator. Fragments of volcanic rock are not infrequently found in the surface soil, but these are believed to have been brought to the island in the guano, which has been so largely used for agricultural purposes.

The two eminent geologists mentioned above divided the strata into three series, Coral Limestone, Oceanic

beds, and Scotland series.

Coral limestones cover about six-sevenths of the whole area of Barbados, and occur as high as 1,100 feet above the sea, though their actual thickness does not exceed 260 feet. They were formed during the gradual upheaval of the ancient coral reefs. The oceanic deposits consist of the white earths, generally characterised as chalk in Barbados, while some of the beds are calcareous and others purely silicious. The latter consist almost entirely of the skeletons of minute oceanic Radiolaria and Diatomaceæ. In the calcareous

A FALL OF MAY-DUST IN 1812

earths the shells of Foraminifera are common. The Scotland rocks, consisting chiefly of sandstone and dark sandy clays, form the core and basis of the whole island.

The soil of the island, though exceedingly fertile, is very shallow and there is no doubt that it has been in part formed as the result of successive eruptions of the Soufrière in St. Vincent, whose ashes, carried by an upper current of air, fell, as recently as 1902, all over the island. A similar fall is described by Schomburgk as having occurred on May 1st, 1812. The following picturesque account of this shower of May-dust, as it

is still called, was given by an eye-witness:

"At half-past twelve a.m., a heavy dark cloud obscured the heavens completely, hanging so low as apparently to touch the ground: except in the south and north-east. where there was a fine light-blue tint, which closed in at half-past one a.m., when darkness visibly overspread this part of the island; at this period a sandy grit began to fall in small quantities. At two a.m., explosions heard to the southward and westward, resembling two frigates exchanging broadsides, to the amount of eighteen or twenty; went to the top of the house, but could perceive no flashes, though the sound seemed sufficiently near, light being perceptible at a much greater distance than sound can be heard; the sandy grit converted into ashes, silently falling. From two to six a.m., low, murmuring, hollow, distant thunder, but no lightning seen; except the vivid flashes which preceded two nearer peals. Between these periods, smart squalls with rain and ashes mixed, from the eastward, which seldom lasted above forty seconds, the ashes bearing a greater proportion than the rain in this composition. At half-past five a.m., a small glimmering in the south and south-east resembling the appearance of daylight, but did not last ten minutes before the atmosphere was completely obscured again, and the darkness more intense, if that was possible.

At half-past six a.m., heavy fall of ashes, with light breezes and a hollow, low undulating noise to the northward; expecting an earthquake, quitted the house, and retired to a wattled negro hut. From six to eight a.m., light breezes, with squalls of ashes and rain, of the same description and duration as mentioned before. During the last two hours, meteors resembling globes of fire, about the size of a 13-inch shell, appeared in the north-east and north-north-east, to the amount of ten or twelve, crossing each other in every direction, occasionally appearing and disappearing for the space of an hour and a half; so incessant a falling of ashes, as to render it impossible to face the eastward. At nine a.m., the sky to the northward assumed a purple, torrid appearance, greatly resembling a vast town at a distance on fire, accompanied by a tremulous motion resembling the Aurora Borealis; the horrid glare of this sky made the surrounding darkness more awfully dreadful; the sky to the southward, in the direction towards Bridgetown, had occasionally the same colour, only the tinge much fainter, attended with no motion; the sky never approached in any direction, by my calculation, nearer than seven miles; as I have no data to go on, this is mere matter of conjecture. From nine a.m., to twelve at noon, light breezes and constant and heavy fall of ashes. At ten a.m., a large flight of birds passed over the hut, flying so very low, that the fluttering of their wings was distinctly heard; the notes of these birds resembled the velping of puppies. daylight took place, they proved to be marine birds called Men-of-War, and Coblers: so loaded with ashes they could scarcely raise themselves from the ground. At a quarterpast twelve o'clock daylight appeared immediately over our heads; half-past twelve, the form of the sun, obscured in clouds in the same place. At one p.m., daylight; returned to my own house. From one a.m. to half-past twelve p.m., the wind east to east-north-east; light gentle

THE FALL OF MAY-DUST IN 1902

breezes, never varying above two points, but fluctuating between both: the wind dying away nearly to calm, but never perfectly a calm. This may be said to be the state of the weather during the whole twelve hours of total darkness, except when interrupted by the momentary squall of sand and ashes. The darkness was so impenetrable, that, with the exception of the light that was visible in the south and south-east at five a.m., at no period cou anything be discerned even within reach. From three admeasurements taken in the lowest places, the fall of ashes was an inch and a half. When I left the house the thermometer was 70°, when I returned at 70°; as I left the instrument behind. I know not what variation might have taken place in my absence; the other observations were made with my own eyes, and the watch in my hand. will be observed, the first two hours the sand was small in quantity and coarse in its nature; but the last ten hours were ashes, reduced to an impalpable powder, and sublimated to the highest degree. That it is a calcined matter strongly impregnated with nitre and ferrugineous particles, does not admit of a doubt, if examined through a good microscope; and that it has come from the eastward may be supposed, from its involving in its mass the men-of-war birds, which are generally found about sixty miles to the east end of the island, seldom approaching nearer. From one p.m., to six, the fall of the ashes began to decrease; at six p.m., ceased altogether. At no period of the day did the light amount to more than a dull twilight; and at five p.m., the day closed altogether, and darkness succeeded until the morning."

In 1902 the fall of dust began on May 17th. By five p.m. on that day Barbados was shrouded in the darkness of night, and a rain of coarse, gritty dust had begun to fall. The atmosphere was hot and thick, and the rain of dust, which penetrated into everything and everywhere, continued without intermission until ten p.m., when it

ceased altogether. Daylight showed all Bridgetown, and indeed all Barbados, covered with volcanic dust, and it was computed that at least 2,000,000 tons of it must have fallen over the island. As to the value of the dust as a manure there has been a difference of opinion, though it was generally agreed that it would serve a useful purpose in loosening and drying heavy clay soils.

Barbados is divided into eleven parishes, namely: St. Michael (in which the capital, Bridgetown, is situated), Christchurch, St. Philip, St. John, St. Joseph, St. Andrew, St. Lucy, St. Peter and St. James, with St. Thomas and

St. George in the centre.

Jamaica, which is situated between 17° 43′ and 18° 32′ north latitude and 76° 11′ and 78° 30′ 50″ west longitude, and lies about 100 miles west of San Domingo, and 90 miles south of Cuba, is exceedingly mountainous. It is of this island that it is said that Columbus, wishing to describe it to Queen Isabella, crumpled a piece of paper in his hands. The extreme length of the island is 144 miles, its greatest width 49 miles, its least width (from Kingston to Annotto Bay) 21½ miles, and its total area 4,207 square miles.

The main ridge of the mountains runs east and west, with spurs extending to the north-west and south-east, the latter terminating in the impressive range known as the Blue Mountains, the highest peak of which—Blue Mountain Peak—is 7,423 feet high. The island is well watered and has numerous rivers, the largest of which are the Black River in the south-west, which is navigable for 25 miles from its mouth, and the Rio Grande in the south-east. The Roaring River in St. Ann's Parish, with its picturesque falls, and the Rio Cobre, which flows through the romantic gorge known as Bog Walk, and empties itself into Kingston Harbour, are conspicuous for their beauty. The only other rivers of consequence are the Plantain Garden River, in the Parish of St. Thomas,



A TYPICAL SCENE IN JAMAICA



JAMAICA'S MINERAL BATHS

and the Martha Brae River, near the mouth of which are Falmouth and its harbour.

The foundation or basis of Jamaica is composed of igneous rocks. Over these there are several distinct formations. In the county of Surrey the coast formation is of white and yellow limestone, the interior consisting of metamorphosed rocks, with carbonaceous shales and conglomerate. The only volcanic formation in the island is at Lowlayton and Retreat estates in Portland, but no definite crater exists. This county is very mountainous, the only flat land being the Liguanea plain to the north of Kingston, and the valleys of the Morant and Plantain Garden Rivers. Iron, copper, lead, manganese and cobalt have been found and worked to some extent, but no profitable industry in them has been established.

The county of Middlesex presents a great diversity of formation, St. Mary consisting mainly of white and yellow limestone, carbonaceous shales, metamorphosed, porphyritic, granite, and conglomerate rocks, with many mineralbearing rocks. In St. Thomas-in-the-Vale, the rocks are of granitic formation, overlaid by cretaceous and white limestone and marl beds. St. Catherine is partly alluvial and partly limestone. The county of Cornwall has an extensive area of alluvium, the rest of the parish consisting of white limestone with occasional patches of yellow limestone.

Jamaica has no less than fifteen mineral springs of therapeutic value, the principal being those at Milk River, 13 miles from May Pen on the railway, and at Bath in St. Thomas-in-the-East. Analysis of water from the Milk River bath has given the following mineral constituents in 1,000 parts of water:

They also contain traces of lithia, bromine and silica.

The waters are recommended in cases of gout, rheumatism, sciatica, lumbago, neuralgia, eczema, and liver troubles, and they are believed to be very efficacious in relieving those ailments.

The water from Bath, in St. Thomas-in-the-East, gives the following mineral constituents in a gallon of water:

Chloride of Sodium				13.84
Chloride of Potassium				0.32
Sulphate of Calcium				5.01
Sulphate of Soda				6.37
Carbonate of Soda		• •		1.69
Silica				2.72
Oxide of Sodium, comb	bined	with S	ilica	1.00
Organic Matter				0.99

Jamaica is divided into three counties, Surrey in the east, Middlesex in the centre, and Cornwall in the west, but for administrative purposes; there are fourteen parishes. Kingston, the capital, lies on an admirably protected harbour towards the eastern end of the south coast, and other towns of importance are Montego Bay, Port Antonio and Savanna-la-Mar.

The Cayman Islands, which are dependencies of Jamaica, are situated between 19° 44′ and 19° 46′ north latitude, 79° 44′ and 80° 26′ west longitude, 178 miles east-northeast of that island. They consist of Grand Cayman, Little Cayman, and Cayman Brac; Grand Cayman, which is surrounded by coral reefs, has two towns, Georgetown and Boddentown.

Turks and Caicos Islands, which belong geographically to the Bahamas, are also dependencies of Jamaica. They lie between 21° and 22° north latitude, and 71° and 72° 37′ west longitude. Of coral and sand formation they have a total area of 169 square miles. Grand Turk is the capital of Turks Islands, and the other town of importance is Cockburn Harbour on South Caicos.

Trinidad lies off the delta of the Orinoco, about 16 miles

THE ISLE OF THE TRINITY

to the east of Venezuela, between 10° 3' and 10° 50' north latitude, and 61° 39' and 62° west longitude, and is the most southerly of the West Indian Islands. In shape it is rectangular, with promontories at the four corners some compare it to a hide stretched out and others to a turtle-of which those at the north-west and south-west are extended towards the mainland enclosing the Gulf of Paria, which is really a magnificent landlocked sea, entered by narrow straits at the north and south. Those at the north are known as the Bocas del Dragone, or dragon's mouths, and those at the south, through which Columbus entered, are called the Boca del Sierpe, or serpent's mouth. The northern Bocas or straits are formed by the islands of Monos (monkey), Huevos (egg), and Chachachacare (an Indian word), which are of the same formation as the mountains on the Spanish Main and so help to substantiate the belief that Trinidad was once part of the mainland of South America. Other evidence tending in the same direction is found in the valleys of Trinidad, which lie in the same direction as those in Paria, and in the fact that bituminous deposits are found both in Trinidad and on the mainland. The island is very mountainous, and has three distinct ranges of hills which run east and west, the highest elevations being El Tucuche, 3,000 feet, and the Cerro de Aripo, 2,700 feet, while near the south are the Three Sisters, now identified with the peaks first seen by Columbus, which prompted him to name the island after the Trinity.

The north coast is rock-bound throughout its whole length, the east coast is exposed to surf to such an extent as to be almost unapproachable, and the south coast is steep in most parts.

The rivers, though numerous, are not very important, the principal being the Caroni and the Couva, which empty their waters into the Gulf, and the Oropouche and the Ortoire on the eastern side.

Messrs. Wall and Sawkins classified the several geological formations as the Caribbean group, consisting of micaceous slates, sandstones, limestones and slates which form the constituent strata of the northern littoral range, the Older Parian, an indurated formation of lower cretaceous age occurring in the central range, and Newer Parian, a series of tertiary strata comprising the whole of the southern division of the island.

Transition limestone is met with in every part of the island. At the head of the Aripo and Oropouche rivers are caves adorned by stalactites and stalagmites. The local limestone is generally compact, of a bluish grey colour, destitute of organic remains, and traversed by veins of calcareous spar. Gypsum occurs in parts, and sandstone is abundant. Blocks of milky quartz and crystals of hyaline quartz are found in many parts of the mountainous region, and at the bases of the mountains. Reference is made to the Pitch Lake and to the petroleum deposits, from which so much is expected, in a later chapter.

The island has eight counties and for administrative purposes is divided into "wards." Port of Spain, the capital, lies in the angle formed by the north-west promontory, and the second town of importance is San Fernando, 35 miles distant in a southerly direction.

Tobago lies in 11° 9′ north latitude, and 60° 12′ west longitude, about 75 miles south-east of Grenada, and about 20 miles north-east of Trinidad, of which it has formed a "ward" since 1899. The island is 26½ miles long and 7½ miles wide at its widest part, and is estimated to have a total area of 114½ square miles or 73,313 acres, of which about 10,000 are under cultivation, and 6,360 are set apart as a rain and forest reserve, the balance being Crown lands available for sale. Unlike that of most of the West Indian islands, its greatest length is from east to west.

A WESTERN MOUNT SINAI

The formation of the island is volcanic, and Mr. Cunningham Craig, the late government geologist of the colony has observed that the northern range of mountains in Trinidad is entirely composed of metamorphic rocks, and is part of the same *massif* which forms nearly the whole of Tobago. The southern part of Tobago is quite flat, the central part undulating with small valleys and conical hills, and the north of the island is mountainous with a main ridge running down the centre, buttressed by spurs which enclose many fertile valleys.

The island is divided into seven parishes, but for registration purposes four districts are recognised: the Windward, Northern, Middle, and Leeward or Southern. Scarborough, the chief town, stands on the south side of the island, about 8 miles from the south-west point, and the only other town of any consequence is Plymouth, about 5 miles from it on the north side.

Coming now to the Windward Islands, Grenada, the most southerly of them, lies between 11° 58' and 12° 15' north latitude, and between 61° 35' and 61° 50' west longitude, being 90 miles to the north of Trinidad, 68 miles south-south-west of St. Vincent, and about 100 miles south-west of Barbados. The island is extremely mountainous, having a central range of mountains from which spurs branch off, forming picturesque valleys of great fertility. The highest points are Mount St. Catherine (2,749 feet), Mount Sinai (2,300 feet), and the mountain of the Grand Etang, a circular lake thirteen acres in extent which occupies the crater of an extinct volcano. One writes "extinct"; but it is not safe to be too sure after the lesson of the Soufrière in St. Vincent, and Mont Pelé in Martinique, which were both classed as practically extinct volcanoes before the disasters of 1902. Happily, however, no eruption of the crater which now forms the Grand Etang has ever been recorded. The island has several short rivers and an abundance of springs. Of

the former, the more important are the Great River, which rises near the Grand Etang, and taking a north-easterly course enters the sea to the north of Grenville Bay. The principal towns are St. George's, charmingly situated on a promontory on the leeward side of the island, and Grenville on the windward coast.

Professor Harrison characterises Grenada as being purely volcanic, the only signs of upheaval being raised limestone beaches towards the extreme north. The chief centres of eruption appear to have been in the neighbourhood of Mount St. Catherine, in that of the Grand Etang, near Mount Sinai in the neighbourhood of the south-east mountain, and in what is now St. George's Bay. Between Grenada and St. Vincent stretches an archipelago of small islands, of which Carriacou, which is attached to the government of Grenada, is the largest. It is exceedingly mountainous and was once covered with trees; but it is now almost entirely deforested. The island is 8,467 acres in extent, and its highest elevations are High North 980 feet, and Chapeau Carrè 960 feet. The island has a fine natural harbour called Grand Carenage. Red and grey sandstones, horneblende and argillaceous schists are found in the mountains, and porphyry and basaltic rocks also occur.

Grenada is divided into six parishes: St. George, St. David, St. Andrew, St. Patrick, St. Mark and St. John, and the capital, St. George's, stands on a peninsular towards the southern end of the west coast on the shore of the almost completely landlocked harbour referred to above.

St. Vincent is situated in 13° 10′ north latitude, and 60° 57′ west longitude, being 30 miles to the south-west of St. Lucia and 97 west of Barbados. Its length is 18 miles, and its width at the broadest part 11 miles, while its total area is estimated to be 140 square miles. The highest elevation is the Soufrière, a volcanic peak 3,500

A VOLCANIC ERUPTION

feet high, the eruption of which caused such widespread distress in 1902, upwards of 2,000 persons being killed.

The first recorded eruption of the Soufrière is that described by Baron Humboldt in his Personal Narrative as having taken place in 1718; but where he obtained his information regarding it is not known. About the violent eruption which occurred in 1812 there is no uncertainty. Shephard, in his History of St. Vincent, gives the following account of it: "On the 27th of April the eruption burst forth. Previous to this event, according to the best accounts, which are here consolidated. the appearance of this mountain was singularly romantic. the crater was half a mile in diameter and 500 feet in depth; in the centre of this hollow was a conical hill 200 feet in diameter and 300 in height, the lower half of which was fringed with brushwood, shrubs and vines, while the upper was strewed with virgin sulphur; at the base of it were two small lakes, the one sulphureous and aluminous, the other pure and tasteless: from the fissures of the cone a thin white smoke exuded, occasionally tinged with a light blue flame. Evergreens, flowers, aromatic shrubs, and many alpine plants clothed the steep sides of the crater, and from its external base. nearly to the summit, the mountain was covered with an exuberant growth of forest trees.

"The first indication was a severe concussion of the earth, a tremulous noise in the air and the bursting forth of a vast column of thick black smoke from the crater. Volumes of sand and favillæ darkened the air like a heavy storm of rain, and covered the woods, ridges, and cane pieces with light grey ashes, resembling snow thinly strewed with dust, which speedily destroyed every appearance of vegetation; for three days all these symptoms continued to increase, during this the sun seemed to be in a total eclipse, the sea was discoloured, the ground bore a wintry appearance from the thick crust

of the fallen ashes, and the cattle were starving for the want of their accustomed food.

"On the 30th at noon, the column of smoke assumed a sanguine hue, rose with a livelier motion, and dilated itself more extensively, the noise became incessant with a vibration that affected the feelings and hearing; the Caribs who were resident at Morne Ronde, fled from their houses to Kingstown, and the Negroes from their work, and the very birds were beaten to the earth overpowered by the sand and stones projected from the mountain; at length, just as the day closed, the flame burst forth pyramidically from the crater, the thunder now grew deafening, and electric flashes, some like rockets, and some like shells darting in all directions, and in all forms, illumined the immense column of smoke, which hung over the volcano. In a short time the lava poured out on the north-west side, it was opposed there by the acclivity of a higher point of land, but being driven on by fresh accessions, it ascended and surmounted the obstacle, forming the figure V in a torrent of fire, plunged over the cliff, carrying down rocks and woods in its course, and finally precipitating itself into a vast ravine at the foot of Morne Ronde; all this while large globular bodies of fire were exploded from the crater, which burst, and either fell back into it, or among the surrounding bushes, which were instantly in a blaze; in about four hours the torrent of lava reached the sea, and shortly after, another stream descended eastward toward Rabacca. The Island was now shaken by an earthquake; it was followed by a shower of cinders which fell like hail for two hours, and this was followed by a fall of stones mingled with fire, which continued for an hour.

"Many houses were set on fire, many Negroes were wounded, and some were killed, but happily the weight of the stones bore no proportion to their magnitude, or the sufferers from them would have been still more

ST. VINCENT DEVASTATED

numerous than they were. At length in the afternoon of the 1st of May, the erruption ceased, and the mountain sank gradually into a solemn silence: the volcano however still burned, and on the 9th of June, it again gave alarming signs of activity, but nothing more occurred than the throwing up of a quantity of stones and ashes, which fell back into the abyss, from whence they came.

"All the former beauty of the Soufrière was of course destroyed, the conical mount disappeared and an extensive lake of yellow coloured water, whose agitated waves perpetually threw up vast quantities of black sand, supplied its place. A new crater was formed on the north-east of the original one, and the face of the mountain was entirely changed; many of the adjoining ravines were filled up, particularly Wallibo and Duvalle's, in the former the river was absorbed for some years, but the gradual accumulation of water burst through the sandy barrier and carried away many Negro houses in its progress; thirty-two slaves, belonging to Wallibo Estate, were washed into the sea by the torrent.

"At Duvalle's, the former settlement of the Carib Chief, a sugar plantation had been established by Messieurs Thesiger and Calvelly; the works, situated in a valley, were entirely covered by the sand and ashes, and some hogsheads of sugar remain there at present calcined to a cinder. The Rabacca River was also filled up, and its stream seldom reaches the sea except in cases of heavy rains.

"It was at first feared that the Island would be rendered barren by the ashes which lay on its surface to a considerable depth, but they did not prove so injurious as was supposed. The great danger was famine; but the neighbouring Colonies of Barbados, Demerary, and Dominica, with a generous promptitude hastened to supply the Island with provisions, and a Committee was appointed

by the Council and Assembly for the purpose of purchasing supplies. An investigation of the losses sustained was also made and a petition presented to the Prince Regent, praying for relief, which was most favourably received, and on the case being laid before Parliament, the sum of £25,000 was voted for the relief of the sufferers."

It is interesting to compare this account of the eruption of 1812 with the following description, given by Rev. J. H. Darrell, of the similar outburst of volcanic activity in 1902, the memory of which must be still fresh in the

minds of many readers:

"At 7 a.m. on Wednesday, the 7th instant [May 1902],

there was another sudden and violent escape of pent-up steam, which continued ascending till 10 a.m., when other material began to be ejected. It would seem that this was the time when the enormous mass of water in the lake of the old crater was emitted in gaseous condition. . . . The mountain heaved and laboured to rid itself of the burning mass of lava heaving and tossing below. By 12.30 p.m. it was evident that it had begun to disengage itself of its burden by the appearance as of fire flashing now and then around the edge of the crater. There

was, however, no visible ascension of flame. These flamelike appearances were, I think, occasioned by the molten lava rising to the neck of the volcano. Being quite luminous, the light emitted was reflected from the banks of steam above, giving them the appearance of flames.

"From the time the volcano became fully active, tremendous detonations followed one another so rapidly that they seemed to merge into a continuous roar, which lasted all through Wednesday night, yesterday (Thursday, the 8th), and up to 6.30 a.m. this morning, the 9th instant. These detonations and thunderings were heard as far as Barbados, 100 miles distant, as well as in Grenada, Trinidad, and the south-end of St. Lucia. At 12.10 p.m. on Wednesday, I left in company with several gentlemen

THE ERUPTION IN MAY, 1902

in a small row-boat to go to Chateaubelair, where we hoped to get a better view of the eruption. As we passed Layou, the first town on the leeward coast, the smell of sulphuretted hydrogen was very perceptible. Before we got half-way on our journey, a vast column of steam, smoke, and ashes ascended to a prodigious elevation. The majestic body of curling vapour was sublime beyond imagination. We were about 8 miles from the crater as the crow flies, and the top of the enormous column. 8 miles off, reached higher than one-fourth of the segment of the circle. I judged that the awful pillar was fully 8 miles in height. We were rapidly proceeding to our point of observation, when an immense cloud, dark, dense, and apparently thick with volcanic material, descended over our pathway, impeding our progress and warning us to proceed no farther. This mighty bank of sulphurous vapour and smoke assumed at one time the shape of a gigantic promontory, then of a collection of twirling, revolving cloud-whorls, turning with rapid velocity, now assuming the shape of gigantic cauliflowers, then efflorescing into beautiful flower-shapes, some dark, some effulgent, others pearly white, and all brilliantly illuminated by electric flashes. Darkness, however, soon fell upon us. The sulphurous air was laden with fine dust that fell thickly upon and around us, discolouring the sea; a black rain began to fall, followed by another rain of favilla, lapilli, and scoriæ. The electric flashes were marvellously rapid in their motions and numerous beyond all computation. These, with the thundering noise of the mountain, mingled with the dismal roar of the lava, the shocks of earthquake, the falling of stones, the enormous quantity of material ejected from the belching craters, producing a darkness as dense as a starless midnight, the plutonic energy of the mountain growing greater and greater every moment, combined to make up a scene of horrors. It was after 5 o'clock

when we returned to Kingstown, cowed and impressed by the weirdness of the scene we had witnessed, and covered with the still thickly falling grey dust. . . The awful scene was again renewed yesterday (Thursday, the 8th) and again to-day. At about 8 a.m. the volcano shot out an immense volume of material, which was carried in a cloud over Georgetown and its neighbourhood, causing not only great alarm, but compelling the people by families to seek shelter in other districts."

On this occasion a Mansion House Fund was opened, and upwards of £73,340 was collected for the relief of the sufferers. The administration of this fund unfortunately gave rise to many questions and a debate in Parliament, the Government declining to permit the whole sum to be devoted to the specific purpose for which it was subscribed. At the present time a balance of £25,000 is still unexpended, the interest from it being devoted to poor

relief and similar objects.

The form of all the mountains except the Soufrière indicates that they have suffered prolonged and intense erosion; the radiating valleys are deep and narrow, and have been cut in the old volcanic pile. Except on the steepest slopes, the rocks are deeply covered with weathered material which has either been formed on the spot, or brought down by landslips or as rain wash. Lava flows are not the predominant feature of the coast sections and are far less important than the ash beds. There are, however, very fine examples of lava flows, the thickness of which, as well as the large area they cover, being the most striking features of the geology of the island.

The whole of St. Vincent is of volcanic origin, and there are no marine sedimentaries or organic limestone. On the north-east side there is a more level tract of land known as the Carib country, which formed part of the land reserved to the Caribs by the treaty of 1773. It was once

THE CARIB COUNTRY

the most fertile district in St. Vincent, but all cultivation on it was destroyed by the volcanic eruption, and it is only recently that the Carib canal, on which it was dependent for its water supply, was restored and agricultural operations renewed. St. Vincent has numerous rivers, the principal being the Union or Argyle River on the windward side and the Warrawarou at the south. On the windward side of the island there is also the Rabacca or Dry River, which was choked by the volcanic eruption of 1812. The principal indentation is Kingstown Bay, which forms a splendid anchorage on the south-west coast. On its shore is Kingstown, the capital. The island is divided into five parishes: St. George, Charlotte, St. Andrew, St. David and St. Patrick.

Most of the Grenadines, a chain of islands lying between St. Vincent and Grenada, are dependencies of St. Vincent, the largest which fall under this category being Bequia, 9 miles from Kingstown, Mustique, 18 miles, with Balliceaux—a corruption of belles oiseaux—and Battowia near by; Canouan, 25 miles; Mayreau, 37 miles, and Union Island, 40 miles from Kingstown. It was to Balliceaux that the Caribs were removed prior to their deportation to Ruatan off Honduras after the rebellion of 1795

St. Lucia, situated in 13° 50′ north latitude and 60° 58′ west longitude, and about 30 miles to the north-east of St Vincent, has a total area of 233 square miles. Its greatest length is about 30 miles, and its extreme breadth 21 miles. The main range of mountains runs north and south throughout nearly the entire length of the island, with an average height of 1,500 feet, and is buttressed by numerous ridges which slope gently down to the sea with narrow valleys between them. At Gros Islet at the extreme north-west, and Vieux Fort at the south-east where the backbone of mountains ceases, are the flattest parts of the island. To the south of the island stand two

conical mountains, known as the Pitons, or Peaks, which rise to a great height, the Gros Piton being 2,619 feet high, and the Petit Piton 2,461 feet. Less than a quarter of a mile apart at their base, they look very imposing. Not far from them inland is another Piton—that of Canaries, which, rising to a height of 3,140 feet, is the highest point of the island. The Gros Piton is comparatively easy to ascend, but until 1878 the small Piton defied man. In that year, however, it was conquered by a M. Lompré who succeeded in gaining its summit, and in 1885 Mr. Charles de Brettes, accompanied by Dr., now Sir, John W. Carrington, the then Chief Justice of St. Lucia, ascended it.

There are still traces of volcanic activity in the island. the principal being at Soufrière, where there is a volcanic crater about three acres in extent encrusted with a thin layer of sulphur, alum, cinders, etc., which emits sulphurous fumes. In the neighbourhood there are hot springs and mineral waters which once enjoyed a considerable vogue on account of their medicinal properties. Baron de Laborie was apparently the first to turn them to account, and we read in Breen's St. Lucia that soon after his assumption of the government in 1784, he had these waters analysed by the "Médécins du Roi" in St. Lucia and Martinique, and that in consequence of their favourable report, Louis XVI granted a sum of money towards the construction of baths and the requisite buildings "for the use of His Majesty's troops in the Windward Islands." This undertaking was carried out by Baron de Laborie in 1785, and baths were established on an extensive scale between the volcano and the seaside town of Soufrière, which continued for many years to be the resort of invalids fron the neighbouring islands.

After the capture of the island by the English, and owing, no doubt, to the troubles arising from the French Revolution, the baths fell into disuse. In 1836, however,

ST. LUCIA'S SULPHUR BATHS

Sir Dudley Hill endeavoured to restore them, but his efforts were rendered useless, owing to the action of Mrs. Alexander, a neighbouring landowner, who claimed a portion of the land occupied by the buildings. An action for trespass against the Governor was, unfortunately for St. Lucia, given in Dame Alexander's favour, and since then no serious attempt has been made to restore the glories of this erstwhile cure-resort, though baths can still

be indulged in at the Ventine sulphur springs.

St Lucia is well watered, having innumerable small rivers, the chief of which are the Cul de Sac and Roseau on the leeward side, and the Mabouya, which empties itself into the sea on the windward coast. The island has many bays which afford good anchorage, and Castries harbour, at the head of which Castries the capital stands, is quite one of the finest in the West Indies, though it is modestly described by the motto of the colony as "Statio haud malefida carinis." It is about a mile in length, and, being landlocked, formed a superb anchorage for a fleet in the days before the Dreadnought first came on the scenes. Its entrance, between the headlands of the Tapion and Vigie, is only a third of a mile wide.

Another bay worthy of notice is that of Gros Islet near the north end of the island, which is protected by the small but historic Pigeon Island from a fort on one of the two hills of which Rodney watched the movements of Count de Grasse's fleet off Martinique, before he engaged it in the memorable battle which brought such glory to

the English on April 12th, 1782.

Geologically St. Lucia has been described as a confused, amorphous mass of igneous matter, without any definite structural arrangement, and its rocks, with the exception of a coralline limestone found in the neighbourhood of the town of Soufrière, are all of igneous or volcanic origin. These rocks are either crystalline, of the nature of traps, exhibiting much variety of structure, or uncrystalline,

composed of volcanic ashes, constituting tufas. Of the former many resemble basalt and greenstone, whilst some are an approach to granite or syenite. The mountains are made up of a volcanic conglomerate, and basalt rocks of all sorts (porphyrites, andesites, pumiceous and bedded tuffs), phonolitic and schistose masses, felstones, lavas, and such-like, are found. These rocks are Tertiary or Post-Tertiary.

In the valleys and alluvial plains the soil consists of a deep vegetable mould mixed with clay, and, in the more elevated positions, of red earth; the substratum is a mixture of sand and gravel. Rough jasper is found at Vieux Fort to the extreme south, various commercial clays in the south-western parts, and very small quantities of iron and copper ores exist in some localities. Sulphur was formerly obtained in large quantities from the sulphur springs of Soufrière in the west of the island, but a tax of 16s. per ton having been imposed on it in 1840, the industry collapsed. As this deposit is always in a state of natural accumulation, the crusts were again stripped in 1892 by Mr. Cousins, an English engineer, and transported home as a marketable commodity.

The capital of St. Lucia is Castries, which stands on the shore of the harbour of the same name on the west coast and about 5 miles from the northern end of the island.

Dealing now with the Leeward Islands, St. Kitts, 45 miles to the west of Antigua, is about 23 miles long and has a total area of 68 square miles only. It is situated in 17° 18' north latitude, and 62° 48' west longitude. Being purely volcanic, the island is naturally very mountainous. It has a central range running south-east and north-west and culminating in Mount Misery 3,711 feet high, an extinct—while penning this word, the writer touches wood—volcanic cone. The mountains run down to the coast on either side, and are densely cultivated up to a

THE PUMP ROOM IN NEVIS

considerable height. At the south-east the main range of mountain peaks forms a semicircle, which encloses a fertile plain, at the south-west of which is Basseterre, the capital of the island on the sea shore. At the south-east corner a narrow isthmus, not more than a mile or a mile and a half wide, extends towards the neighbouring island of Nevis, from which it is separated by a strait scarcely two miles in width.

St. Kitts has no rivers worthy of the name, but is well watered; indeed sometimes it is too well watered, for during heavy rains "washes" occasionally occur which do much damage. On the lower levels the soil is naturally rich and exceedingly fertile. Owing, it is believed, to the deposit of volcanic matter, the soil on the east side

of the island is stronger than that on the west.

Nevis, which lies in 17° 14' north latitude and 62° 33' west longitude and has an area of 50 square miles, is also purely volcanic; indeed, it is little more than a single volcanic cone which rises to a height of 3,596 feet. The island possesses a mineral spring which is said to be of great efficacy in the treatment of gout, lumbago and kindred ailments. Early in the nineteenth century Nevis was much resorted to on account of its medicinal waters, and it became the most fashionable island in the West Indies. Upwards of £40,000 was spent on the erection of a "Bath House" and Pump Room. The hotel was, however, allowed to fall into ruin, but it has recently been restored. Of Nevis Richard Blome wrote as far back as 1672, "Here are divers Springs of Fresh-Water, and one Spring of a Hott and Mineral Water; not far from whose Spring-head are Baths made, which are much frequented for the curing of several distempers of the Body of man."

A sample of water from this mineral spring was analysed at the Public Health Laboratories in London in 1909, and Dr. J. C. Thresh, in his report, said that it closely

resembled the water from the Wildbad Springs of Wurtemberg, which are extensively used for chronic rheumatism and gout. Chemical examination yielded the following result:

PHYSICAL EXAMINATION.

Turbidity: Clear and bright. Slight sediment of sand. Colour: Slight yellowish green. Odour: None.

Determinations.					Results in						
					(Grains	per ga	llon. Parts per 10	0,000.		
Tota	al soli	id ma	tter dri	ed at	180°	C.	4	14.1	63.0		
Chlo	orine							5.7	8.5		
	Equi	valen	t to ch	lorides	(60%	6 Cl.)		9.5	13.0		
Nitric Nitrogen 0.37							0.5				
Equivalent to nitrates (17% N.) 2.2									3:	2	
Nitrites Absent.											
Hardness: Permanent, 8.4; Tempor-											
	ary,	9.8;	Total					18.2	26.0)	
			zinc, ii						Absent.		
Free ammonia 0.0004								0006			
Orga	anic a	ammo	nia					0.000		0020	
Oxy	gen a	bsorb	ed at 9	8° F. i	n thre	e hou	ırs	0.018	9 0.0	0270	
SALINE CONSTITUENTS EXPRESSED IN PARTS PER 100,000.											
Ca.			Na.					SlO ₂			
5.6			10.0	22.8		8.2		4.7	combinations.		
5.6	_		_	8.4	_	_			Calcium		
0.0				0.1						4.0	
	4.5			11.2		_			Magnesium		
										5.7	
_			2.45	3.2			_		Sodium		
									carbonate	5.65	
		1.4	-	_	1.7				Potassium		
									sulphate	3.1	
			1.15		2.4		-		Sodium		
									sulphate	3.55	
_		_	5.35		_	8.2	-		Sodium		
									chloride 1	3.55	
		_	.9	_	_		2.4		Sodium nitrate		
-	-	-	.15			_	-	- 4.7 Silica with trace			
									of sodium		
									silicate	4.85	

Total solid constituents dried at 180° C. = 63.0 63.7

The capital of this little island is Charlestown on the leeward coast, 12 miles from Basseterre.

One thing is certain, and that is, that visitors imbibing or bathing in the mineral waters in Nevis and Jamaica do not risk incurring the fate which befel a

A VERY QUAINT EPITAPH

certain Mr. B—y, a rich West Indian, who, according to a British Guiana paper of 1821, was compelled to return to England on the score of ill-health. On his arrival he was ordered off to Cheltenham to take the waters. In a few weeks he and his daughters died, and, according to the above paper, "a black marble slab points out the spot in the churchyard of that town of their common grave. The father died last. Before his death he wrote this couplet:

"'Here I lie with my three daughters:
Is this your cure? Then d—n your waters.'"

Antigua which lies in 17° 6' north latitude, and 61° 45' west longitude, and is about 40 miles east of Nevis and 27 miles east of Montserrat, has an area of 108 square miles. The island, which in shape is oval, has three distinct characteristics. In the south and south-west it is volcanic and mountainous; in the north and northeast it is of coral formation, the soil consisting of calcareous marls and coarse sandstone, while the centre part is flat and clayey. The soil of the valleys and low lands is a rich black mould on a substratum of clay and is remarkable for its productivity. On the other hand, the soil on the higher lands consists of a stiff, reddish clay, on a substratum of marl. The island has unfortunately no rivers, and the want of fresh water springs is sadly felt in times of drought, but the small Bendal's stream supplies a factory of the same name. The shores are lined by coral reefs, but the island has many natural harbours, the most notable of which are St. John's Harbour on the north-west, which is fully two miles long by three-quarters of a mile wide, the historic English Harbour, (at which the mail steamers used to call), in the south, with the still larger Falmouth Harbour near it, Willoughby Bay at the south-east, and Parham Harbour on the north coast. St. John's, the capital, stands on gently sloping ground overlooking the harbour of the same name. The island

is divided into six parishes, St. John, St. Peter, St. Philip, St. Mary, St. Paul and St. George.

The small islands of Barbuda, 25 miles to the north, and Redonda, between Montserrat and Nevis and 25 miles to the south-west, are dependencies of Antigua. Barbuda, which has an area of 62 square miles, is flat and has a lagoon on the west side, separated from the sea by a spit of land. Redonda is a mere rock which is, however, of value on account of the deposits of phosphate of alumina there.

Montserrat, 27 miles to the south-west of Antigua and about 34 miles from Nevis, is situated in 16° 45' north latitude and 62° west longitude, and its total area is 321 square miles. It is entirely volcanic, and has three groups of mountains, the highest elevation being the Soufrière, which rises to 3,002 feet in the southern part of the island. The hills ascend by gradual slopes from the sea and are cultivated to a height of 1,500 feet, the principal centres of cultivation being on the western and south-east sides. Blome wrote in 1672 that the island "is much inclined to Mountains, which are well cloathed with Cædar, and other Trees"; and the natural forest still covers the summits of the two main ranges. The island is in consequence well watered; the northern hills are, however, deforested with the result that the land in their neighbourhood is for the most part dry and of little value.

Plymouth, the chief town, stands on the south-west coast, and has an open roadstead.

Anguilla, the most northerly of the Leeward Islands, lies about 60 miles to the north-west of St. Kitts, and has an area of 35 square miles. The "dogs" and neighbouring islets are dependencies of it.

Dominica, the largest of the Leeward Islands group, is exceeded only by Jamaica and Trinidad in size in the British West Indies. It is situated between 15° 20′ and

DOMINICA'S IMPERIAL ROAD

15° 45' north latitude, and 60° 13' and 61° 30' west longitude, and lies 85 miles south-east of Montserrat, and half way between Guadeloupe and Martinique, from each of which it is distant about 30 miles. The island. like its neighbours, is volcanic and very mountainous, the highest point being Morne Diablotin, which is over 5,000 feet in height. The main range of mountains runs north and south with branches running down to the sea, which are clad with luxuriant forest trees. Many of these furnish valuable timber. The rivers are numerous. There are said to be 365, but there is a vague suspicion that this figure is not accurate, but was arbitrarily chosen to enable it to be said that Dominica has a river for every day of the year. The principal rivers are the Layou and Pagoua, which almost intersect the mountains near the middle of the island where the range resolves itself into undulating country, known as the Layou flats. This district, which is some 20,000 acres in extent and varies from 200 feet to 1,500 feet in height, is very fertile and has proved to be well suited for almost every form of tropical cultivation. Cacao, coffee, limes, rubber, spices, oranges, etc., grow there to perfection, and since 1899, when a road to it with the grandiose title "Imperial" was constructed, a good many settlers have taken up land in the neighbourhood. The road is 18 miles in length and extends to Bassinville. Its name is rather suggestive of a boulevard flanked with imposing groups of statuary, but, truth to tell, it is in reality only a bridle-path which is sorely in need of improvement.

Roseau, the capital, is situated on the leeward side, and has only an open roadstead; but in Prince Rupert's Bay, near the north of the island, Dominica has a fine natural harbour which if properly developed, should form an admirable coaling station. It is protected and sheltered by two hills, known as the Cabrits, on a

promontory to the north.

The Virgin Islands lie to the eastward of Porto Rico and include the following British units: Tortola, Virgin Gorda, Jost van Dyke, Peter's Island, and Salt Island, besides many small islets making a total area of 58 square miles. Tortola, the largest of the British Islands in this group, is situated in 18° 27′ north latitude, and 64° 39′ west longitude.

The Bahamas, which are the most northerly of the West Indian colonies, consist of a chain of coral islands lying between 21° 44' and 27° 34' north latitude, and 72° 40' and 79° 5' west longitude. They comprise about twenty inhabited islands, and an immense number of cavs and rocks. The chief islands are New Providence in which the capital, Nassau, is situated, Abaco, Harbour Island, Eleuthera, Inagua, Cat Island, Ragged Island, Rum Cay, Exuma, Long Island, Long Cay, North Bimini. South Bimini, and Watling's Island, all of which are ports of entry, besides Great Bahama, Crooked Island, Acklin Island, Mayaguana, the Berry Islands, and Andros. Their total area is 4.466 square miles, and they extend in a south-easterly direction, for a distance of about 600 miles from the shores of Florida to the north-west of Haiti

The islands are of coral formation, and are mostly narrow and low, the highest elevation being 400 feet, which is attained in Cat Island. Except Andros, where there is a stream which becomes a lake in the rainy season, the islands have no rivers, but good water is obtained from shallow wells.

Nassau, the well-known winter resort, situated on New Providence, is the capital of the Bahamas. The town lies on the north shore of a safe harbour which is protected by a small island called "Hog Island."

Though situated on the mainland of South America, British Guiana is, as has been shown, generally considered an integral part of the British West Indies owing

THE FEATURES OF GUIANA

to the many interests which it has in common with those islands. It lies between 0° 41' and 8° 33' north latitude. and 56° 201' and 60° 23' west longitude, and has a total area of 90,500 square miles. Its coast line is 250 miles in length and the country extends back to a distance of fully 600 miles from the sea. Yet, in spite of the large area of the colony, only the front lands and the banks of the rivers near their mouths are to any extent inhabited. These front lands are flat and below the level of the sea, which is kept out by an elaborate system of sea defences first established by the Dutch during their occupancy of the colony. The soil of the front lands being alluvial, is very rich and fertile. The interior of the colony consists of rolling grass plains or Savannahs, dense tropical forest and bush, and ranges of high mountains. A series of sand-hills runs parallel to the sea coast beyond the Savannahs, and it is believed that they were left successively by the ocean as it receded in distant times.

On the western boundary there is a chain of sandstone mountains, called the Pacaraima range, the most notable of which is Roraima (8,740 feet), whose wonders have been described by Mr. (now Sir) Everard im Thurn, who in 1889 was with Mr. H. I. Perkins the first to reach its fastnesses. Other ranges of importance are the Imataka, spurs only of which enter the colony, the Kanuku mountains, and the Sierra Akarai.

The rivers are many and noble, the principal being the Demerara, the Essequibo, (with its tributaries the Mazaruni, Cuyuni, Potaro and Rupununi), and the Berbice which give their names to the three counties, and the Corentyne which separates British from Dutch Guiana. These rivers are all subject to tidal influence in their lower reaches, the spring tides rising and falling to the extent of 18½ feet. All the larger rivers are impeded by rapids and cataracts which hinder navigation, and in several cases render haulage of boats for

considerable distances a necessity. Among the best known rapids are those of Tumatumari and Etaballi on the Essequibo, but the grandest fall of all is that of Kaieteur, discovered by Mr. C. Barrington Brown, a description of which is given in the chapter devoted to the scenery of the West Indies.

The geology of British Guiana has been the subject of close investigation by Professor J. B. Harrison, the Director of Science and Agriculture of the colony. The coast lands, he states, consist of a plain of marine alluvium, interrupted in a few places in the north-west districts by low hills of more or less decomposed country rock. These alluvial deposits consist of interbedded clays of unknown thickness, silts and silicious sands, the latter forming lenticular deposits of purely local occurrence. The lower parts of the formation are believed to be of the pliocene and pleistocene age. The sand dunes are composed of glistening white quartz-sand.

The country consists of Archean gneiss, varying in its character and composition from hornblende-schist and diorite-schist to aplite-gneiss. Over a large area the Archean rocks are covered by a great thickness of sandstone and conglomerate, parts of the great sandstone and conglomerate plateau of South America. Both the Archean rocks and the sandstones are penetrated by dykes and sills of diabase of probably more recent origin. Rising through the sandstone are hills and low mountains of a more or less altered gabbro or very coarse-textured diabase. These are of apparently far greater age than the intrusive diabase. The sandstones surround these mountain masses, which probably were islands in the former sea now represented by the sandstones and conglomerates.

The only minerals of economic importance which have been found in quantity are gold and diamonds. The gold is found widely diffused in the districts occupied

GOLD IN BRITISH GUIANA

by the Archean rocks, but only in payable quantities where certain conditions prevail, the chief of which appears to be intrusion of basic igneous rocks. These basic rocks are of at least two periods, those belonging to the gneissose formation, probably originally gabbro and diabase, but now in the form of quartz-diorite, epidiorite, amphibolite and hornblende-schists, and later unaltered diabase. The former class of rocks gives rise to the Groete Creek goldfield, the Cuyuni goldfields, the Puruni field and that of the upper Mazaruni. Gold appears to be diffused through the mass of rock and to be set free during its degradation. From the degradation-products, which are chiefly quartz, concretionary ironstones and ferruginous clays, the gold has been concentrated by the normal processes of weathering, and also by processes of solution and redisposition of the metal. Where the Archean rocks are traversed by dykes of the late diabase, gold is not infrequently found in the decomposition-products, especially in the vicinity of the junction of gneiss and diabase. Where the diabasedykes traverse a district already intersected by intrusions of quartz-porphyry, felsite and allied rocks, the junctions are frequently rich in metal and their degradation-products furnish the gravel for many well-paying placers. The auriferous deposits occur more frequently where the dykes of diabase are small and numerous. The larger hill and mountain ranges, except possibly in localities where the amount of degradation has been very great, apparently, as a rule, contribute little. A third source of gold, and in places a very productive one, is the occurrence of mineralised masses of acidic rocks, such as the aplite-granite of Omai.

British Guiana is divided into three counties, Demerara, Essequibo and Berbice, and the principal city is Georgetown, which lies on the right bank and near the mouth of the Demerara River. The second town in importance

is New Amsterdam, the capital of Berbice, near the mouth of the Berbice River.

British Honduras lies in 18° 29′ to 15° 53′ north latitude, and 89° 9′ to 88° 10′ west longitude, and is bounded on the north and north-west by Yucatan, on the north-east and east by the Bay of Honduras, an inlet of the Caribbean sea, and on the south and west by Guatemala.

The coast is protected by coral reefs and cays which contributed in no small measure to the success of the inhabitants against the Spanish in the memorable battle of St. George's Cay which is referred to elsewhere.

For some miles inland, the ground is low and swampy, and mangroves abound. Beyond this is a narrow belt of rich alluvial land, which is succeeded in turn by vast tracts of arid and sandy land known as "Pine ridges" parallel to the rivers. Behind these again are lower ridges, called broken ridges, and then the Cahoon ridges, covered with hundreds of thousands of cohune palm trees (Attalea cohune), which bear nuts, the successful cracking of which on a commercial scale—without injuring the valuable kernel—has so far successfully defied the ingenuity of man. Behind the Cahoon ridges are broad Savannahs watered by the rivers which rise in the mountains beyond.

The Capital is Belize on the river of the same name, and other towns of some consequence are Stann Creek, Corosal, Orange Walk, Punta Gorda the Cayo, Monkey River and Mullins River. Like British Guiana, British Honduras is a country of great possibilities, and it is surprising how little is known about it at home.

CHAPTER IV

SCENERY-BUILDINGS-TOWNS

The scenery of the West Indies is exquisitely beautiful. That will be admitted by everyone who has been privileged to visit those colonies. Nearly all the islands are, as has been shown in the preceding chapter, of volcanic formation, and they are consequently very rugged and mountainous. The only notable exceptions are Barbados and part of Antigua; and though the first view of the former island may be a little disappointing to a new arrival, a closer inspection reveals many spots of great attraction and charm.

There are, for instance, the numerous gullies or ravines in the north-west of the island-ideal places for a picnic or "maroon"—clothed with a wealth of tropical vegetation in which creepers and ferns of infinite variety predominate, and there is the hilly Scotland district seen to perfection from Hackleton's cliff. Here one stands on the brink of what appears to be-though it is not-an immense and broken crater, whence, as the Rev. G. Hughes in his Natural History of Barbados (1750) wrote: "Nature at one View displays a great Variety of surprising Prospects. Here the high impending Rocks yield a dreary rueful Appearance: The several deep Chasms below, over which they project, are imbrowned with the thick Foliage of lofty Trees. The adjacent steep declivity is crowded with irregular Precipices, and broken Rocks; the whole View terminating in the tempestuous Sea, over whose craggy Shores the foaming waves incessantly break."

The coup d'wil formed by the weather-worn buildings of Codrington College, surrounded by stately cabbage palms which are reflected in a glassy lake, with the blue waters of the Atlantic beyond, would alone redeem

Barbados of the charge of having a lack of beauty which is so often levied against it by those who judge the island from hot and dusty Bridgetown alone.

Palm trees are, of course, a prominent feature in West Indian scenery, particularly the tall cabbage or Royal Palms, which form as admirable a foreground for the painter or photographer in the West Indies as the historic stone pine tree has done for so many years for artists sketching the Bay of Naples and Vesuvius from the Vomero. "Grey pillars," wrote Charles Kingsley, when he first saw these cabbage palm trees in St. Kitts, "which seemed taller than the tallest poplars, smooth and cylindrical as those of a Doric temple, each carrying a flat head of the darkest green. . . . It was not easy to believe that these strange and noble things were trees; but such they were. At last we beheld with wonder and delight the pride of the West Indies, the Cabbage Palms-Palmistes of the French settlers-which botanists have well named Oreodoxa, the 'glory of the mountains.' "

Barbados has been likened to a well-kept garden, so highly is it cultivated. Wherever the eye turns there are fields of gracefully waving sugar-canes interspersed with the old-fashioned windmills, except where they have been replaced by the more practical but less picturesque steam-engines.

Where all are so enchanting, it would be difficult to say which island of the West Indies is really the most beautiful. In Dominica one feels inclined to award the palm to Dominica, in Trinidad to give it to Trinidad, and so on; but probably Jamaica, owing to the great variety of its scenery, is the island really entitled to it. Surely there could be no grander sight than that presented by the aptly named Blue Mountains in that favoured island, which rise to the clouds beyond the plain of Liguanea, culminating in the majestic Blue Mountain

SUGAR WORKS IN BARBADOS



A VIEW OF LIGUANEA PLAIN

Peak. The view, too, from the rising ground of the plain and of Kingston which lies below, spread out like a map on the shores of the placid harbour and embraced by the long spit of land called the Palisadoes, is scarcely less attractive. It was admirably described by Michael Scott in Tom Cringle's Log: "Immediately under foot rose several lower ranges of mountains, those nearest us. covered with laurel-looking coffee-bushes, interspersed with negro villages hanging among the fruit trees like clusters of birds' nests on the hillside, with a bright green patch of plantain suckers here and there, and a whitepainted overseer's house peeping from out the wood. and herds of cattle in the guinea-grass pieces. Beyond these stretched out the lovely plain of Liguanea covered with luxuriant cane-pieces, and groups of negro houses, and guinea-grass pastures of even a deeper green than that of the canes; and smaller towns of sugar works rose every here and there, with their threads of white smoke floating up into the clear sky, while, as the plain receded, the cultivation disappeared, and it gradually became sterile, hot and sandy, until the Long Mountain hove its back like a whale from out the sea-like level of the plain; while to the right of it appeared the city of Kingston, like a model, with its parade, or place d'armes, in the centre, from which its long lines of hot, sandy streets stretched out at right angles, with the military post of Up Park Camp, situated about a mile and a half to the northward and eastward of the town. Through a tolerably good glass the church spire looked like a needle, the trees about the houses like bushes, tall coco-nut trees like harebells."

Let the reader imagine one of the favourite backwaters of the Thames—that of Wargrave for example with the willows and elms and poplars replaced by such palms as he has seen perhaps in the great conservatory of Kew, but of course, far, far larger, meeting

gracefully overhead, under a sky of the deepest blue. He will then have a fair idea of the glories of the famous irrigation canal leading from the picturesque gorge of the Rio Cobre, known as Bog Walk—the Boca del Agua, or water's mouth. Such views as that of the little town of Montego Bay obtained from the railway as the train emerges from the last tunnel on the line with a shrill whistle and runs fussily down through fields of waving sugar-cane to the terminus, with the deep blue sea dotted with the tiny Bogue Islands beyond, have no counterpart in England or in Europe. "Wherever you turn in this wonderful island," wrote William Archer recently, "you find some new form of beauty. In Bog Walk you are in a highland glen; Buff Bay valley is almost Alpine in character: Mandeville suggests the Surrey hills; but everywhere there is an indescribable tropical richness superadded to the northern forms: and the bays of the coast have no parallel out of the tropics."

Another beauty spot in Jamaica of inexpressible charm is the romantic Fern Gully, near Ocho Rios, for the preservation of which from vandal banana growers, Sir Harry Johnston made so eloquent and successful an appeal after his visit to the island. Here is a ravine positively filled with ferns of every description, for a distance of several miles. There is certainly no place in the West Indies more deserving of being preserved as

a national park.

The name Jamaica is said to have been derived from an Arrawak word meaning "well watered," and the island has certainly several rivers and waterfalls of consequence, the most noteworthy of the latter being those on the Roaring River, which plunge down amid what is almost a tropical forest, many of the trees being actually in the falls themselves, and the Cane River Falls in a cool ravine decked with orchids, ferns and flowering vines. Here it was that Three Fingered Jack had his cave, and

THE BOCAS DEL DRAGONE

here it was that that notorious brigand was eventually

run to ground by the courageous "Quashie."

Trinidad also has two superb waterfalls situated in such exquisite surroundings as only the tropics can furnish, namely those at Maracas, where the water is broken into a shower of spray over a perpendicular wall of rock covered with ferns and tropical vegetation which would be considered precious in a greenhouse at home, and at Diego Martin, where the water is precipitated in a slanting direction into the Blue Basin, a small lake which certainly does not belie its name.

The approach to Trinidad through the narrow channels christened by Columbus, who left the Gulf of Paria by one of them, the Bocas del Dragone, or the Dragon's mouths, from their formidable appearance, is grand to a degree. Between the northern coast of Trinidad and Venezuela stand the mysterious sentinel islands of Monos (monkey) Huevos (egg) and Chacachacare, which have witnessed Columbus's caravels fighting their way against the swirling currents, Nelson's Victory sailing majestically by with her decks cleared for action, and-what a contrast—that steel-plated leviathan, the Dreadnought, on her maiden voyage.

Beyond these islands again is the fairy-like archipelago, called the Five Islands, to which the jaded worker in Port of Spain can repair for recuperation at the close of his busy week. They call to mind Isola Bella and Isola Madre on Maggiore, though the setting of forest-clad hills is even grander here than that on the Italian lakes.

The smaller islands are scarcely less favoured, for cannot Grenada boast of its Grand Etang, Dominica of its Freshwater Lake and waterfalls, St. Vincent of that magnificent amphitheatre of forest-clad mountains overlooking Kingstown Bay, and St. Lucia of its Pitons, those sugar-loaf hills, which have for many a year formed a landmark to mariners? The Grand Etang is a crater

lake nestling in a mountain fastness. Now it is calm and peaceful, and it would be an evil day for Grenada if anything were to occur to destroy the equilibrium of the mountain, causing the waters to be engulfed and an eruption to be provoked; but the volcano is believed to be extinct, though the experience of Mont Pelé in Martinique, and the Soufrière in St. Vincent which had similar mountain lakes, makes it unsafe to prophesy.

Throughout the West Indies the harbours are remarkably picturesque, formed, as so many of them are, of the craters of volcanoes which have been for centuries quiescent. Such placid harbours as the Carenage of Grenada with their fleets of trim sloops lying at anchor, on the bosom of the deep blue waters guarded with their ruined forts which were once the terror of the invading

force, are a sight ever to be remembered.

But the West Indies are not solely dependent upon nature for their charm. The red-roofed houses-where wooden shingles have not been replaced by that modern abomination tin roofing-form a pleasing contrast to the foliage, and nearly every island has its crumbling forts, picturesque in their decay, whose weather-beaten stones blend harmoniously with the wild and luxuriant vegetation. Once menacing, they remain grim relics of the anxious days of the eighteenth century, for not even the disintegrating effect of the tropical climate and bush has been able to obliterate their formidable looking bastions and casemates. Such fortresses as Brimstone Hill in St. Kitts, and Fort Charlotte in St. Vincent, are noble examples of masonry which seem in perfect keeping with their surroundings, while the one at the entrance to the Carenage at St. George's, Grenada, which was constructed after the design of de Caillus, a student of Vauban himself, helps in no small measure to accentuate the charm of the scenery. The view from the hills at the back of the promontory at the extremity of which



AMONG THE FIVE ISLANDS, TRINIDAD



THE GREAT KAIETEUR FALL

this fort stands is superb. Over it straggles the little town of St. George's, dominated by the tower of its homelike parish church, as peaceful a scene as one could well imagine. It would be difficult to avoid the use of superlatives in attempting to describe the view from the Morne in St. Lucia, and that other landlocked harbour—the harbour of Castries—on the possession of which Rodney set such store. A great part of the island, with headlands running out into the sea, lies outlined below, and it is hard to realise that the surroundings of this somnolescent harbour were once the scene of desperate fighting, but St. Lucia changed hands more often than any other island, and the Morne Fortuné was always the objective of the enemy.

In this brief description the scenery of British Guiana has been left until last, for the characteristics of it differ from those of the scenery of the islands. As explained in a previous chapter, the front lands of the colony are below sea level, and all that is to be seen on coming within sight of the colony is a low line of bush and scrub, with tall chimneys of sugar factories dotted here and there. For those who study agriculture or sea-defence work, these coast lands are full of interest, and Georgetown and New Amsterdam have their attractions; but it is in the interior of the colony that the scenic glories lie. Here in this "Magnificent Province," as it is called, there is a sense of space; one can journey for mile after mile up the great rivers, while the scenery changes only imperceptibly. First come rolling savannahs, then a series of tree-clad sandhills running parallel with the coast, and then the seemingly interminable forests. The rivers are much broken by cataracts, and undoubtedly the chief attraction of the colony is the Kaieteur Fall, which, although discovered over forty years ago, has probably not been visited even yet by more than fifty persons. The fall is no less than five times as

high as Niagara, and yet comparatively few people in this country have ever heard of it. It has a clear drop of seven hundred and forty-one feet, after which it falls eighty-eight feet more over a sloping rock, making a total height of eight hundred and twenty-nine feet, while the width varies from two to four hundred feet.

Alas! it has not yet been the privilege of the writer to see this wonderful fall, but Mr. Edward R. Davson has given him the following description of a visit which he recently paid to it: "We left Georgetown in the early morning by the Demerara river steamer and through the day we journeyed upstream, first past sugar estates with their tall chimneys and their vast stretches of vivid green sugar-cane, then past cacao and rubber estates with the managers' bungalows snuggling amid the trees, and then by alternate stretches of bush and savannah. All the way up were clearings here and there, where blacks and boyianders¹ had their little houses on the river bank, and where they grew provisions to supply the daily food for the capital at the mouth. It was sunset when we arrived at Wismar, the steamer terminus, and here we found schooners loading the colony's greenheart logs to bear them over the world and also a miniature railway-station with all its attendant bustle. Then we were borne across the railway which leads to the Essequibo river, always along a reef of pure white sand and continually passing stations of wood-cutting grants. Rockstone was reached when darkness had fallen and by oil lamp we stored our baggage and were escorted to the little bungalow hotel, where a comfortable night was passed.

"Daybreak saw us out again, thanks to the shrill whistling of the Essequibo river launch, and once more we were on our way, pounding along hour by hour up the broad but shallow stream, steering from side to side to

¹ The boviander is a cross between the old Dutch inhabitant and the Indian.

THE JOURNEY TO THE FALL

avoid sand-banks, now and again meeting batteaux 1 filled with gold workers or balata bleeders on their homeward route, and all the way passing an unbroken forest line which stretched down to the bank on either side in a

canopy of impenetrable green.

"As evening fell, we turned into the tributary Potaro. and so we drove upstream until the darkness deepened and we saw the lights of Tumatumari, the gold-town. twinkling ahead. A night spent there at the quarters of a hospitable gold official, a hasty view of the Tumatumari falls at early morn and once more we were off by another

launch which lay waiting about the rapids.

"A few hours brought us to Potaro Landing, and here was the end of civilised travelling and the beginning of bush life. We took the trail through the forest which avoided a large bend of the river and brought us to a camping place on the Pakatuk rapids. A day might be spent in pulling and 'portaging' the long shallow wooden batteau which was now our means of conveyance over these, but the foreseeing organiser of a trip arranged that this should be done in advance, and so we found the batteau with its mixed black and Indian crew, paddles in hand, ready awaiting us.

"From this time onward, the journey increased in interest daily. As we worked more and more south the forest-clad hills grew closer and each reach of the river discovered fresh beauties of tropical life. The day's work was always much the same, the early start from camp before the rising sun had dispersed the river mist; the rythmic and monotonous paddling mile by mile upstream; the hauling of the boat over the rapids when all stood waist deep in water and pulled, pushed, and lifted it over the barriers of rocks; the pitching of the camp in the evening among the trees on the river bank when the pot was boiled and the pipe smoked, and finally the sleep

¹ The local river boats are known as "batteaux."

in hammocks beneath the stars, when all was still save the night birds fluting in the branches overhead.

"Four days later we reached the Takuit falls, and, as the river from here onward was unnavigable, we left the boat and started on our long, slow climb up the hill to the Kaieteur table-land. The Indian path was steep and long and the forest air hot and heavy, so that we were glad at heart when we emerged on the rocky table-land. A short walk across brought us to the edge of the plateau basin and then the Kaieteur Fall burst upon us in all its grandeur. From the highlands in the distance one could see the river rolling past forest and plain till it reached the edge of the table-land, and, hurling itself over, go thundering down into the mist below; then again in the valley far beneath one could see it meandering on its normal river course down through the lowlands to the sea. As for the fall itself, mere words can never adequately describe it. From the upper lip of the cliff the water glides over in a glassy curtain on its descent of near a thousand feet; and gradually the curtain splits and shivers in a hundred lines of falling water, which go shooting, feathering down and down until the eve can only see the mist which rises from the pool where the waters meet the lowland in the dark depths far below. The wind-eddies blow the spray mist here and there and up and down, and the sun's rays catch the vapour cloud and throw across now one, now two, quivering rainbows; and flights of white-throated swallows continually sweep over the face of the fall and shooting down with incredible velocity twist in and out of the gloomy cavern behind. Night and day there booms in one's ears the deep organ note of the fall, and around all is the solitude of nature broken only by the passing of Indians on their hunting trips or travellers such as ourselves.

"The night we spent on the Kaieteur plateau was a night one never could forget, when the moon rose up



THE KAIETEUR FALL, BRITISH GUIANA



THE SPIRIT OF THE FALL

and with a cold white light touched the distant hills above, and the heavy forests down below, and clothed the fall in a ghostly garb that made one feel with the Indians when in fear and reverence they pass from the presence of the Spirit of the Fall. And so it was with us; with a feeling of inexplicable humility and reverence we gazed our fill, and then next morning we packed our belongings and turned our backs upon one of the greatest and most beautiful works of nature. Slowly we descended the hill again and paddled our way back day by day to the haunts of men, and so we returned to civilisation with a new and happy memory indelibly engraven on our minds."

It was Mr. Barrington Brown, of the Geological Survey, who first discovered the existence of this remarkable fall, which is situated on the Potaro River, 200 miles from Georgetown, on April 24th, 1870. The name Kaieteur, or more properly Kaietuk, is an Indian word meaning the "Old Man" Fall, and is attributed to the custom of the Indians of putting their relations in a canoe when they got too feeble and old to work, and allowing them to drift down the river and over the fall, a painless and practical form of Euthanasia!

A visit to Kaieteur is no longer the formidable undertaking it was some years ago. The enterprising firm of Sprostons, Ltd., has now completed arrangements for taking parties to the fall and back in nine days for \$65 per head, and no doubt many will avail themselves of the facilities offered.

In Roraima, a remarkable mountain in the Pacaraima range on the western border, British Guiana has another scenic treasure which has rarely been visited. It was first discovered by Mr. (now Sir) Everard im Thurn, who has given the following description of its wonders.

"The first impression was one of inability mentally to grasp such surroundings; the next, that one was entering

on some strange country of nightmares, for which an appropriate and wildly fantastic landscape had been formed, some dreadful and stormy day, when, in their mid-career, the broken and chaotic clouds had been stiffened in a single instant into stone. For all around were rocks and pinnacles of rocks of seemingly impossible fantastic forms standing in apparently impossibly fantastic ways—nay, placed one on, or next, to the other in positions seeming to defy every law of gravity-rocks in groups, rocks standing singly, rocks in terraces, rocks as columns, rocks as walls, and rocks as pyramids, rocks ridiculous at every point with countless apparent caricatures of umbrellas, tortoises, churches, cannons, and of innumerable other most incongruous and unexpected objects. And between the rocks were level spaces. never of great extent, of pure yellow sand, with streamlets and little waterfalls and pools and shallow lakelets of pure water, and in some places there were little marshes filled with low, scanty, and bristling vegetation. And here and there, alike on level space and jutting from some crevice in the rock, were small shrubs, in form like miniature trees, but all apparently of one species. Not a tree was there; no animal life was visible; or, it even seemed, so intensely quiet and undisturbed did the place look, ever had been there. Look where one would, on every side it was the same, and climb what high rock one liked, in every direction, as far as one's eve could see, was this same wildly extraordinary scenery."

In the old days of slavery many noble residences were built in the West Indies. They were solid and substantial, and well calculated to withstand hurricanes. A number of handsome examples of these "Great Houses," as they are called, still remain, among the more notable being Long Bay Castle, in Barbados, once the residence of the notorious Sam Lord, of wrecking proclivities, and the Principal's residence at Codrington

WEST INDIAN "GREAT HOUSES"

College, in the same island, dating from about 1660, where the founder lived and died, Rose Hall near Montego Bay, and Headquarters House, once the residence of the wealthy Hibberts, and now the Colonial Secretariat, in Kingston, Jamaica.

Immense sums of money were spent on these Great Houses. Many are panelled with mahogany, in which several of the islands were once rich, many have handsome marble steps now, alas, in most instances, broken and decayed, and heavily gilded mirrors now dulled with age. Handsome lustres, isolated pieces of Sheffield plate, chippendale settees, and mahogany wardrobes indicate the lavish style in which the houses used to be furnished.

In the years which succeeded the prosperous period the proprietors were satisfied with residences built of wood, where building had to be undertaken, and it is of that material that the majority of the private houses in the West Indies are constructed. The residences in Barbados are, however, an exception, for in that island the coral rock forms excellent building material. In British Guiana the wooden houses are raised on brick pillars from eight to ten feet high to keep them from the dampthe front lands being below the level of the sea-but everywhere the residences have galleries or verandahs, which are deliciously cool, for there is nearly always a breeze during the day in the West Indies. The windows are protected with jalousies, and, though it is frequently used, glass is really superfluous unless it be to keep out the rain.

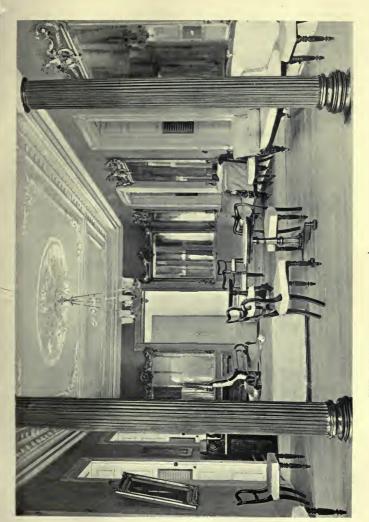
Furniture is at a discount in a West Indian home, and so, too, are carpets. The very thought of them would make one hot in the tropics, though the author has stayed in a house where they were used. The owner was a loyal Scotchman who prided himself on reproducing in the island of his adoption, as nearly as possible the conditions prevailing at home. The floors were heavily

carpeted, the glazed windows were closed after dark, and the heavy curtains drawn across them, with consequences to one's personal comfort, which can be more easily imagined than described.

From the colonies' point of view it is a regrettable fact that our settlers who go to the West Indies intending to spend the rest of their life there are in a minority. In this they differ from the French and Spanish colonists. who cease to hanker after home as the English do, and take out with them all their worldly goods, endeavouring with success to make their towns resemble those in La Belle France for example, and to revive the atmosphere of the Boulevards in their new surroundings. This used to be very apparent in St. Pierre, the little town which nestled at the foot of Mont Pelé in Martinque and was overwhelmed by the eruption of that volcano in 1902. Its streets were well paved, and it was for all the world like a French provincial town of the better class with its handsome cathedral, its theatre, its cabarets and restaurants, and its flaneurs idling under the trees of its shady boulevards.

As for the negroes, most of them are content to pass their lives in wooden huts which are so light and flimsy that they fall an easy prey to hurricanes. After such disasters sympathetic readers at home learn of the thousands of houses wrecked, but they little realise what those houses really are. They are fragile and frail to a degree. At night these huts are hermetically shut, for there is nothing the negro dislikes so much as the cool night air. Perhaps he closes windows and doors to keep out the "miasma," just as passengers crossing the Roman Campagna by train at night were advised to do. It is at sundown that fever is caught, but, as we now know, not from miasma, but from the mosquito which is particularly active at that time of day.

In recent years there has been a distinct revival in the



THE DRAWING-ROOM, LORD'S CASTLE, BARBADOS



TRINIDAD'S PARK LANE

building of substantial residences in the West Indies, and this is particularly the case in Port of Spain, Trinidad, where several private mansions have been erected on a scale of great magnificence in the neighbourhood of the Savannah. They certainly equal in splendour—if not in some cases altogether in taste—the "Great Houses" of former days. Well might the particular group of houses which the writer has in mind be called the "Park Lane" of Trinidad. It surprises visitors, who have been led to believe the West Indies are merely a group of colonies with a grievance, exhibiting, as it does, every sign of the prosperity which the island is now enjoying.

It would not be human nature if every resident in the West Indies did not consider the capital of his own island the finest. Whether this is due to intense lovalty or to insularity need not be discussed here, but where so many places have been described in guide books as "probably the finest town in the West Indies"-sometimes the saving word "probably" is omitted-it might be considered invidious to make any distinction. Kingston, Jamaica, is, however, for the present hors concours. It is in a transitional state, the work of reconstruction after the earthquake of 1907 having not yet been completed, and in the circumstances the palm can certainly be awarded to Port of Spain, the chief town of Trinidad. That island is the wealthiest of our West Indian possessions, and it is therefore in the natural order of things that its capital should be the finest. The late Sir Rupert Boyce, the eminent authority on tropical hygiene, who visited it in 1909, was greatly impressed with the drainage system and general cleanliness of the city.

The town, which occupies the site of an old Indian village called Conquerabia, stands about two miles from the mouth of the Caroni River, at an angle formed by the north-western promontory of the island. It has as yet no proper harbour, and large steamers have therefore to

lie out in the Gulf of Paria, which is, however, a safe anchorage, but in all other matters the port is quite in line with modern requirements. In 1909-10, 763 steamers with a total tonnage of 1,326,282 were entered at the port.

Mention has already been made of the splendid private residences of which this city can boast. It also has many exceedingly handsome public buildings, the principal of which is the Red House, in which the Government Offices are situated. Destroyed by fire during a riot on March 23rd, 1903, it has been rebuilt on a greatly improved scale, and the Legislative Council chamber is certainly the most dignified and stately in the West Indies. Holy Trinity Cathedral, and the Roman Catholic Cathedral, both of which were designed by Mr. Reinagle, the Secretary of Sir Ralph Woodford, Governor from 1813 to 1828, who effected many improvements in Port of Spain after a fire, rise above the commonplace. town is scrupulously clean, and the occupation of the " Johnny Crows" has long since gone. These birds used to be the scavengers of the town in the days before a modern sanitary system was introduced. They really encouraged dirt, for the inhabitants, in true Spanish fashion, would throw their refuse into the roadway, and it was not by any means unusual to see these ghoulish looking birds savagely attacking the dead body of a cat or a dog in the streets which are now an example of cleanliness to the whole of the West Indies.

Port of Spain, which has a population of about 54,000 is, in most respects, a thoroughly modern and enlightened city. It was one of the first towns of the Caribbean to be lighted by electricity, and to have those electric cars, which add so much to the life of the place and to the pleasure of its inhabitants. These cars now run right round the Savannah, a large open park about 130 acres in extent, which is the playground of Trinidad. Port of Spain has several distinctive features, among which must

JAMAICA'S NEW CAPITAL

be included the tall and graceful areca palms which so closely resemble wisk brooms, and the gardens of the private houses with their glorious hedges of bright-coloured allamandas, bougainvilleas, hibiscus and poinsettias. Beyond the Savannah is Government House, which is a most substantial building of limestone at the very foot of the mountains, which replaced the Cottage Ornée in the Botanical Garden described with such

enthusiasm by Charles Kingsley.

Kingston, the capital of Jamaica, is rapidly rising from the dust and ashes of the earthquake and fire of 1907, a veritable White City. Under the guidance of the Governor, Sir Sydney Olivier, who from the first undertook the task with the enthusiasm of a Haussmann, the rebuilding of the city is proceeding apace, and it is already possible to appreciate what a handsome capital Jamaica will have when the work is completed. The streets are wide and cleaner than of old. Gardens, already green with turf, and shortly to be bright with flowering plants and palms, serve to delight the eye and refresh the senses.

Those who have visited Jamaica will recollect that, after rounding Port Royal, it is not until one is quite near, that Kingston, which appears to nestle at the very foot of the magnificent Blue Mountains, comes into sight. Viewed from the harbour, no striking difference between the old and new cities is observed, except in the dome of the Roman Catholic Cathedral, and, alas, a hideous advertisement of a tobacco company, which are now conspicuous, for the unsightly line of wharves has been rebuilt, the proposal to construct a sea-wall of dimensions commensurate with the importance of Kingston having not yet been carried out. Port Royal Street, the first thoroughfare gained, is for the most part Port Royal Street of preearthquake days, though it can boast now the artistic building of the Royal Mail Steam Packet Company, in which the offices of the two cable companies are also

located, with its dainty little garden in front. With the exception of these offices and of various churches, the more important new buildings are situated in Harbour and King Streets. Several are of noble proportions, notable among the more striking buildings being the Myrtle Bank Hotel—the design of which vaguely reminds one of the Trocadero in Paris—the Colonial Bank, the Nova Scotia Bank, various stores, and, of course, the much-discussed Public Buildings, which are sternly carried out in reinforced concrete, with flat roof supported by many columns, the whole presenting a decidedly Eastern appearance.

Like Port of Spain, Kingston has its cars, electric light and telephones, but the port is less frequented than that of Trinidad's capital, the total number of steamers entered in 1909 being 395, with a tonnage of

803,472 tons.

Montego Bay, the second town in importance in the island and the terminus of the Jamaica railway, is also a port of entry, and the number of steamers entered at it in 1909-10 was twenty-six with a tonnage of 76,219 tons, while Port Antonio received 689 steamers, most of which called for fruit, with a total tonnage of 520,355 tons.

It must be admitted that the chief towns of the smaller British islands, and even Bridgetown, the capital of proud little Barbados, compare rather unfavourably with Port of Spain and Kingston. Bridgetown is certainly capable of improvement in many respects. Its main streets are crowded, dusty, and unpleasant, and its buildings, with the exception of the Public Buildings and Cathedral, which are coral rock, and its substantial Life Insurance building, decidedly poor. Yet the town has a certain charm, for there is nowhere in the West Indies where life and character of the negroes can be better studied. The town, which has a population of

CROWDED BRIDGETOWN

about 21,000, is lighted by gas and electric light, and has an admirable telephone system in connection with the rest of the island. In 1909-10, 650 steamers, with a total tonnage of 1,133,800 tons, were entered at the port. Speightstown, the only other town in the island has a

population of about 1,500.

The characteristics of Georgetown, the capital of British Guiana, which has a population of 53,176, are widely different. The city lies on the right bank of the Demerara River, the mouth of which is protected by Fort William Frederick and also—unfortunately—by a bar which can only be negotiated by vessels of any size at high tide. The number of steamers entered at Georgetown in 1909 was 552, with a tonnage of 471,743 tons.

The town was founded by the Dutch in 1781, and laid out by the French in the three following years. The Dutch, on their return to the colony in 1784, called it "Stabroek," and a district of the present city still bears this name. It was first called "Georgetown" in 1812 during the Regency, and about twenty-five years later coincident with the creation of the Bishopric of Guiana, it blossomed into a corporate entity, a law for this purpose being passed in the first year of the reign of Queen Victoria. Georgetown is now divided into fourteen wards, each of which is represented on the Municipality by a councillor elected on the basis of a generous franchise.

The streets, which are shaded with trees, are wide and clean, and many of them—especially in the Cumingsburg district—have canals, locally called "trenches," running down the centre, on which the famous Victoria Regia lily flourishes. They also harbour a whole colony of frogs, which make their presence felt in the so-called "still tropical night" by their incessant bubbling, purring, and whistling, which forms a soothing accompaniment to the barking of dogs and crowing of cocks.

Along the river bank for a distance of two miles are wharves, or "stellings," as they are called locally, and behind these is busy Water Street, the principal commercial thoroughfare. Along it electric cars hum with clanging bells, and in its stores, English, East Indians, Portuguese, Negroes and Chinese—so cosmopolitan is the city—purchase the necessities of life, which are to be found here in abundance.

Other notable streets are Main Street and Brickdam, so called from its brick-like roadway of burnt clay, which has a noble avenue of cabbage palms. The last named street leads to the Botanic Gardens, which now grace what was once Plantation Vlissingen. This is the "Park" of fashionable Georgetown, and here the citizens with their wives and families take their airing before sundown—there is no twilight in this part of the world—while the Militia band discourses the latest and lightest music. The gardens are admirably laid out with picturesque walks, groves, lakes spanned by neat bridges, gay flower gardens and palm trees—a piece of landscape gardening which does infinite credit to its designer, Mr. J. F. Waby.

To return to the town. Without plunging into statistics it may be mentioned that it has a total area of two square miles, and that some of its streets are 140 feet broad. It is well lighted by electricity and has a telephone system and, as already stated, an admirable and most efficient service of electric cars. The fresh water supply is plentiful except in periods of prolonged drought, being derived from the savannahs and creeks "aback," to use a local expression, with which the town is connected by means of the Lamaha Canal. The only drawback is that the water contains much vegetable matter in suspension, and as often as not is similar in colour to café au lait, a beverage which it has not the advantage of resembling in taste. The Public Buildings are constructed of stucco, and the

THE GLAMOUR OF THE WEST

Stabroek Market is a monstrosity of iron. What more can be said of them except that they serve their purpose? But in the Victoria Law Courts and Cathedral, which are "half timbered," and in the Town Hall, Georgetown has

buildings of which it can justly be proud.

Yes, there is no doubt about it, the scenery, buildings and towns of the West Indies have a glamour of their own. To those who have experienced it, it is not surprising that, when the fogs begin to fall in the old country, presaging the approach of winter, the visitor from those sun-kissed islands of the west should long to return to their warmth and brightness.

CHAPTER V

FLORA AND FAUNA

It is a curious fact that most of the staple products of the West Indies are derived from exotic plants, and that comparatively few are indigenous. For instance, the sugar-cane, cacao, coffee, bamboo, akee, cinnamon, logwood, nutmeg, banana, orange and ginger, to mention a few only of the economic plants and trees commonly met with in the West Indies, have been introduced from other parts of the world. It is the same with many of the trees and plants in West Indian gardens. Few are indigenous, and the way in which imported plants have flourished and the rapidity with which they have spread throughout the islands says much for the remarkable fertility of the soil of the West Indies.

The Flora of the West Indies presents many features of peculiar interest. Mr. William Fawcett, the late Director of Public Gardens and Plantations in Jamaica, in the course of a lecture which he delivered recently at the West India Committee Rooms, made reference to some of the surprises of West Indian vegetation. the favoured isles of the West, he said, oranges might be picked growing wild, bananas grew in plantations measured by the square mile, pineapples were planted out like turnips in fields, and strange fruits abounded, one of which, the cashew, bore its stone on the outside. Residents could grow such fruits in their gardens, and also sugar, tea, coffee, cacao and vanilla; the coco-nut palm supplied the thirsty traveller with excellent water, and also with cream, butter, jelly, nuts and oil. Readymade products were to be had for the taking, lace from one plant, and velvet ornaments from another; some plants existed without leaves, others without roots;

THE SILK COTTON TREE

others again consisted only of roots, while excellent oysters grew on trees, a remark which prompted a facetious writer in the *Globe* to suggest that he would like to be in Jamaica when there was an "r" in the month, and when the bottled stout bushes were in bloom.

Some of the more important plants and fruits of economic value, such as the sugar-cane, banana, cacao, and rubber, are described in a later chapter, but an attempt will be made here to give some idea of the Flora as now existing in the West Indies, and to touch on a few points of interest connected with it.

Of the trees in the West Indies, perhaps the most noble of all is the Silk Cotton, or Ceiba (Eriodendron anfractuosum), made lastingly famous in Tom Cringle's Log. These trees are widely distributed; but they are seen at their best in Jamaica, where those at Up Park Camp and on the Spanish Town road, described by Michael Scott, are still standing.

"The trees, which grew in detached clumps, were most magnificent. We clambered up into one of them, a large umbrageous wild cotton tree, which cast a shadow on the ground—the sun being, as already mentioned, right overhead—of thirty paces in diameter; but still it was but a dwarfish plant of its kind, for I have measured others whose gigantic shadows, at the same hour, were upwards of 150 feet in diameter, and their trunks, one in particular that overhangs the Spanish Town Road, 20 feet through of solid timber; that is not including the enormous spurs that shoot out like buttresses, and end in strong twisted roots that strike deep into the earth, and form stays, as it were, to the trees in all directions.

"Our object, however—publish it not in Askalon—was not so much to admire the charms of nature as to enjoy the luxury of a real Havannah cigar in solitary comfort; and a glorious perch we had selected. The shade was grateful beyond measure. The fresh breeze

was rushing, almost roaring, through the leaves and groaning branches, and everything around was green, and fragrant, and cool, and delicious—by comparison, that is, for the thermometer would. I daresay, have still vouched for 80°. The branches overhead were alive with a variety of beautiful lizards and birds of the gavest plumage; amongst others, a score of small chattering green paroquets were hopping close to us, and playing at bo-peep from the lower surfaces of the leaves of the wild pine (a sort of Brobdignag parasite that grows like the mistletoe in the clefts of the large trees), to which they clung, as green and shining as the leaves themselves, and ever and anon popping their little heads over to peer at us; while the red-breasted wood-pecker kept drumming on every hollow part of the bark, for all the world like old Kelson, the carpenter of the Torch, tapping along the top-sides for the dry rot."

The floss, best known from the East as Kapok, from the inside of the pods of the Silk Cotton trees is used for stuffing pillows, life belts, etc., and also for decorative work. Another large tree is the Saman (*Pithecolobium Saman*) also known as the Guango or Rain tree. At night and also during the great heat of the day, the leaves of this tree, which is conspicuous in the pasture lands of Jamaica, close up and sleep. The Trumpet tree (*Cecropia peltata*) is a tree of very rapid development; it is the first to spring up wherever a clearing has been

made in the woods.

The Balata tree (Minusops globosa) or Bullet tree, which is found in the forests of Guiana and to a small extent in Trinidad, is, on the other hand, of very slow growth, taking years before it reaches maturity, when it yields, as described elsewhere, a gutta-percha-like product used for insulating cables, and in the manufacture of belting, etc. Mahogany (Swietenia Mahagoni) is conspicuous in Barbados, which was once covered with

"BREAD-FRUIT" BLIGH

a forest of mahogany, locust wood, and fustic. Mahogany is often planted to the west of estate residences, to screen them from the setting sun, and it affords a welcome shade. In the old "Great Houses" there are still many handsome pieces of furniture made from local mahogany which would grace a palace at home. The Baobab (Adansonia digitata) of African origin is also scattered among the islands; indeed, one in Barbados is said to date from the year 1735.

Another tree, which is found all through the West Indies, is the Bread-fruit, with its large, indented and deep green leaves, and round fruits as large as a child's head. The botanical name of this ubiquitous tree (Artocarbus incisa) was given to it by Reinhold and George Forster, who accompanied Captain Cook on his second voyage round the world in 1772-4. Such glowing accounts did these two naturalists give of the bread-fruit which they found in the South Sea Islands that its introduction into the West Indies was suggested; and it was with the object of obtaining plants of the bread-fruit, with a view to their acclimatisation in the West Indies, that William Bligh, who had been Cook's sailing master in the Resolution, sailed on his memorable voyage in the Bounty in December, 1787, to Otaheite, which he reached ten months later. How the crew became demoralised by their too luxurious life there, how under Fletcher Christian they mutinied and cast Bligh adrift in an open boat, and how the mutineers eventually settled on Pitcairn Island, where their descendants exist to this day, has often been told. Bligh in his frail craft, after a voyage of three thousand six hundred and eighteen miles, lasting nearly three months, reached Timor, off the east coast of Java, on June 14th, 1789, and arrived back to England in a schooner on March 14th in the following year.

Largely owing to the exertions of Sir Joseph Banks,

President of the Royal Society, a second expedition was fitted out, and in 1791 "Bread-fruit" Bligh sailed again for the South Seas in the Providence, with Captain Nathaniel Portlock in the Assistant. On this occasion. the voyage was successful in every way, and in January, 1793, a valuable cargo of five hundred and thirty choice and curious plants, including the bread-fruit, were landed at St. Vincent and deposited in the Botanic Garden Three hundred and forty-seven plants were also left at Jamaica, and some were sent to the Royal Gardens at Kew. For his valuable services, Bligh was awarded the Gold Medal of the Society of Arts, which had offered a substantial reward to the first person who introduced the bread-fruit into the West Indies. Captain Bligh is commemorated in Blighia sapida, the botanical name of the Akee, a West African fruit well known in the West Indies.

For the Mango tree (Mangifera indica), which is also ubiquitous, the West Indies are indebted to the East. It was Lord Rodney, the saviour of Jamaica in 1782, who introduced the much sought-after variety known as "No. 11" into that island. Indeed, it is believed by many that he also took plants of the seeded variety of the bread-fruit to Jamaica before Bligh. It is at any rate certain that in the year of his memorable victory he captured a French vessel on her way from Mauritiusthen the Isle de France-to San Domingo, which was laden with very valuable plants, and inasmuch as Sonnerat had introduced the bread-fruit into Mauritius from Guinea in 1763, it is reasonable to assume that some plants of it were in the ship captured by Rodney. pity is that no regular attempt has been made to export the luscious fruit of the Mango to the Mother Country on a commercial scale. That there would be money in doing so is certain, for the author has seen a single tree which has brought its owner, an enterprising storekeeper



A TYPICAL WEST INDIAN ROADSIDE SCENE



A FRUITFUL MANGO TREE

in Kingston, Jamaica, as much as £80 in a single year. The blood red young foliage of the Mango is very attractive.

Two trees of great beauty are the Flamboyante (Poinciana regia), which is covered with flaming red flowers, and the superb Bois Immortel (Erythrina umbrosa)—the Madre de Cacao of Trinidad—which combines utility with beauty, being, as described elsewhere, largely used as a shade tree for cacao, while it is also a joy to the eye.

Another familiar plant, which is almost a tree, with slender and bare stem surmounted by a crown of large leaves, is the Papaw (Carica Papaya), whose milky juice has marked digestive properties and is the basis of the drug known as papain, which is exported to a small extent from Montserrat. If a tough chicken is wrapped in a leaf of this tree, it is soon reduced to a state of tenderness and adapted to the requirements of the most delicate palate. The chicken is wrapped in a leaf, and after that in a napkin. It is then buried for some time in the earth before it is cooked. As an alternative some of the milky juice from the fruit is put into a pot with the recalcitrant fowl while the latter is being cooked. The ripe fruit of the Papaw itself is a good substitute for the melon.

The Sand box tree (Hura crepitans) is common in the islands, and great is the surprise of the new-comer when its fruit bursts with a loud report, scattering seed in every direction. These fruits are sometimes dried, filled with lead, and used as paper-weights; but even then they may give the owner a shock when climatic conditions favour, for the writer has known one to burst on his writing-table after years of useful work, with a loud report. In the old days the fruits used to be wired together and filled with sand, which was used as a substitute for blotting paper, and to this the name "Sand

box" is attributed. The Siris tree of India (Albizzia Lebbek), another Asiatic tree, is also a curiosity. has large, pendulous and dry pods, which are kept in continuous movement by the very lightest breeze, for which reason—fair readers will perhaps forgive the writer—the tree is known in the West Indies as the "Woman's Tongue" tree. The Pudding Pipe tree or Purging Cassia (Cassia Fistula), a native of India though Ligon found it in Barbados in 1647, has pods longer than the Woman's Tongue, extending as they do to a length of two to three feet. The seed is surrounded by a pulp which is a mild laxative. The plant from which that disagreeable confection called Senna is prepared (Cassia obovata) is said to be found growing wild on the Palisadoes in Jamaica. The fruit of the Tamarind (Tamarindus indica), a magnificent tree native of the tropics of the Old World, has similar properties and is exported from several of the islands. The cosmopolitan Castor Oil plant (Ricinus communis), the source of castor oil, grows well in the West Indies. The seeds of the Physic Nut (Jatropha Curcas) are purgative, and so, too, are those of another species of the same genus, the Belly Ache Bush (Jatropha gossypifolia). According to the Rev. Griffith Hughes' Natural History of Barbados, published in 1750, "The seeds dropping from the ripe Berries are so great a Specific against Melancholy, that even Doves, that have used to feed on them, will not when confined to a Cage, whoot, if deprived of these, and Bird-pepper." The young fruits of the Sea-side Grape (Coccoloba uvitera), which has handsome foliage, are, on the other hand, an astringent.

The Frangipani (Plumieria Sp.) is a quaint tree with thick, awkward-looking stems and branches, and red, white, or yellow flowers which have a delicate and sweet scent very different to the rather objectionable frangipani

scent of commerce.

The Logwood tree (Hæmatoxylon campechianum) is

THE DREADED MANCHINEEL

found in greatest numbers in Jamaica. It has a dark coloured bark and masses of yellow flowers which are much sought after by those bees which produce the famous "Logwood Honey," and the wood yields the well-known dye. A dye is also produced from the Annatto or Roucou (Bixa Orellana); but in this case it is procured from the pulp round the seeds. It serves for colouring such fatty substances as cheese, butter, milk, etc.; medicinally both seeds and leaves are used as a febrifuge. Calabash trees (Crescentia Cujete) abound, and the huge calabashes which they yield, when hollowed out, form useful receptacles for liquids of every kind, and for the collection of Balata in British Guiana. The wood of the tree is exceedingly tough and is much used for boat building.

The Almond (Terminalia Catalpa) is another tree imported from the East: it bears an almond-like fruit. the seeds of which are edible. Not so is the fruit of the Manchineel (Hippomane Mancinella), which though appetising to look at is very poisonous. It is even dangerous to stand under this tree during a shower of rain, as the water off its leaves burns acutely. Hughes, however, mentions a remarkable dispensation of Providence. He noticed that "wherever a Manchineel tree grows, there is found a white-wood, or a fig-tree near it; the juice of the latter being an infallible antidote against the poison of the former. Salt water is no less efficacious; and as these always grow up by the seaside, this remedy is near at hand." The Thorn-apple (Datura Sp.) is another poisonous plant. It has large, white, trumpet-shaped flowers, which are familiar to visitors to the Italian lakes. Stramonium cigarettes are made from its leaves, which are smoked by sufferers from asthma, to whom they give relief. Mangroves (Rhizophora Sp.)not to be confused with Mangoes-are found in muddy estuaries, and a more lugubrious or depressing spot

than a mangrove swamp it would be difficult to imagine. A peculiarity of the mangrove is that the seeds germinate whilst still inside the fruits. They throw down stout roots which finally stick upright in the mud, put forth leaves, and make one mangrove tree the more. On the roots and not upon their "boughs and spraies," as Sir Walter Ralegh has it in his Discouerie of Guiana, delicious oysters grow. The mangrove tree is sometimes used for making rope and cordage. There is also a white mangrove (Laguncularia racemosa) of different habit. The bark of many of the mangrove trees has useful tanning properties.

Mention is made elsewhere of Banana trees, which are ubiquitous but in their greatest number in Jamaica; but there is also the Balisier or wild Plantain (Heliconia) with curious red flowers and large banana-like leaves. This tree blossoms, but it never fruits. The leaves of the Fan Tree (Ravenala madagascariensis) also resemble those of the banana, but are spread out in one plane like a fan. This tree is also called the Traveller's Tree, not because travellers rest in its shade, but because by piercing the stem of the leaves they can obtain water from it.

In the dry and rocky districts various kinds of Agave are found (Agave Morrisii and Furcroea Sp.). These are none other than the familiar, but wrongly termed, Century Plants or American Aloes, with rosettes of large, fleshy leaves. After a long period (ten or more years), each plant throws up a tall pole often adorned with orange-coloured flowers, and after this supreme effort it dies, leaving young suckers at the base to carry on the family history. The Agave sisalana, cultivated in the Bahamas, vields sisal hemp used for rope-making, etc. It was in the pioneering days of this now successfully established industry that Mr. Joseph Chamberlain was unfortunate enough to lose a considerable sum of money.

THE CENTURY PLANT

The Spanish Needle, Dagger, or Yucca, with sharp. pointed leaves, flourishes in similar localities, and so, too. do various kinds of mysterious cacti such as, for example, the night-flowering cereus. Some are climbers, others are tall with columnar stems, and others resemble in shape a Rugby football with a red Turk's cap on the top. An example of the latter is the Turk's-head cactus (Melocactus americana), which gave its name to Turks Islands, a dependency of Jamaica. The Prickly Pear (Opuntia Tuna), with its edible fruits, is another well-known cactus. Pinguin (Bromelia Pinguin), a prickly plant distantly related to the pine-apple, also falls into this group of "succulents." Like the cacti and aloes, it is used as a hedge. The cultivation of true aloes (Aloe vera) was once an industry in Barbados, the inspissated juice forming the "aloes" of commerce. The trade has, however, passed to tropical Africa, where wild aloes cover immense tracts of country, and it is only in the Dutch islands that aloe cultivation has been kept up in the West Indies.

In moist situations, Tree Ferns raise their graceful forms, and such varieties as golden, silver and maidenhair ferns, the most beautiful of which is the *Adiantum farliense*—so called from its having been first grown at Farley Hill, the residence of the late Sir Graham Briggs in Barbados,—thrive in damp and steamy localities, to which they add great beauty and charm.

The grasses in the West Indies are legion, prominent among them being Guinea grass (Panicum maximum), the seeds of which were first introduced into Jamaica in or about the year 1744 as food for some extraneous birds which had been presented to Mr. Ellis, the then Chief Justice. The birds died and the seeds were thrown away. They germinated, and the eagerness of the cattle to consume the grass suggested the idea of cultivating it. Now it is found everywhere, being largely

cultivated as fodder all over the tropics. Bur-grass or Pimploes (Cenchrus tribuloides), a well-known pest in the wool-growing districts of North America, is a nuisance at times, as the burs from it stick to one's clothing and are not easy to remove. Devil grass or Bahama grass (Cynodon Dactylon) is invaluable as a lawn grass, as it grows anywhere and withstands great drought. So widespread is it that it occurs wild even in the south of England. Nut grass (Cyperus rotundus), another cosmopolitan plant, is a troublesome weed; its tubers are known in America as "coco." Sour grass (Andropogon pertusus), is chiefly identified with Barbados, where it is largely used as fodder. Khus-khus or cus-cus grass (Andropogon squamosus) has aromatic roots, but lemon grass, another species of andropogon, is far sweeter and vields an essential oil which is much used and valued in the manufacture of perfumery.

Coming now to vegetables, there is the Yam (Dioscorea of various species), the huge root of which as often as not resembles the foot of a megatherium, or at any rate an elephant. Its name is probably based on the negro verb "nyam" which signifies "to eat." "Daag no nyam daag'' ("Dog doesn't eat dog") is a familiar negro proverb. Soft and floury to the palate, it would soon put the potato to shame if the two could meet on even terms in this country. In Jamaica the dainty foliage of the yam is trained up sticks resembling hop-poles, but in Barbados, where wood is scarce and the winds are strong, it grows on the ground. The Sweet Potato (Ipomæa Batatas), closely related to the convolvulus, is also popular and an important article of diet. The young pods of the Ochro (Hibiscus esculentus) are mucilaginous but attractive. and what would a West Indian chet do without the "cho-cho" or Christophine (Sechium edule)?

The Sapodilla (Achras Sapota) is a delicious fruit, and so, too, is the Avocado pear (Persea gratissima)

"MIDSHIPMAN'S BUTTER"

which has figured as circumstances required as either "midshipman's" or "subaltern's butter." In shape it resembles a large pear, varying in colour from green to purple. Inside is a large hard seed, surrounded by a butter-like substance which is delicious when seasoned with a squeeze of a fresh lime and pepper. The origin of its name is said to be Avocat, or Lawyer-and here an apology is due to the legal profession-because it makes so much show (in flower) with so very little result (in fruit). This is not the only libel on a much abused profession which has been perpetrated in the West Indies. In several islands there is a tenacious tree (Clusia flava) which hugs another one so closely that it saps its very life -it is called the "Scotch attorney"! The seed which is dropped by birds in the fork of a tree, germinates and sends down roots to the ground. These roots gradually form a woody case round the host which they ultimately kill. The black folk in Jamaica call the tree the "Scotchman hugging creole."

The Star-apple (Chrysophyllum Cainito) is a fruit with a milky pulp. The leaves are handsome, being dark green above and golden-coloured beneath, thus giving rise to the negro proverb, "Double-faced like Star-apple leaf." What little flavour the Rose-apple (Eugenia Jambosa) possesses can only be compared with that of scented soap. The fleshy crimson outer parts of the flowers of the Sorrel or Rozelle (Hibiscus Sabdariffa) are eaten in fruit pies, and are used for making preserves and sorrel drink. Other fruits are the Guava (Psidium Guajava), which contains a pulpy substance and any number of small seeds, the curious Carambola (Averrhoa Carambola) of India and China, with five-angled vellow fruits, the Loquat (Eriobotrya Japonica), the Pomegranate (Punica Granatum), the Sour-sop (Anona muricata), and its converse the Sweet-sop or Sugar-apple (Anona squamosa). The Custard-apple (Anona reticulata), the

Mammee-apple (Mammea americana), and the Barbados Cherry (Malpighia glabra) are common; and there are besides, oranges, lemons, grape-fruit, and shaddocks—some of which are as large as footballs; but, taking them all round, the fruits of the West Indies, with the exception of the citrus fruits and pineapple, seem somewhat insipid to those accustomed to the exquisite fruits of higher latitudes.

Ginger (Zingiber officinate) was exported from Barbados as long ago as 1654. It now forms the basis of a valuable industry in Jamaica, and who has not heard of the merits of Jamaica ginger? The cultivation of arrowroot (Maranta arundinacea) is principally carried on in St. Vincent, but Cassava (Manihot utilissima), a native of South America, which has been a source of food supply from the earliest days of colonisation in the West Indies, is produced in all the West Indian colonies. It yields farine, cassava-starch and cassareep; the latter forms an important ingredient of that famous West Indian dish known as Pepper-pot, which contains all sorts of odds and ends of flesh and fowl, and, warmed up daily, is sometimes kept going for years.

Allspice, or Jamaica pepper (Pimento officinalis), is chiefly grown in Jamaica, but the hot peppers (Capsicum Sp.) such as Bird's-eye peppers, Bonnet-peppers, etc., are found in the West Indies generally. Pigeon-peas (Cajanus indicus), Ground-nuts (Arachis hypogæa), and Cashew nuts (Anacardium occidentale) are very widely grown. The Ground-nut yields a valuable oil, but no attempt has been made to express it for export, and the Cashew nut has this peculiarity, that it grows outside the fruit. Both the fruit and seed are edible, and the juice from the skin of the seed is an excellent substitute for marking ink. The kernels furnish a valuable and nutritious oil and, when roasted, are most delicious. The Butter-nut or Souari tree (Caryocar nuciferum) grows in British Guiana, but

only the seeds are edible.

THE VICTORIA REGIA LILY

Of the plants which minister to the outer requirements of man must be mentioned the Luffa (Lagenaria vulgaris), a powerful climber with handsome yellow flowers, which open at daybreak. This plant it is which yields the Loofah of commerce and of the bath-room. The Chewstick (Gouania domingensis) is a woody climber, whose twigs are convenient as a substitute for the tooth-brush, and the Jamaica Supple Jack, cut from a climber (Paullinea Sp.) forms a useful corrective for recalcitrant youths, while the young leaves of the Jippa-jappa plant (Carludovica jamaicensis) form the basis of Panama hats, in the manufacture of which quite a small industry exists in Jamaica. In the canals in Georgetown, British Guiana, the Egyptian Sacred Lotus (Nelumbium speciosum) flourishes; so, too, does the Water Lettuce (Pistia Stratioles), and that superb giant water-lily, the Victoria Regia. This truly noble plant was discovered in South America by Haenke in 1801. D'Orbigny first sent home specimens of it to Paris in 1828, and five years later a German traveller came across the lily on the Amazon. It was, however, Sir Robert Schomburgk who discovered it in British Guiana—on the Berbice River—and directed public attention to its beauty by a letter to the Royal Geographical Society.

As a general rule, flowers of temperate climes do not do well in the West Indies, and run too much to wood. In the higher places, however, roses, such as La France, Maréchal Neil, etc., grow, though they are often inferior in appearance to those to which we are accustomed at home, and devoid of their scent. There is far less variety about a garden in the West Indies than there is in one in England, and in gardens in the Caribbean Islands and British Guiana effect is gained rather by flowering shrubs than actual flowers. Those gorgeous relations of our humble Spurges, Poinsettias (Euphorbia Poinsettia) grow almost wild, and where they are cultivated, as they are in nearly

every West Indian garden, they can truly be described as magnificent. Of Hibiscus Rosa sinensis, the Shoeflower of the East-so called because its leaves contain tannin and are used for blacking boots and shoes-there is a wonderful variety, and the purple and red Bougainvilleas (Bougainvillea spectabilis) run riot as if they were the commonest weeds. The Clitoria (Clitoria Ternatea), a peculiar double pea of exquisite delicacy, adds a tone of blue, and Allamandas (Allamanda cathartica)—the leaves are a powerful cathartic—one of yellow. Allamandas are commonly cultivated, and there is a poisonous wild flower (Urechites suberecta) which closely resembles them. The Corallita (Antigonum leptopus), a delicately pink coral-coloured creeper, lends a rare charm to the entrance porch, and the Quisqualis indica is a very pretty climber which has masses of whitish flowers that open in the evening and change to red. The Climbing Lily (Gloriosa superba) has brilliant flaming flowers of orange and red. With the delicate blue of Plumbago (Plumbago capensis) we are not unfamiliar at home. Crotons (Codiæum), which are not, by the way, true crotons, that is to say, those which yield the croton oil, of great variety form a wonderful background for the flower borders. The Periwinkle (Vinca rosea and alba), some white, some mauve, and some white with a mauve eye in the centre, is common, and so, too, are many kinds of Cannas (one of which, Canna edule, yields the famous "Tous-les-Mois" flour and starch). West Indian Mignonette (Lawsonia alba) is a shrub with almost white flowers of great fragrance (the Henna of the East), and Crabs' Eyes (Abrus precatorius) is a pretty little climbing plant with red and black seeds, used in the West Indies for ornamental work, but of evil notoriety in the East, where they are used as a poison.

Orchids are very unevenly distributed in the British West Indies. Some islands, as for example Jamaica, are rich in them, and though orchids are not general they are



VICTORIA REGIA LILIES, GEORGETOWN, BRITISH GUIANA



WEST INDIAN ORCHIDS

most easily and successfully grown throughout. There are fine collections of these wonderful plants brought from all parts of the world in the Botanic Gardens in Jamaica and Trinidad, and many private collectors (Dr. H. Alford Nicholls, C.M.G., of Dominica, is an instance) adorn their drawing-rooms, verandahs and gardens with many choice specimens. To those who are interested in Darwin's book on orchids, such quaint plants as Catasetum from Trinidad will appeal. From the same island come Gongora, with their long, pendulous spikes of most weird-looking flowers; from Jamaica Broughtonia sanguinea, with its blood-red flowers: from the Cayman Islands Schomburgkia Thomsoniana, with large purple and white flowers; these, with Cattleyopsis, with rose-coloured flowers from the Bahamas, and Phaius Tankervillea, introduced from China more than a century ago and now naturalised in Jamaica, are amongst the orchids that will be noticed. Among exotic species which are readily grown are Dendrobium Pierardii, with numerous pendulous racemes of flowers of delicate primrose just tinged with mauve, Dendrobium moschatum, with long-stretching flower stalk with large golden-yellow flowers, Cattleya Dowiana, Cattleva Schroederæ, Phalænopsis, and many others too numerous to mention. These orchids are grown either on trunks of trees in the garden, or on blocks of wood or in baskets, if it is intended to transfer them to the house when in flower.

But what would a West Indian garden be without its palms? Of these there is an immense variety, by far the most beautiful being the Cabbage Palm or Palmiste (Oreodoxa oleracea), a description of which is given in another chapter. Scarcely less beautiful are the exquisite Areca Palms, spoken of by Hindu poets as "arrows shot from heaven," which are seen at their best in Trinidad, the Bull Thatch Palm (Sabal Blackburniana), and the Royal Palmetto (Thrinax parviflora). The Gru-gru

Palm (Acrocomia lasiospatha), with its spiny stem, is conspicuous, and still more so is the coco-nut (Cocos nucifera), which is seen at its best fringing the sandy beaches. The Cohune Palm (Attalea Cohune), with its magnificent leaves, is common in British Honduras, where its presence gives a name to whole districts, and a fortune awaits the man who discovers a suitable apparatus for cracking its hard shell on a commercial scale, for the nut contains a valuable oil.

The Aeta or Ita Palm (Mauritia flexuosa) is chiefly seen in British Guiana and Trinidad, and the Talipot Palm (Corypha umbraculifera), the great leaves of which are carried before people of rank among the Cingalese, is not common. The latter takes about a quarter of a century to fruit, when it throws out feathery plumes and then dies. There are fine specimens of this palm in the Botanic Gardens in British Guiana and Dominica. Whatever may be said of the flowers, it is certain that the palms, which strike such a new note to visitors from the Old World, contribute in no small measure to the exquisite beauty of the scenery of the West Indies.

From the Flora the writer will now pass to the Fauna of the West Indies. This is neo-tropical and belongs properly to that region which includes South and part of Central America. It is far less obtrusive than the flora. Except in British Guiana on the mainland, which can boast of the tapir—the ancestor of the horse,—the manatee (one of which was shown at the old Royal Aquarium in the 'eighties as a mermaid), the monkey, jaguar, etc., mammals are rare, though they are represented by the agouti, armadillo, opossum or manicou, and the racoon or kinkajou, the latter being a very delightful furry creature not unlike a "Teddy bear."

It is probable that Columbus found very little animal life when he discovered the islands. Oldmixon¹ records

¹ The British Empire in America. London, 1708.

CAMELS IN BARBADOS

that while there were "several Beasts found on the other Charibbee Islands" there were "few or none at Barbadoes; which was almost over-run with Hogs." These hogs were not indigenous, but were the descendants of those left by the Portuguese when they first discovered the island. They were indeed so numerous, that "The English thought to have given it [Barbados] the name of The Isle of Hogs"; but it presumably occurred to them afterwards that such an appellation might give rise to a misunderstanding, and the suggestion was apparently

dropped!

The same authority tells us that camels were imported at the first settlement of the island, and were used for draught purposes, as indeed they are to this day at that interesting farm at Gombo, not far from Pisa in Italy. "Captain Higginbotham," wrote Ligon, 1 on whose quaint Topographicall Admeasurement of the Yland of Barbados. dated 1673 two well-fed camels are depicted, "had four or five, which were of excellent use, not only for carrying sugar to the bridge [Bridgetown] but of bringing from thence hogsheads of Wine, Beer, or Vinegar, which horses cannot do, nor can Carts pass for Gullies, and Negroes cannot carry it, for the reasons afore-mentioned; a good camel will carry 1600 l. weight, and go the surest of any beast." The planters did not, however, understand the management of these delicate beasts, and it would seem that the camels did not long survive.

Carriage horses were introduced into the same island from England, and horses for riding and for the use of the militia were obtained from New England. Horses were also imported from "one of the *Leeward Islands* in the *Carribbies* call'd *Currifa* [Curaçao] besides some we breed and very strong and good mettled, bold and fit to charge on: these horses we use either for the Ingenio, or

¹ A True and Exact History of the Island of Barbadoes. By Richard Ligon, Gent. London, 1673.

the Saddle, seldom or never for carrying sugar, the gullies being so steep."

"Oxen, Bulls, and Cowes," too, were imported from England and New England, though they came principally from the "Isle of May and Bonavista." Asses or Assinegoes, as they were then called, were also introduced by the settlers, who found them exceedingly serviceable for carrying sugar across the numerous gullies in the days before the forests which once covered Barbados were cut down and roads were constructed.

"When the great rains fall, the wayes are so deep, and full of roots, as when a horse puts in his leg between two roots, he can hardly pull it out again, having a great weight on his back; and if he fall, 'tis hard lifting him up. Whereas the Assinigoes pick and choose their way, and sometimes choose out little wayes in the wood, such as they know are fit for them to pass, which horses cannot do, because the wayes are now to narrow for them, or if they were not, they would want much of the wit of the Assinigoes, to pick and choose their way. And if by chance the Assinigoes fall, two Negroes are able to help him up, and we seldom use more than two, for assistance to the Christian that has the charge of the carriages. One of these Assinigoes will carry 150 weight of sugar; some of the strongest 200 weight."

Horned cattle were largely imported for turning the primitive sugar-mills, and they are still used for draught purposes in Barbados and elsewhere. English sheep were few in number in the West Indies in the early days of colonisation, and it was many years before they became accustomed to the pasture there, which consisted of "a soure, tough and sapless grass." Besides, they unfortunately showed a predilection for a poisonous plant which bred disease among them. Another disadvantage was that the sheep required constant shearing. Those brought from "Guinny and Binny" and those



HORNED CATTLE, MONTEGO BAY, JAMAICA



THE "QU'EST CE QU'IL DIT?"

which had "hair growing on them instead of wool; and liker Goats than Sheep," were, on the other hand, more easily acclimatised. Goats prospered from the first, and at the present time they still do better than

sheep in the West Indies.

Deer were successfully introduced into several of the islands, and it is a tradition (of doubtful authenticity) that a former owner of Long Bay Castle in Barbados used to tie lanterns to their antlers with the object of wrecking vessels on the reef called the Cobblers, the unfortunate mariners mistaking the lights for those of Bridgetown. Wild deer are still found in the small island of Barbuda near Antigua, and the late Mr. J. H. Hart, in his admirable work on cacao 1 included "Deer" in his list of the fauna of the cacao field, which is also commonly visited by the Opossum or Manicou and the Lapp (Coelogenys paca) and the Agouti (Dasyprocta aguti). The two last-named animals are, however, becoming rare, and are highly prized for the table, making, as they do, an appetising dish.

Birds in the West Indies are of great variety. Though their plumage is often more gorgeous than that of any birds at home, their note is inferior and there is no song bird in the tropics of the New World to be compared with the lark, the linnet, or the thrush. Since the introduction of the mongoose, to which reference is made below, birds in the West Indies have been greatly reduced in numbers. Of the non-migratory birds the principal are Trogons, Sugar-birds, and Parrots of various kinds. The Qu'est ce qu'il dit—a bird of the shrike type, with brown and yellow plumage—which repeats the question, "Qu'est ce qu'il dit?" with remarkable persistence and accuracy from morning until night is conspicuous, and other familiar birds are Grieves, Warblers, Fly-catchers, Doves, Plover, Snipe, etc.; but as the number of varieties in any particular

¹ Cacao, A Manual on the Cultivation and Curing of Cacao. London: Duckworth & Co., 1911.

locality reaches upwards of a hundred, a list of them might weary the reader. Superb in their plumage is the orange-coloured and crested Cock of the Rock, and superb too the crimson Bell-bird of British Guiana. Humming-birds are seen at their best in Trinidad, which has appropriately been called the "Land of the Humming-Bird." Of infinite variety, these tiny birds—many are scarcely bigger than a bumble-bee—flit from flower to flower, fluttering their exquisitely coloured wings, which seem never to be at rest. Let the unfortunate stay-at-home visit the Natural History Museum at South Kensington and inspect the unique collection of humming-birds there. He will then be better able to appreciate what a delight they are in their native home.

The common or garden London sparrow thrives at Annotto Bay, Jamaica, the only place in the West Indies where the writer has seen that familiar bird. An experiment of greater interest than that of the acclimatisation of the sparrow in the West Indies has been made in recent years with the introduction from their native haunts in the Aru Islands of Birds of Paradise into Little Tobago, an island belonging to Sir William Ingram which lies off Tobago; according to latest reports they are becoming acclimatised, and there seems to be a fair prospect of these beautifully plumaged birds becoming a permanent addition to the fauna of the West Indies. The introduction of Indian Starlings or Mynahs into St. Kitts was suggested some years ago, with the object of coping with a pest of grasshoppers—an insect of which that bird is said to be particularly fond—but the authorities deprecated the idea, lest the balance of nature should be upset, as it has been by the introduction of the mongoose. Yet, there is a well-known resident in Barbados who, after a visit to the mother country, invariably returns to his island home with a large cage of English birds which he lets loose on his estate!

THE FER-DE-LANCE SNAKE

Under acts of the local legislatures, certain birds are protected, some conditionally and others unconditionally, a "close time" being provided in the latter case. In Grenada, for example, any person who kills, wounds, or takes any of the protected birds, or their eggs or nests, or who has in his possession any such bird killed, wounded, or taken, or any part thereof, or the eggs or nest of any such birds, is liable to a penalty of five pounds. The legislatures have, however, been unable to check the depredations of the mongoose, which is the worst offender.

The nasty "Johnny Crows," which used to be protected by ordinance and preserved as scavengers, are fortunately no longer privileged in this manner. Now that Port of Spain has been cleaned up and drained, there is no longer any need for the services of this ghoulish and bald-headed bird, which often used to be seen tearing dead kittens and dogs, besides offal of all kinds, to pieces in the streets.

Reptiles are fairly numerous in the West Indies, and include the Cribo or common snake, the Whip snake, Iguana (Iguana tuberculata), and lizards of various kinds. Of the snakes, the Fer-de-Lance is the only one which has proved to be a menace to life, and that variety is confined to St. Lucia, into which island, it is said, it was introduced by the French from Guadeloupe or Martinique with the object of driving out the Caribs. The Fer-de-Lance is certainly a very venomous snake; but statistics go to prove that its effect on the obituary of St. Lucia was greatly exaggerated in the old days.

It was not until 1869 that the death-rate from snake bites in the island was recorded. In that year the deaths attributed to that cause numbered twenty-two, and the Legislative Council was prompted to offer a reward of half-a-crown for every five heads of the Fer-de-Lance snake brought in. So effective was this measure

that in the first year the reward was claimed for no fewer than fifty thousand heads. The annual vote for the purpose of snake destruction was £300, but the amount expended in 1872 was £465. Fer-de-Lance hunting became a recognised sport for the people, and the deathrate from snake bites fell to six. Soon afterwards the then Administrator, Mr. (afterwards Sir William) Des Voeux, obtained from Dr. P. L. Sclater at the Royal Zoological Gardens a pair of mongoose, which had been reported to be valuable in destroying snakes in India. The little creatures reached the island safely, and some doubts being expressed as to their ability to kill such a formidable snake as the Fer-de-Lance, it was decided to hold a private séance before they were allowed to escape to the forests. This was accordingly held on the lawn of the military hospital on the Morne Fortuné above Castries. All being in readiness, Mr. Falkiner Chadwick, the then Chief of Police, produced a glass jar containing a particularly lively specimen of the Fer-de-Lance, fully three feet in length. A cage containing the mongoose was then opened near the glass jar, and at the same moment the snake was liberated. One mongoose at once bolted and was never seen again, but the other boldly faced the venomous reptile as it glided stealthily from the jar. A battle royal then ensued, which lasted several minutes. The outcome of it was, however, scarcely for a moment in doubt. .The mongoose proved the winner hands down, and carried his victory to the point of swallowing some inches of the snake head foremost. As a reward, the mongoose was given his liberty. He lived for some days in the basement arches of Government House and then disappeared in search perhaps of further prev.

Ten years later mongoose were extensively imported from Barbados by the St. Lucia Agricultural Society, and it is to this action that the comparative immunity

MONGOOSE V. FER-DE-LANCE

from the Fer-de-Lance which St. Lucia at present enjoys is to be attributed.

In the upper reaches of the Essequibo, and also in Jamaica, Alligators or Caymans—one figures on the coat of arms of Jamaica—are to be seen, and in the creeks off the rivers of British Guiana the great Camoudie snake is found. The alligators afford excellent sport.

The result of the introduction of the rabbit into Australia has its counterpart in that of the introduction of the mongoose into the West Indies. Both have demonstrated the danger of upsetting the balance of nature. This is how the now ubiquitous mongoose first settled in the West Indies. The sugar-canes had been suffering very severely from the ravages of rats, including European brown and black rats and the cane-juice rat (Mus saccharivorus), and the sugar planters were at their wits' end to know what to do. Various remedies were tried, including ferrets, cats, ants and even a very voracious South American toad. They proved, however, of little avail, and by 1872 Dr. (now Sir) Daniel Morris estimated that fully £100,000 had been spent in rat catching.

Then Mr. W. Bancroft Espeut imported into Jamaica direct from India nine mongoose (Herpestes griseus), four male and five female. They proved an immediate success from the point of view of rat extermination, and pairs were eagerly sought for at high prices in Jamaica and the neighbouring islands. The mongoose soon became established—too well established in fact—for it was not long before they overran every parish in Jamaica, being found, it is said, even on the mountain tops. They made short work of the rats, which rapidly diminished in numbers, and if they had stopped there, all would have been well; but they did not. Satiated with the rodents, they turned their attention to the more appetising poultry and birds, which soon diminished in numbers to a noticeable degree. Lizards, too, fell an easy prey to the mongoose, to the

great delight of the insects, which began to increase to an alarming extent.

It was now the mongoose which became a plague, and matters grew so serious, that in 1890 a Government Commission was appointed in Jamaica to enquire into the prevalence of this once insignificant little creature. Abundant evidence was taken from planters and others. and the Commissioners in their report stated that they were satisfied that though the mongoose had conferred great benefits on sugar and coffee estates by destroying rats, the evidence appeared to show that these were more than counterbalanced by its injurious effects. find, from the evidence," they stated, "that the mongoose destroys young pigs, kids, lambs, newly-dropped calves, puppies, kittens, also the young of the coney, poultry of all kinds, game such as partridges, quails, guinea-fowl, snipe, lapwing, ground doves, young John Crows, and all birds which nest on or near the ground, and their eggs, as well as snakes, ground lizards, frogs, turtle and turtle's eggs, land-crabs and other useful creatures. evidence to show that the mongoose eats ripe bananas, pines, young corn, avocado pears, sweet potatoes, cacao, vams, peas, and certain fruits, and that he is suspected of sucking the sugar-canes, also that he will eat meat and salt provision and can catch fish; in short, that he is, or has become, omnivorous."

Referring particularly to St. Lucia, Dr. Lucius Nicholls in his report on the Government Laboratory work in that island for the six months ended September 30th, 1910, had the same story to tell. The mongoose was introduced as a natural enemy of the Fer-de-Lance, and at first it found no competition and an abundant food supply, so it was small wonder that it multiplied at a very great pace. Admirably doing the work for which it was intended, it completely destroyed all the serpents in and around towns, villages and settlements, and in the

OMNIVOROUS "HERPESTES"

immediate neighbourhood of the great majority of the cane and cacao estates. Apart from this, it exterminated several birds that nest upon the ground, and other harmless snakes of value as rat destroyers; it then reduced the agouti and iguana to disappearing point, and very greatly diminished those good destroyers of insects—the lizards; besides, it devoured innumerable rats, until that wily creature altered its methods of living, and made nests in the trees, and spent the night hunting for food, for the mongoose hunts by day.

This vast amount of food supply being lost or lessened, and that which remains having no doubt learnt to keep one eye on the mongoose, this little animal, says Dr. Nicholls, has naturally started to diminish, and it will continue to do so until some balance is reached between

itself and its food supply.

The mongoose has been imported to other places as a destroyer of rats, and for flat, unwooded lands such as cane-fields he is at first an undoubted success, but for cacao estates and woodlands he is the opposite, as he keeps the rats in the trees, where they destroy the cacaopods and fruits. This *Herpestes* is also a great slayer of poultry, all small ground mammals and reptiles, and birds that breed upon the ground. Dr. Nicholls concludes by saying that any government or person considering its importation should carefully view the fauna and nature of their country and consider its possible effects. So much then for the mongoose which, as the reader will gather, has lost its erstwhile popularity.

Insects are exceedingly numerous in the West Indies. Mr. James Rodway, the curator, records that there are about twenty thousand different kinds in the collection at the British Guiana Museum! "Some are lovely and harmless, others disgusting—stinging ants and wasps are common everywhere. . . At night there is a continual hum like a singing in the ears, which ceases at sunrise."

Among the "lovely" insects are the fireflies, which are particularly plentiful in Trinidad where they have been even enmeshed in ladies' ball dresses with beautiful effect. Among the "disgusting" insects, on the other hand, are, of course, the mosquitos, marabuntas or Jack Spaniards, and the like, besides such pests as the moth and shot-borers, which sugar planters are constantly fighting.

Little beetles, known as "Hard backs," are at times very common in British Guiana. They appear in swarms or showers in such quantities that many a festive dance has been temporarily suspended to permit of their being swept up, while such receptacles as wine glasses and soup plates have to be covered up during a visitation. The backs of these little beetles are so hard that if a tumbler or a wine glass is put on them they will walk about dragging it with them.

Ants are seen everywhere, and the appearance of the "Parasol" variety (Atta cephalotes) causes great apprehension to the owner of the garden or plantation which it visits. Parasol ants can strip a tree of every leaf which it possesses in a single night. They seem to make their plans with great deliberation, marching one behind the other to the tree on which they set their fancy, and returning to their nest, each one with a piece of cut leaf far bigger than itself over its head. If deflected from their path they show-with their antennæ-the greatest indignation and use every means to resume their columnar formation. Scorpions and centipedes are present in the West Indies, but they are not often to be seen, nor are they nearly so venomous as they are popularly supposed to be. The writer has come across more scorpions in Italy than he ever has in the West Indies.

Linnæus in 1758 catalogued only six species of mosquito, but subsequent research has shown that there exists an infinitely greater number. The mosquitoes in the

MOSQUITOES AND MALARIA

West Indies include the harmless Culex, the Anopheles, which is found on the mainland and all through the islands, with the exception of Barbados, which is quite free from them, and the Stegomyia calopus, the communicating agent of yellow fever when it is about, which

is happily not often nowadays.

It was in 1880 that Laveran, a French Army surgeon in Algiers, discovered the existence of parasites in the blood of a malarial patient, but it was not until fourteen years later that Sir Patrick Manson and Major Ronald Ross demonstrated what an important part the Anopheles mosquito plays in the dissemination of malaria. As the name implies, it had always been believed that malaria was due to "bad air," miasmas, etc., but Dr. Sambon and Dr. Low by practical experiments on the Campagna near Ostia proved that this was not so. For several months during the most malarial part of the year they lived there, withdrawing at sunset to a mosquito-proof house where they remained until sunrise. Though malaria was rife in the neighbourhood, they both remained immune.

Dr. Charles Finlay of Havana was the first to propound the theory that mosquitoes were also the carriers of infection in the case of yellow fever, that distressing disease which was in the old days responsible for great mortality in the West Indies. He singled out—and correctly, as it was subsequently proved—the *Stegomyia* as the intermediate host in this case.

After the close of the Spanish-American war, a Commission, consisting of Walter Reed, James Carroll, A. Agramonte and Dr. Lazear, was appointed by the Government of the United States to investigate the matter. Specimens of the Stegomyia were obtained, and after being fed on yellow fever patients, they were allowed to bite susceptible persons in a specially arranged yellow fever camp. On July 27th, 1900, Carrol submitted

himself to the bite of an infected mosquito applied by Dr. Lazear, and this is the account which he has given of what took place:

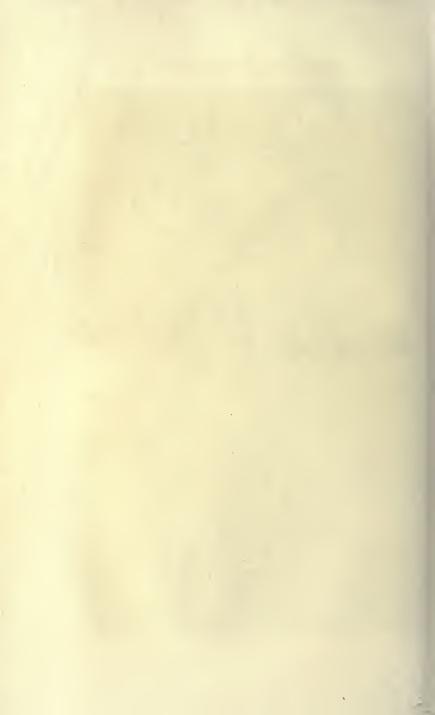
"The insect had been reared and hatched in the laboratory, and had been caused to feed upon four cases of yellow fever, two of them severe, and two mild. The first patient, a severe case, was bitten twelve days before; the second, third and fourth patients had been bitten six, four and two days previously, and were in character mild, severe and mild respectively. In writing to Dr. Reed that night of the incident, I remarked jokingly that if there was anything in the mosquito theory, I should have a good dose. And so it happened. After having slight premonitory symptoms for two days, I was taken sick on August 31st, and on September 1st I was carried to the yellow fever camp. My life was in the balance for three days, and my chart shows that on the fifth, sixth and seventh days, my urine contained eight-tenths and nine-tenths of moist albumen. On the day I was taken sick, August 31st, 1900, Dr. Lazear applied the same mosquito, with three others, to another individual, who suffered a comparatively mild attack, and was well before I had left my bed. It so happened that I was the first person in whom the mosquito was proved to convey the disease.

"On the 18th of September, five days after I was permitted to leave my bed, Dr. Lazear was stricken, and died in convulsions just one week later, after several days of delirium, with black vomit. Such is yellow fever.

"He was bitten by a stray mosquito while applying the other insects to a patient in one of the city hospitals. He did not recognise it as a *Stegomyia*, and thought it was a *Culex*. It was permitted to take its fill, and he attached no importance to the bite until after he was taken sick, when he related the incident to me. I shall never forget the expression of alarm in his eyes when I



A CHARACTERISTIC MULE TEAM IN BARBADOS



TWO COURAGEOUS DOCTORS

last saw him alive in the third or fourth day of his illness. The spasmodic contractions of his diaphragm indicated that black vomit was impending, and he fully appreciated the significance. The dreaded vomit soon appeared. I was too weak to see him again in that condition, and there was nothing that I could do to help him. Dr. Lazear left a wife and two young children, one of whom he had never seen." Peace has its victories as well as war, and surely the names of these noble men deserve to be inscribed on the Roll of Fame.

A vigorous campaign has been conducted in the British West Indies against the mosquito, and with remarkably successful results. In 1909 that eminent authority on tropical disease, the late Sir Rupert Boyce, of the Liverpool School of Tropical Medicine, visited Barbados, Grenada and Trinidad, and there can be no doubt that his visit served to stimulate the efforts which were already being made by the local medical services in the direction of combating mosquito-borne disease.

The Jigger, referred to in old books as the Chigo, is still often met with, but it is not dangerous. This little insect is a species of flea. The female burrows under the skin of the foot, and deposits her eggs there, causing a tickling sensation and (if the foot is neglected), painful sores. Some negroes are, however, exceedingly skilful in removing the source of discomfort, and the sensation of having a "jigger" cut out from one's foot is said to be exquisitely delightful.

Ticks cause a good deal of trouble with the cattle on the "pens" or cattle ranches in Jamaica, and their presence was made the subject of an investigation by Professor Newstead, of the Liverpool School of Tropical Medicine, who put forward various suggestions for reducing the pest to which effect is now being given by

the authorities.

The rivers in the West Indies swarm with fish of many

varieties, and Mr. Harry Vincent, 1 gives a list of one hundred and sixteen different sea fish in the waters surrounding Trinidad. Of these he classifies eighty-five species as food fishes, and thirty-one as being not used for food. The former include Brochet or Snook, Barracouta, Grouper, Jew-fish and Parrot-fish, and the latter Sea-cow, Sharks and the Four-eye or Star-gaze, found in the surf near the shore, which attracted Charles Kingsley's attention. "Ridiculous little things," he wrote, "about as long as your hand, who, instead of diving to the bottom like reasonable fish, seemed possessed with the fancy that they could succeed better in the air, or on land: and accordingly jumped over each other's backs, scrambled out upon the mud, swam about with their goggle-eyes projecting above the surface of the water, and, in fact, did anything but behave as fish."

Mr. Vincent considers the Cavalli or Carangue, the King fish or Tasard, the Barracouta, and the Tarpon or Grandécaille, the principal game-fish, and he gives a stirring description of an encounter with one of the last named. the "Silver King" as he is commonly called in the Gulf of Mexico and Florida. "He is the Machiavelli of the finny tribe, his manœuvres at and round the bait are protean. At one time he will hit the bait with a rush, directly he feels the hook executing a tiger-like spring from the water into the air, in all probability ejecting the hook at first jump, especially if it has taken him in the top jaw or palate, where it cannot possibly find secure hold on account of the bony plates there. On another occasion he will hit the bait with a similar bang, and drop it at once like a naughty boy at a runaway ring of the door-bell. Other times he will swim round the bait giving it occasional little light tugs, or more imperceptible sucks. Even when fairly hooked in the lower jaw, after making three or four springs in the air and finding them

¹ The Sea Fish of Trinidad. By Harry Vincent.

A FINNY MACHIAVELLI

ineffectual, he will float on top of the water foxing, pretending he is exhausted, evidently hoping the fisherman will haul him in, until he gets on the wire, when he will make a fresh rush and kink it, after which he can easily break it and get away. Even when gaffed and put in the boat he must be speedily stunned with a club or he will jump out again. The local fishermen have a proverb to the effect that 'the grand-écaille is never dead until he

· is in the pot.' "

Turtle are found more or less all through the West Indies, but the chief centre of the turtle-fishing industry is the Cayman Islands to the west-north-west of Jamaica. Turtle are caught off the Cays off the coast of Nicaragua, and brought to the islands to fatten before they are shipped alive to England, where they are butchered for the banquets of the rich. The enjoyment of the consumers of turtle soup would certainly be chastened if they were to see the unfortunate turtle on board the mail steamers on their way to England from the West Indies, lying in all weathers on deck and forced to be content with a daily sponge down or a rinse with the hose!

The principal kinds of turtle are the green turtle and the hawk's-bill. The latter are killed as soon as they are caught and their shells, which form the tortoise-shell of commerce, are removed. When the green turtle are first captured, their new owners' names are cut on their shells and they are placed in "crawls" until the boats are ready to return to the Cayman Islands. The turtle have a remarkable homing instinct, and cases are on record where they have escaped from the Cayman Islands, and have made their way back to the fishing grounds three hundred miles away.

CHAPTER VI

CLIMATE—COST OF LIVING—AMUSEMENTS

GENERALLY speaking, the climate of the West Indies is equable and decidedly healthy, though conditions vary considerably according to the locality. The extreme heat is tempered during the day by delightful sea breezes, thanks to which, as well as to the provisions which are made for bodily comfort, one feels decidedly cooler and less lackadaisical in a temperature of 86° F. in the West Indies, than in one fully ten degrees lower in England. The West Indies are essentially a "white man's country" in the sense that white settlers thrive there, though manual labour is best performed by the blacks.

Mention has been made of the climatic conditions varying according to locality, and it is noteworthy that many of the West Indian Islands offer a greater variety of climate than others; thus while in Kingston, Jamaica, the heat is at times intense, blankets at night are a comfort and indeed almost a necessity in residences on the mountains, where fires are not unknown. Again, places near the equator and sheltered from the prevailing winds are, of course, decidedly hotter than those which are farther away and are situated in the track of the north-east trade winds, as Barbados is, for example. The trade winds begin to blow in about December and continue steadily until March and April and it is consequently during the winter months that the climate of the West Indies is at its best.

The rainy season generally sets in in June, and continues until the end of the year, with a break in August or September, and in British Guiana there is supposed to be a long rainy season from about the middle of April until August, and a short rainy season during December and

A WEST INDIAN FLOOD

January. During this period the climate becomes rather hot and steamy; but it must not be assumed that the rain is incessant. The clouds gather together making it easy to predict when rain is going to fall, and when it does come down it comes with very great violence. What we would call a "tropical downpour" at home would as often as not be considered little more than a drizzle in the West Indies, if such an utterly discomforting form of rainfall were known in those parts.

Visitors to the West Indies during the dry season often wonder what the significance can be of the great river courses which they see, some of them fully seventy or eighty yards across, and often without a vestige of water in them. Many of these river courses are unbridged, and still more are unbridgeable, for during the rains they become in a remarkably short space of time roaring torrents, carrying all before them and bearing on their bosom trees, wreckage, etc., out to sea, which becomes discoloured for miles. There is a graphic description of such a flood in Tom Cringle's Log. "Suddenly the wind fell, and the sound of the waterfall increased, and grew rough and loud, and the undefinable rushing noise that precedes a heavy fall of rain in the tropics, the voice of the wilderness, moaned through the high woods, until at length the clouds sank upon the valley in boiling mists, rolling half-way down the surrounding hills; and the water of the stream, whose scanty rill but an instant before hissed over the precipice in a small transparent ribbon of clear grass-green, sprinkled with white foam, and then threaded its way round the large rocks in its capacious channel, like a silver eel twisting through a dry desert, now changed in a moment to a dark turgid chocolate colour. . . . length the swollen torrent rolled roaring down the narrow valley, filling the whole water-course, about fifty yards wide, and advancing with a solid front a fathom high-

a fathom *deep* does not convey the idea—like a stream of lava, or as one may conceive of the Red Sea, when at the stretching forth of the hand of the prophet of the Lord, its mighty waters rolled back and stood heaped up as a wall to the host of Israel. The channel of the stream, which, but a minute before, I could have leaped across, was the next instant filled, and utterly impassable."

Hurricanes occasionally visit the islands, and during what are known as the hurricane months, the planters view with apprehension any sudden fall in the barometer. An old negro adage regarding these storms runs:

"June, too soon,
July, stand by,
August, come it must,
September, remember,
October, all over."

It is certainly very true.

Statistics have shown that hurricanes of such force as to cause serious damage to life and property are comparatively rare in any particular island. Thus Montserrat, which was devastated in 1899, had previously enjoyed immunity from hurricanes for upwards of a hundred years. Trinidad and Tobago, and of course British Guiana are fortunately free from these visitations altogether.

Of all the islands of the West Indies, Barbados enjoys the reputation of having the finest climate. The most easterly of the Lesser Antilles, it is most favourably situated, standing right out in the Atlantic in the path of the north-east trade winds. Barbados was aptly described by Geo. J. H. Sutton Moxley as a "West Indian Sanatorium," and its climate has been praised by many eminent authorities. Thus Sir Frederick Treves wrote of it 1:

"The climate of Barbados in the winter is healthy and The Cradle of the Deep. By Sir F. Treves, G.C.V.O. London, 1911.

THE CLIMATE OF BARBADOS

agreeable. The little island lies far out to sea in the very heart of the trade wind. . . . The thermometer varies from about 76° to 82° F. There are no sudden lapses of temperature, none of that mean chill at sundown which falls like a footpad upon the sojourner in the Riviera. It is possible to be out and about all day. There is no need of any sun-helmet. . . . The climate, as a whole, may be judged by the circumstance that the medical men of Bridgetown cling all the year round to the black frock coat and tall hat, which are the delight of the profession in Great Britain. The air is comparatively dry. . . . The island presents an admirable climate for those who cannot, or will not, winter in northern latitudes."

The Santa Cruz mountains in Jamaica also enjoy a particularly favourable reputation for the climatic amenities which they afford, and so, too, do those ideal health and pleasure resorts known as the Five Islands, and the islands of the Bocas off Trinidad, to which reference

has already been made.

Residents in the West Indies when they visit England complain bitterly of the variable temperature and of the comparative lack of sunshine which are unfortunately so characteristic of the old country; and it is very noticeable how on the ocean steamers returning from the West Indies, the spirits of the passengers fall after the Azores are passed, and the sky, as often as not, becomes grey and cold. Even when the English summer is "tropical," as it was in 1911, West Indians complain when they are submitted to its rigours. The author has heard visitors from the West Indies grumbling bitterly at the heat and freely expressing their longing to get back to their breezy islands where there is never that airlessness which is at times so trying in England.

The climate of the Bahamas is much cooler than that of the West Indian Islands which are within the tropics. From January to March the temperature falls into the

sixties, but the mean temperature in the hottest months, namely from June to September is about 80° F. May to October are considered the rainy months. The winter climate is particularly delightful, and in the early months of the year New Providence attracts numbers of winter visitors from America.

In British Honduras the dry season lasts from February until about the middle of May, and it rains frequently in October, November and December. But throughout the West Indies, sunless days are rare, and provided no unnecessary risks are run the climate is not to be feared.

It may perhaps seem rather a far cry from the climate to the cost of living; but after all both these subjects are to many people of supreme importance when they contemplate visiting or settling in a country new to them, and so no excuse need be made for passing now to the consideration of the budget of a West Indian household. The cost of living in the West Indies, as it must necessarily do elsewhere, depends so much upon the tastes and temperament of the individual, that it would not be easy to make any hard and fast statement regarding it.

It would, perhaps, be best in approaching the subject to enquire into the minimum on which a self-respecting person could live year in and year out in the West Indies. Now many planters are willing to give pupils board and lodging for £60 a year, and from this it follows that it is possible to live in comparative comfort in the country districts of the West Indies for £100 per annum. Petty expenses are generally insignificant, for opportunities of spending money are necessarily less than they are at home, and, in consequence, families with what would be considered a moderate fortune in this country would be counted well off in many parts of the West Indies. Though it would be too much to say that living is better in the islands than it is at home, it is certainly cheaper in most instances. If one were to attempt to live on the same

A WEST INDIAN BUDGET

system as most people do in England, eating quantities of meat, etc., living in the West Indies would, no doubt, be very expensive; but, fortunately, one has no desire or inclination to do so. House rent varies as a rule from £2 10s. to about £5 per month, and in British Guiana from £5 to £12.

Few West Indian houses, even those of the better class, are really "furnished" in the English sense. In a tropical climate carpets and curtains would be superfluous, and are certainly not wanted; nor are saddle-bag arm-chairs, sofas, etc. A polished floor, jalousies to the windows, rocking chairs, delightful cool "Berbice" chairs with long arms to support the legs, and also, perhaps, an iced drink and a palm-leaf fan, adequately take their place. Such furniture can be purchased at the local stores or second-hand, for in British Guiana it is the custom for residents to sell their furniture when they go "home" even for a few months' holiday, and to buy their own back or someone else's when they return to the colony.

Few people spend more than £20 or £30 a year on clothing, unless they live in or near one of the large towns or visit England. Servants—black of course—are cheap and extremely good if treated firmly, but with kindness. The scale of wages is approximately as follows: butlers, £20 per annum; parlourmaids, £12 10s. to £20; nurses, £15 to £20; cooks, £15 to £20; coachmen, £20 to £25.

Washing is inexpensive and well done except in some country districts, where it pains one to see one's "work" violently beaten against rocks and stones in the true Italian lake-land fashion. At Kingston, Jamaica, there is an admirable steam laundry which conducts its operations with great rapidity and excellence, and washing delivered to it before noon is in cases of emergency returned on the same evening, which shows that even under a tropical sun the American spirit of "hustle" is not unknown.

Travelling does not have to enter into the budget of most West Indian families, unless a visit is paid to England or a neighbouring colony, but people who would not dream of affording a carriage at home, have their_pony and trap or buggy, which in St. Lucia, for example, can be engaged for as low an expenditure as £3 per month. In British Guiana, carriages are usually hired by the month from one of the livery stables.

Doctors' and lawyers' fees are extremely reasonable, and as a correspondent informed the writer, one can enjoy the luxury of a thorough illness of a month or six weeks for £10. In the smaller islands it would be safe to say that few families spend more than £200 (\$960) a

year in actual household expenses.

Mrs. M. A. Perez, who has had a good deal of experience in the latter connection, has kindly furnished the author with some information regarding the cost of living in Trinidad, and as that is generally considered the most "expensive" island in the West Indian group, it may be

profitable to summarise her remarks.

To begin with, she states that rents in Port of Spain are higher than in English provincial towns or a London suburb, running as they do from £62 10s. (\$300) to £125 (\$600) per annum. Those figures include, however, all rates, taxes, etc., and though they may seem high, it must be remembered that wear and tear is considerable in the tropics, owing to the destructive climate, house property being in consequence by no means profitable to landlords.

Beef and fish are cheap, and the latter is plentiful all the year round; but the former is inclined to be dry and inferior, of course, to that to which one is accustomed at home, while disturbances in Venezuela frequently lead to a reduction in the supply and a rise in prices. The usual price of beef is, however, about 6d. (12 cts.) per lb. year in and year out. Mutton is generally about 1s. 6d.

THE TERM "CREOLE"

(36 cts.) per lb. and poor in quality, supplies coming almost entirely from America. Fowls, on the contrary, are plentiful and cheaper than at home, and fresh laid eggs can be got in Trinidad at 1s. per dozen. Vegetables are cheaper than in England, and so, too, are fruits. Finnan-haddocks, codfish, herrings, fresh butter, etc., are imported in cool chambers of the large steamers; but indulgence in them and other luxuries naturally leads to the monthly bills being swollen.

Groceries are necessarily much more expensive than they are in England, being all imported and consequently subject to the necessary, but disagreeable, customs duties on which the revenue of the West Indian colonies mainly depends.

Servants are, on the whole, cheaper than they are in England; but as more are required in Trinidad, the appropriation for servants becomes the same in a modest household in the West Indies as it is at home. Servants generally prefer to "find for themselves" and since, as a rule, they glory in greasy native cookery and prefer creole 1 dishes to the choicest exotic luxuries, it is generally best to employ them "without accommodation" as it is called.

Washing is much cheaper than it is home, and as the negro washerwomen are not always too destructive, washing becomes one of the greatest comforts of a housekeeper. Indeed, it is remarkable how well native women turn out their "work" from their small huts with only a very limited supply of the necessary utensils. 84 cents. (3s. 6d.) is the usual price per dozen "pieces," and as a piece may be a muslin dress, two blouses, or a

¹ A "creole" is anyone born in the West Indies irrespective of colour. Thus a child born of white parents in Barbados, for example, is a "creole" of that island. The term is also applied to animals and even to produce, and it is not unusual to talk of a "creole pig" or "creole corn."

blouse and skirt, it will be gathered that the charge is exceedingly modest. The household washing is also very cheap, but it does not vary so much from what one is accustomed to at home as the personal washing does.

Horses and carriages, after the initial cost, are cheaper to keep than in England, and are not essential near the towns where there are well-equipped livery stables at which carriages can be hired by the day, week, or month at very reasonable rates. Nearly every house has its telephone, which is a luxury costing £10 (\$48) per year, but a great delight, as it enables one to keep in touch with one's friends.

Mrs. Perez is of opinion that living is cheaper in the country than in the towns, as the planter can raise plenty of stock and vegetables for his own use. In Trinidad, too, an excellent system prevails by which "market baskets" are sent over the government railway by the various grocery stores in Port of Spain, at the rate of 6d. (12 cts.) for 25 lbs. weight, ice being carried at a lower rate still. The baskets are in due course returned to town free of charge containing a book of orders. This adds greatly to the amenities of life in the country, and it is a very poor house which does not receive its bi-weekly supply of fresh bread, beef and ice from Port of Spain.

Life passes pleasantly enough in the West Indies. It is a mistake to suppose, as some novelists have done, that there is no hard work done there, and that the planter spends his day lolling in a rocking chair on the gallery of his house, in a white suit and a huge wide-awake hat while he sips sangaree. The days of dolce far niente have long gone by, and fortunes are not amassed without strenuous work, and plenty of it. On the estates and in the offices, the business day begins early—soon after daybreak in fact—but as it is over by half-past three or four o'clock, ample time is left for recreation.

LIFE IN THE WEST INDIES

The most favoured outdoor amusements in the West Indies are lawn-tennis and cricket. Some years ago one might have put cricket first, but it has yielded to a great extent to the craze for lawn-tennis, which is now played everywhere. Each colony has its lawn-tennis club or clubs, where play is indulged in in the afternoon up to the very moment of sunset, when it becomes too dark to continue, there being no twilight to speak of in the tropics. Many private houses have tennis lawns, and lawn-tennis forms always the chief amusement at the delightful garden parties, which are a prominent feature in the social life in the West Indies. Croquet, too, is exceedingly popular, especially in Barbados.

The West Indies have turned out many notable cricketers, including "Plum" Warner, who first became acquainted with the rudiments of the game in Trinidad, where his family, the head of which was Sir Thomas Warner, the coloniser of St. Kitts, have resided for generations, P. J. Henery, Ollivierre, Sydney Smith and

others.

Every self-respecting colony has one or more cricket clubs, and the keenest interest is taken in the game, especially during the winter months in alternate years, when an Intercolonial Cricket Cup is competed for by representative teams from Barbados, British Guiana and Trinidad. It may be of interest to record that in eleven tournaments, Barbados has won this cup six times, Trinidad on four occasions, and Demerara once.

In the early part of 1895 an English team, captained by Mr. R. Slade Lucas, visited the West Indies and returned very enthusiastic about the good time which they had enjoyed, both from the cricket and from the social point of view. As the result of the tour, they came back satisfied that there was plenty of good material scattered over the West Indies which only needed encouragement and development to be characterised as "first-class."

Two years later both Lord Hawke and Mr. (now Sir) Arthur Priestley took out elevens to the West Indies, which were cordially received wherever they went. On their return. Lord Hawke, who from the first took a deep interest in West Indian Cricket, was instrumental in an invitation being sent out for a West Indian eleven to visit England, and on May 26th, 1900, under the auspices of the West Indian Club, the first representative West Indian cricket team arrived at Southampton in the R.M.S.P. Trent and proceeded on a tour through England, under the captaincy of the Hon. R. S. Aucher Warner, own brother to "Plum" of that ilk. In all, seventeen matches were played, five of which were won by the West Indians, four drawn, and eight lost. The visitors were L. Constantine (Trinidad), P. J. Cox (Barbados), W. Bowring (Barbados), L. S. D'Ade (Trinidad), P. A. Goodman (Barbados), F. Hinds (Trinidad), M. W. Kerr (Jamaica), G. C. Learmond (Demerara), G. L. Livingstone (Jamaica), W. H. Mignon (Grenada), C. A. Ollivierre (St. Vincent), S. W. Sproston (Demerara), Burton (Demerara), and Woods (Trinidad).

Commenting on this, the first West Indian tour, Pelham F. Warner wrote in a descriptive pamphlet published after its conclusion: "The tour was a great success. Considering that the team had never played together before, that they were quite unaccustomed to the strain of three-day cricket, and that they lost the toss on no fewer than twelve occasions, out of the seventeen matches that the programme comprised, I think that the judgment I have been given will be endorsed on all sides. Of the seventeen matches played, five were won, four drawn, and eight lost, and bearing in mind all the circumstances and the opponents they had to meet, this was a very creditable performance. At first the tour looked very much like ending in failure, as the first four matches were lost right

WEST INDIAN CRICKET

off the reel, but far from being disheartened by such a bad start, the team improved day after day, and at the end of the tour was quite equal to first-class cricket."

Mr. R. A. Bennett's cricket eleven visited the West Indies in 1902, and in the winter of 1905, Lord Brackley took a team of cricketers to those colonies, which enjoyed plenty of good sport besides the proverbial hospitality of the colonies wherever they went. In the following year the second representative West Indian cricket team arrived on June 3rd, to try conclusions with the counties. On this occasion the captain was Mr. H. B. Gardiner Austin, of Barbados, and the team included O. H. Layne (Barbados), C. P. Cumberbatch (Trinidad), A. E. Harragin (Trinidad), J. E. Parker, L. Constantine (Trinidad), Sydney G. Smith (Trinidad), P. A. Goodman (Barbados), G. C. Learmond (Demerara), C. S. Morrison (Jamaica), G. Challenor (Barbados), C. K. Bancroft (Barbados), R. Ollivierre (St. Vincent), and Burton (Demerara). West Indians on this visit played thirteen first-class matches, winning three and losing eight. Two were drawn.

The latest English cricket eleven to tour in the West Indies was Mr. A. F. Somerset's team, which left for Barbados in January, 1911, and visited in succession British Guiana, Trinidad and Jamaica. After a very successful tour they returned in April with five wins to their credit, out of a total of thirteen matches, four

being lost, three drawn, and one tied.

After this slight historical digression, and before leaving the subject of cricket, it may be mentioned that the black people are particularly enthusiastic about the game. It is quite common to see tiny black children, innocent of clothing, indulging in it with all the assurance of their elders, using, however, sugar-canes for wickets, a coco-nut palm leaf for a bat, and whatever they can lay hands on for a ball.

The black spectators at cricket matches are very

demonstrative, and it is not at all unusual to see many of them rush out on to the ground and leap and roll about from sheer excitement when a wicket falls on the side which they do not favour, or when a brilliant catch is made. "De Lard, de Lard, look at de Lard!" they cried, when Lord Hawke went in to bat. Mr. A. F. Somerset has told how, during his recent tour, he found that a characteristic feature was the wonderful enthusiasm and vociferation of the lookers-on. "A good ball dealt with brings a shout of 'Played!' all round the ground, and to stop a 'yorker' evokes a yell that would not be given for a hit out of the ground in England. When that comes off a large part of the crowd spring on to the ground, throw their hats and umbrellas in the air, perform fantastic dances, and some of them are occasionally arrested by the police—until they consent to quiet down. At Barbados, our skipper, owing to the impossibility of making himself heard by any of the field, took out a whistle so that he could draw the attention of the team to himself and do the rest by signalling. We were much amused on our way back from the ground after we had won the first test match to hear a loud voice say, 'England will be glad of this.'"

Next in favour to lawn-tennis and cricket is golf, which has recently been taken up very actively in the West Indies. There are now golf links in Barbados, Jamaica, Trinidad, St. Vincent and Antigua, which are exceedingly well patronised. This is not surprising when one considers that so many residents in the West Indies are of Scotch

origin.

What is astonishing is that football should be played in the tropics, as it is, both in British Guiana and in Trinidad where there are football clubs. Cycling, too, is immensely popular and the bicycle races and athletic sports meetings attract enormous crowds.

Polo is played in the larger colonies and it is particularly

POLO IN THE WEST INDIES

favoured in Jamaica and Trinidad. There was some talk of a West Indian polo team coming over to this country last year, but owing to the great expense involved the proposal had to be abandoned. It would, however. be very interesting to see how the local bred ponies would compare with English ponies when matched against them.

Mr. Sam Burke, a polo enthusiast in Jamaica, describes the ponies raised in that island as being all nearly cleanbred; they can all gallop and are marvellously handy and kind. They lack the weight and size of the English ponies, but their stamina is extraordinary. Polo players in Jamaica have found ponies on which they have been able to play very regularly, over hard, sun-baked grounds, twice a week, and to keep on doing this for several years. There are several ponies within Mr. Burke's knowledge which have been playing polo almost without a rest for over ten years and are still fairly sound. Recently, Jamaica ponies have met good demand in Trinidad and the other islands, and a Jamaica pony, "Dinna Forget," has been exported to England and is now a registered polo pony stallion here. The ordinary type of Jamaica 14.2 pony is well up to 11 st. at polo in good company. Such ponies can be bought for £30 to £40.

Horse-racing is general, and many owners go to great expense in importing race-horses and jockeys from England to compete at the races in Barbados, British Guiana, Trinidad, Jamaica, and elsewhere, for racing is not confined to these colonies. Nearly every small island has one or more race meetings during the year, which are made the occasion of great merry-making by the black population. As to betting, the Pari muluel system generally prevails; and it is worthy of mention there is none of that disorder which is so often met with on

race-courses in other parts of the world.

The residents in the West Indies are devoted to dancing, and it is really surprising what energy they display in

a ball room. In spite of the high temperature they dance every number from beginning to end, and habitually go "in with the fiddles and out with the lights." It would be difficult to imagine any more delightful entertainment than a dance in a West Indian house with the windows and doors all open showing glimpses of the moonlight glistening on the leaves of the coco-nut trees, of the fire-flies darting here and there—and also of a number of dusky faces watching the "Buccras" enjoying themselves—while the band discourses those dreamy Spanish waltzes for which Trinidad, at any rate, is particularly famous.

The love of dancing even permeates the poorer classes. Perhaps the glories of the "Dignity Ball" of old may in some measure have departed, but the black is a devoted worshipper at the shrine of Terpsichore, and the author has before him as he writes an invitation to attend a dance in Trinidad, couched in the following peculiar terms: "We respectfully request you to witness the above dance with your presence on Friday night at the Prince's Building."

The programme on the occasion in question was even more quaint. The author could not understand it, but, perhaps the reader may be able to do so. It ran as follows:

PROGRAMME

- 1. Waltz-Master? what will you have.
- 2. Waltz-A Green Swizz.
- 3. Waltz-And you Madam?
- 4. Lancers—An "Old Tom" Tail.
- 5. Two Step-Let Unity Exist.
- 6. Mazurka—Don't Lurk about the Place.
- 7. Waltz-A bouquet for Madam.
- 8. Lancers—Oh! Madam looks sweet. By the Maid.
- 9. Passio—We are the Ragtime Boys.
- 10. Waltz-Make Friends with the Children.
- 11. Two Step-It's time to go a flirting.
- 12. Waltz-Hurry up Boys.

INTERMISSION-SUPPER

A QUAINT BALL PROGRAMME

- 13. Waltz-Don't leave your girl behind.
- 14. Waltz-Tiss Me Daddy before woo dow.
- 15. Lancers-Some one at the front door.
- 16. Two Step-Keep from the Bar.
- 17. Passio-Whisky and Soda to the crowd.
- 18. Polka-You must be brisk John.
- 19. Two Step-Hurry up the Master coming.
- 20. Lancers-Pass round the drinks.
- 21. Waltz-Well done! good luck to you boys.
- 22. Passio-Don't Mind what the Tailors say.
- 23. Two Step-We are the cocks of the West.
- 24. Waltz-After the Ball is over.

Now, an old West Indian proverb runs, "If you go tump-a-foot dance, you must dance tump-a-foot," which is interpreted, "Do at Rome as the Romans do"; so the invitation was not accepted.

CHAPTER VII

WEST INDIAN INDUSTRIES

THE industries of the British West Indies are mainly agricultural. Indeed the majority of our West Indian colonies are entirely dependent upon agriculture for their prosperity. The principal exceptions are British Guiana and Trinidad, for gold, diamonds, timber and indigenous rubber and balata figure among the exports of the former colony, while Trinidad has a valuable asset in its pitch, manjak, and petroleum deposits, in the development of which very large sums of money have been invested. Again, salt-raking is practised in Turks Islands, and the salt and sponge industries of the Bahamas are of some consequence. Phosphate of alumina is recovered in Redonda and sulphur is collected in certain localities.

The principal agricultural industries in the West Indies are those of sugar, rum and molasses, cacao, coffee, fruit (including bananas, limes, grape-fruit and oranges), rubber, cotton, spices, ginger, tobacco and rice. Stock-breeding, dairying and bee-keeping are also important industries in certain islands.

In reviewing the principal industries, the premier place must still be given to sugar, for, in spite of many vicissitudes to which it has been subjected, it is still the chief staple industry of the West Indies, though in some of the islands, notably Dominica, Grenada and St. Vincent, barely enough sugar is now produced to cope with local requirements. In Barbados, British Guiana, Antigua, St. Kitts, and St. Lucia, sugar is still king, for no industry was found to take its place in the days when through a series of circumstances which is described

THE GREAT SUGAR INDUSTRY

below, the cultivation of the sugar-cane ceased for many

years to be profitable.

The sugar-cane (Saccharum officinarum), which was destined to build up the fortunes of so many noble families in England, and, in the days of unfair competition with foreign and subsidised beet sugar, to bring ruin on so many of our homes, was first cultivated in the West Indies in Cuba, into which island it was introduced by the Spaniards. In 1578 there were as many as twentyeight sugar mills in operation in that island. From Cuba, cane cultivation rapidly spread to the other West Indian islands as soon as they were settled. When Ligon arrived in Barbados, in 1647, "sugar-making was but newly practised by the inhabitants there. Some of the most industrious men, having gotten Plants from Fernambock [Pernambuco], a place in Brasil, and made tryal of them at the Barbadoes; and finding them to grow, they planted more and more, as they grew and multiplyed on the place, till they had such a considerable number, as they were worth the while to set up a very small Ingenio [works]." The planters were not lacking in enterprise, and some of their number visited Brazil in order to acquaint themselves with the methods of cultivation and manufacture.

The first cane mill was erected in Essequibo—now a county of British Guiana—early in the seventeenth century. With the introduction of sugar cultivation, plantations rapidly increased in value. As an example, half of a plantation of five hundred acres belonging to a Major Hilliard, which had been valued at four hundred pounds sterling, was sold for seven thousand pounds sterling soon after sugar cultivation started. In the early days of the industry, sugar fetched a sum which to present-day planters would seem almost fabulous. Slavery was of course in vogue, labour was cheap, fortunes were soon built up from this simple grass, and the planters lived in

princely style in their palatial "Great Houses." Costly Chippendale furniture, mirrors and china were sent out in the West Indiamen, which were to return laden with sugar, and the mahogany tables of the sugar lords groaned with costly plate.

Then came a series of disasters which must surely be unparalleled in the history of any other agricultural and manufacturing industry. The first signs of trouble were the abolition of the slave trade in 1807, and the agitation for the abolition of slavery, to combat which enormous sums of money were poured out by the planters. They proved of little avail beyond postponing the—for the planters—evil day, and, when slavery was abolished in 1834, the West Indians found themselves for the first time face to face with a serious crisis, an occurrence which was of common experience in the succeeding half century.

Slavery continued in Cuba, Porto Rico, Brazil and elsewhere for many years later, but the tariff of the United Kingdom differentiated between free and slave-grown

sugar.

In 1846, the differential duty was lowered, and a few years later the sugar duties were equalised, with disastrous results to the West Indian sugar industry. It was shown before the Committee on Sugar and Coffee Plantations in 1848 that the cost of producing muscovado sugar in Antigua, which had been 7s. 6d. per cwt. under slavery or compulsory labour, had risen to 16s. 6d. during freedom. In Barbados the cost of production rose from 6s. to 15s. 6d., while British Guiana was even in a worst plight, the cost of producing a hundredweight of sugar rising under freedom to as high as 25s., which made competition with Cuba and Porto Rico, where in consequence of the continuance of slavery the cost of production remained as low as 8s. and 8s. 6d. respectively, altogether impossible. The abolition of slavery was a policy which could be defended, but the policy of subsequently

SO-CALLED "FREE TRADE"

admitting slave-grown sugar to compete on British markets with free labour sugar from British colonies was indefensible. The duties should have been so arranged that British sugar could compete in its own markets on an equality with slave-grown sugar. Unfortunately, equality of competition is not regarded as synonymous with Free Trade. British producers were loaded with a heavy handicap and were told that that was "Free Trade."

Some idea of the extent of the disaster may be gauged by the evidence given before the Committee moved for by Lord George Bentinck.¹ Lord Howard de Walden complained before that body that whereas in the days of slavery his two estates in Jamaica cleared £20,000 annually, Montpelier showed a loss of £2,195 in the eight years after abolition, while Caymanas showed an average clearance of £700 only. Sir William Codrington, too, stated that the property in Antigua from which his father used to receive £20,000 to £30,000 per annum, only produced a revenue of £1,700 in 1847. Again, Dr. Ranken showed how Plantation Kitty, in Demerara, which was sold in 1829 with the slaves on it for £63,500, changed hands for £3,000 in 1846.

It is interesting to note, however, from the table from which the figures of the cost of production on the opposite page were taken, that beet had not yet become a formidable competitor, the cost of producing one hundred-weight of beet-root sugar in Europe being 24s. 4d. A foot-note adds: "This beetroot sugar is valued at about 4s. to 6s. per cwt. below colonial Muscovado; so that colonial Muscovado must be about 33s. per cwt. to enable beet to sell in this market for cost and charges."

Then came the competition of beet sugar. Napoleon at the time of the First Empire conceived the idea

¹ The Sugar Question, being a digest of the Evidence before the Committee on Sugar and Coffee Plantations. By One of the Witnesses, London, 1848.

of establishing a continental beet industry which would ensure an adequate supply of sugar for France, and at the same time render that country independent of the British colonies. At his fall the industry which he started languished, but it was revived and definitely established in 1829, from which date it was fostered by a system of bounties which rendered it a formidable competitor of cane. These bounties were indirect and direct, indirect when they took the form of a system of underestimate of the duty to be levied, coupled with the full payment of drawback on exportation, and direct when they consisted of a direct bonus on exportation. The system is admirably described by Mr. George Martineau, C.B., in his work, Sugar, Cane and Beet, an object lesson, 1 and that eminent authority in the same work deals with the steps which were taken to put a stop to this unfair competition which had for years such a paralysing effect on the cane sugar industry.

The bounty system was not confined to France alone. By degrees it became almost universal. The powers competed among themselves, and an increase in the bounty in one country was followed by a similar or larger increase in the neighbouring states. Bounties varied in amount from £1 to as much as £5 per ton of sugar, and the marvel is that the West Indies were still able to produce sugar at all against such cruel odds. Several international conferences were convened to discuss the matter, but that is all they did; the matter was discussed and duly pigeonholed. In 1897-98 the situation became aggravated, the bounties being supplemented by cartel bounties in Germany and Austria, which drove the price of sugar in Great Britain far below the cost of production. Owing to the existence of protective tariffs, cartels or trusts consisting of sugar producers and manufacturers were formed, who

¹ Sugar, Cane and Beet, an object lesson. by George Martineau, C.B. London: Sir Isaac Pitman & Sons, Ltd., 1911.

THE BOUNTY SYSTEM

were able to charge the home consumer such a high price for his sugar that they could afford to export or "dump" the balance of their output at a loss and yet realise a substantial profit from the transaction as a whole. Then it was that the Indian Government could no longer endure the serious injury to its industry inflicted by hundreds of thousands of tons of Austrian and German refined sugar which were "dumped" on their markets. During Lord Curzon's viceroyalty, a scale of countervailing duties was drawn up and adopted by the Indian Tariff Act of 1899.

Still, the end of the bounty system was not yet. For over a quarter of a century an active campaign had been carried on against bounties, which were condemned by statesmen of every shade of political opinion, though none had the courage to stamp them out by imposing a countervailing duty on bounty-fed sugar entering our markets, or by prohibiting it. Conferences had been held, but each one proved abortive. The reason why the earlier Conferences were abortive is very simple and worthy of being put on record. The foreign delegates at the conferences in Paris in 1876-7 repeatedly urged that it was impossible for their governments to abolish their bounties unless the British Government would give them security, in a penal clause, that they should no longer be liable to compete in British markets with bounty-fed sugar. This demand was constantly repeated, but as the British Government as constantly refused to listen to it, negotiations were of no avail. The demand was not only reasonable but absolutely imperative if British markets were really to offer to all comersincluding even British producers—equality of competition. But, as in the case of slave-grown sugar, the so-called free traders of this country did not desire freedom of competition. Justice to industry is not part of their creed.

But, on March 5th, 1902, at a Conference at Brussels,

a Convention was signed by the principal sugar-producing States, and subsequently ratified by them, by which they agreed to abolish bounties from September 1st, 1903, and to render the existence of cartels impossible by limiting the difference between their customs duties and excise duties. A penal clause in this Convention provided that the high Contracting States should impose a countervailing duty on, or prohibit the importation into their territories of, sugars from countries which granted bounties either on production or export. Thus equality of opportunity in British markets was once more restored to the West Indian producer, and as a result considerable developments took place in the West Indian sugar industry.

It is fitting that the names of the British delegates at this successful Conference should be recorded on this page. They were Sir Constantine Phipps, Sir H. W. Primrose, Sir Henry G. Bergne, Mr. T. J. Pittar, Mr. Arthur A. Pearson and Mr. E. C. Ozanne, while Sir Nevile Lubbock. the then chairman of the West India Committee, and Mr. George Martineau attended in the capacity of expert advisers. It was entirely owing to the representations of these two gentlemen that an Imperial Grant in Aid of £250,000 was voted by Parliament to enable the sugar industry of the West Indies to tide over the period until the Convention became effective, the date of its coming into force having been postponed from September 1st, 1902, until the same date in the following year. agreed that the Convention should remain in force for five years and thenceforward from year to year, but by Article X the right was reserved to each of the Contracting States of withdrawing on notifying such intention twelve months before the expiration of the Convention.

It was generally believed that in view of pre-election pledges the Liberal Government would denounce the agreement. The assistance of the Chambers of Commerce throughout the Empire were consequently invoked

THE BRUSSELS CONVENTION

by the West India Committee, and from every part came protests against the threatened denunciation of the Convention.

On June 6th, 1907, Sir Edward Grev announced that he had intimated to the Contracting States that prohibition or the imposition of countervailing duties was inconsistent with the declared policy of the British Government and that they could not therefore continue to give effect to the provisions requiring them to penalise bounty-fed sugar. He added, however, that they had no desire to give sugar bounties or to see the revival of such bounties, and should the governments of the Contracting States consider that these views could only be met by the complete withdrawal of Great Britain from the Convention they would be prepared to give the necessary notice on the first possible date. Sir Edward Grey also intimated, that if the other Contracting States preferred to exempt the United Kingdom by supplementary protocol from the obligation to enforce the penal provisions of the Convention, this would render it unnecessary to give notice of withdrawal.

Thenceforward the attention of the sugar-producing world was concentrated upon Brussels, where the Permanent Commission, established under the Convention, sat to consider this proposition. Inasmuch as Russia was the only bounty-giving power of any consequence outside the Convention, it became clear from the first that the solution of the difficulty would lie in the adhesion of Russia, and to secure this end negotiations proceeded. Fortunately they proved successful, and before the close of the year it was announced that Russia had agreed to adhere to the Convention, subject to the understanding that she should maintain her fiscal and customs system, but should not increase the advantage to the producers in the maximum price fixed for sale on the home market. She engaged, moreover, not to export more than one

million tons of sugar during the six years 1907-1913. An additional Act to the Convention releasing Great Britain from the obligations under the penal clause and a protocol dealing with the adhesion of Russia were signed by all the Contracting States, and a grave menace to our sugar-growing colonies was thus averted.

Since the suppression of bounties and cartels, the West Indian sugar industry has steadily progressed, and it is now again enjoying a fair measure of prosperity. The beneficial results of the Sugar Convention are not, however, to be gauged by the rate of progression alone, but also by a comparison of the industry as it is, with the industry as it would have been if fair play had not been given to it in 1902. It was then at its last ebb and must but for the Convention have been extinguished, involving liabilities to the Imperial Government estimated by the Anti-Bounty League in 1902 at fully £3,798,000. In a letter to the Rt. Hon. J. Chamberlain, the then Secretary of State for the Colonies, dated January 9th in that year, Lord Stanmore the President, Sir Nevile Lubbock the Chairman, and Mr. Mayson M. Beeton the Secretary. wrote:

"If matters are allowed to take their course, the abandonment of the sugar estates and the extinction of the sugar industry in the West Indies will be at once rapid and universal. You are aware, Sir, that the first steps towards abandonment have already been taken in the instructions sent out by many proprietors to their managers to reduce expenditure in field and factory to the barest minimum, pending the present uncertainty of affairs."

By the abolition of bounties, confidence in the sugar industry was restored and proprietors were once more able to obtain capital wherewith to effect improvements in manufacture. New central sugar factories of the most modern description have, since 1902, been erected in Antigua, St. Kitts, and Jamaica, several proprietors in

NEGROES CUTTING SUGAR-CANES



THE WEST INDIES SAVED!

Barbados have improved their plant and adopted the central factory system of crushing their neighbours' canes, and, generally speaking, the industry has entered upon a new lease of life. But it was not only the sugar industry that benefited. For years the British West Indies had been colonies with a grievance, and this caused them to be shunned by capitalists, who have, however, recently been again turning their attention to British Guiana and the islands of the Caribbean.

The West Indies' sister, Canada, has also contributed towards bringing about the revival. By the Dominion Tariff Act of 1897, which came into force on August 1st of the following year, a preference of 25 per cent. was given to raw sugar entering Canada from the British West Indies and to certain other British produce. From July 1st, 1900, this preference was increased to one of 331 per cent., and was extended to refined sugar of British growth and manufacture, and on April 1st, 1907, by the Tariff Act of the preceding year, further changes were made which had the effect of raising the preference to 372 per cent. But until bounties and cartels were suppressed, West Indian sugar found a better market in the United States, whose Government had wisely imposed countervailing duties on bounty-fed sugar, and consequently the Canadian preference was not at first taken advantage of. There was little inducement for a producer to send his sugar to Canada, for though the reduction of duty in Canada amounted to 17:875 cents. per 100 lbs., the countervailing duty imposed by the United States on bounty-fed sugar was 27 cents. per 100 lbs., and consequently there was an advantage in favour of the United States market of 9:125 cents. per 100 lbs. After the abolition of bounties, however, and consequent upon the United States giving a preference to Cuban sugar and becoming more and more selfsupporting in regard to sugar supplies. West Indian sugar,

attracted by the preference, was diverted more and more to Canada. The value of the preference was, however, reduced by the privilege given to the Wallaceburg (Ontario) refinery in 1907—and continued for three years by the budget of 1909—of importing at the British Preferential rates, two tons of sugar for every ton of Canadian beet which they refined, and by the further privilege which was extended to the Canadian refiners in 1909 of importing foreign sugar to the amount of 20 per cent. of their requirements on the terms of the British preference, in consequence of the allegation that the West Indian producers were combining with the object of raising

their prices to the refiner.

This charge was stoutly repudiated by the West Indian producers, and it formed one of the principal subjects of enquiry by the Royal Commission, appointed in 1909, of which Lord Balfour of Burleigh was Chairman, which visited Canada and the West Indies and took abundant evidence on the subject. The conclusion which they arrived at was that the preferential policy initiated by Canada had already been of very great benefit to the West Indian producer of sugar, and that taking one year with another those interested in the production of British West Indian sugar had received from a third to a half, or approximately 9s. to 14s. per ton above the price which they would have been able to obtain without the preference. With regard to the alleged combination, they pointed out that the conditions of some of the colonies concerned, notably Barbados, Antigua and St. Kitts, where producers selling independently of one another were numerous, would probably render it impossible to form a general combination, even if the growers had decided to do so. But this subject is dealt with later.

The sugar-cane is propagated by cuttings from the mature cane. Where labour is plentiful, as in Barbados, canes are planted in holes, but in British Guiana they are

SUGAR-CANE CULTIVATION

laid in furrows. Each joint of the cane contains a bud from which the young cane germinates. In twelve or eighteen months the canes reach maturity. This is the period to which the negro looks forward, for he and his family can then subsist almost entirely on sugar-canes. Canes take the place of the labourer's dinner-can at home. and it is the commonest sight to see even the small children tearing them to pieces with their teeth. During crop time a change seems to come over the population of the sugar-growing colonies; the people then have a sleek appearance which can undoubtedly be attributed to the advantages of a sugar-cane diet. Surely this is a powerful argument in favour of the use of "pure cane" instead of "beet" sugar, for who in their senses would dream of chewing a raw beetroot or derive any satisfaction from doing so?

When ripe, the canes are cut down by the field labourers with those long cutlasses, or machetes as they are called, a weapon which has its uses in times of trouble as well as in peace, for they were much availed of in Cuba by the reconcentrados. No labourer is worth his salt without one in the West Indies, and they are almost as ubiquitous as the kerosene tin, which serves such widely different purposes as a flower pot, and, when flattened out, iron

roofing.

From the field, the canes are conveyed to the mill in large iron punts in British Guiana, and, in the islands, either by light railways in the more enlightened localities, or in mule carts. In the old days the canes were carried to the mill by donkeys and mules, and Richard Ligon records how the beasts, when their burden had been taken from them, were turned round, and how they went back to the fields of their own accord to get a fresh load, "so that they may be not unfitly compared to Bees; the one fetching home Honey, the other Sugar."

The early forms of mill consisted of three upright

rollers, the middle one of which was turned by great sweeps to which horses or cattle were harnessed, the unfortunate beasts walking round and round while the crushing of the cane was proceeding. This primitive form of mill still survives among the peasantry in Jamaica. Water and wind power succeeded cattle and there are still a number of estates in Barbados and the smaller islands, which are dependent upon the goodwill of Æolus for the reaping of their crops. In Barbados especially windmills form quite a prominent feature of the landscape. for that island is favourably situated for receiving the full strength of the north-east trade wind which blows almost without ceasing from November to March. But the majority of factories now have mills driven either by the old-fashioned beam engine or by horizontal steam engines.

There are two principal forms of sugar manufacture in the West Indies, the Muscovado process, which is still practised on the smaller estates and yields either a sugar for refining, or that delightful old brown sugar of our childhood's day, and the Vacuum Pan process by which either grey crystals for refining or the yellow crystallised sugar, world-famous as "Demerara," are made. The muscovado process of sugar manufacture differs in few respects from that which prevailed in the West Indies nearly three hundred years ago. Ligon who described it in 1673 might have been writing of the twentieth instead of the seventeenth century, so little change has there been in the methods of manufacture on small estates.

This, however, is not altogether a matter for reproach, and all proprietors cannot be blamed for not adapting themselves to more modern methods, for many of them have secured better profits on a comparatively small outlay than they would have done if they had spent capital on costly machinery. Again, the molasses resulting from the manufacture of muscovado sugar

MUSCOVADO OR VACUUM PAN?

is a valuable by-product which realises fancy prices in the markets of the north.

At the same time, it would be unwise to ignore the writing on the wall. Some refiners prefer vacuum pan to muscovado sugar, as the basis of their operations, and the day, not yet in sight, may come when the hardy backwoodsmen of Newfoundland may substitute sugar and preserves for molasses of which they are at present large consumers. Moreover, in the future the competition among cane-growing countries will be keener than ever. and in the event of any falling off in consumption the

weakest will have to go to the wall.

After this brief homily, the muscovado process of cane sugar manufacture may be briefly described. The greenish-coloured juice, as it comes from the mill, is heated up to the desired temperature, and passes into a tank, called a clarifier, where it is mixed with a certain amount of lime. By this means the impurities are separated from it. The clarified juice then flows down to the "copper wall," which consists of a series of three or more large open copper tanks, called "tayches," in which the process of evaporating the liquor takes place, the juice being boiled in these tayches by a fire which is kindled under them and kept going with the megass or crushed cane, which is dried in the sun and used as fuel. The juice is ladled by dippers from the first tayche to the second, and so on to the third, in which the process of evaporation is generally concluded, though in some cases an extra pan heated by steam, known as the "Aspinall pan," is used for completing the process. When the juice reaches a sufficient density it is ladled out and poured into large square boxes called coolers, in which it is allowed to crystallise. As soon as it becomes sufficiently solid it is dug out and put into large wooden casks called hogsheads, with perforated bottoms, which are placed on "rangers" or rafters, on the floor of what is known as

the stanchion-room. Here it is left for two or three weeks and allowed to drain, the uncrystallised sugar or molasses running out through holes guarded with plantain stalks into the tank below. After this period the cask is headed up, and the sugar is then ready for shipment. There are many different qualities of this muscovado sugar, the best being the lighter kinds, while the sugar from the bottom of the casks commands a lower price, and is termed "foots."

The vacuum-pan process of sugar manufacture, which can be seen in British Guiana, Jamaica, Trinidad, Antigua. and St. Lucia, and to a lesser extent in Barbados, is altogether more elaborate than the muscovado. It is admirably described by Mr. Llewellyn Jones and Mr. Frederic I. Scard in their standard work on Manufacture of Cane Sugar 1 but for the purpose of the present volume it will suffice to say that its main characteristics are as follows: The canes, on reaching the factory are weighed, lifted out by machinery, and placed on the cane-carrier, an endless belt which conveys them direct to the mill. Here they are crushed by means of a succession of rollers, in some cases there being as many as three sets, which form with crushers an eleven-roller mill. The megass or crushed cane is removed on another carrier direct to the furnaces for which it is used as fuel, the furnaces being specially made to burn green megass, thus obviating the necessity of drying it in the sun.

The juice is then pumped up into clarifying tanks, in which it is treated in the same manner as is described above. The pure liquor is next drawn through pipes into the triple effect, an apparatus for economical evaporation consisting of a series of three closed vessels, in which the juice is boiled to concentrate or thicken it. The

¹ The Manufacture of Cane Sugar. By Llewellyn Jones and Frederic I. Scard. London: Edward Stanford, 1909.



THE INTERIOR OF A SUGAR FACTORY



THE "TRIPLE EFFECT"

object of the "triple" is to save steam, and consequently fuel. By producing successively lower boiling points in the several vessels by reducing the air pressure in them. the vapour from the juice in the first when heated by steam is made to boil the juice in the second, and that from the second the juice in the third, to which a vacuum pump is attached. The syrup, as the juice is now called, is then transferred to the vacuum pan, in which it is boiled at a low temperature until granulation sets in. this process being watched through a small glass window, and the progress of crystallisation being tested by a "proof-stick," which is inserted into the pan through valves and withdraws a sample of the liquor. The vacuum pan is then "struck" or tapped at the bottom, the contents, now called "massecuite," being transferred to the centrifugals, large drums with perforated or mesh sides, which are made to revolve some 1.200 times to the minute. The result of this operation is that the molasses is driven out of the drums by centrifugal force, leaving behind the sugar, which is mixed to secure uniformity of grade and colour, packed in bags, and is then ready for shipment. The molasses, which is not such a valuable commodity as muscovado molasses, is then reboiled, and made into lower grades of sugar, called second and third sugars, or, if prices favour it, is used to make rum or cattle food.

Sugar planters are fortunate in having two such valuable secondary products to sugar as rum and molascuit, either of which can be manufactured at short notice according to market requirements. The latter is a cattle food, patented by Mr. George Hughes in 1901, which is made of the interior cellulose fibre of the sugar cane, finely screened, into which molasses is absorbed.

According to the definition which was submitted by the author on behalf of the West India Committee to the Royal Commission on Whisky and other Potable

Spirits in 1909 and accepted by them, rum is "a spirit distilled direct from sugar-cane products in sugar-cane

growing countries."

Some attribute the derivation of the name rum to the last syllable of "Saccharum" while others derive it from the first syllable of "rumbullion" an old Devonshire term meaning uproar; and one can well imagine the uproar which succeeded too liberal potations of the spirit which at an earlier date was known as "Kill Devil."

Rum is manufactured in the following manner: Molasses, skimmings, etc., are mixed with water, sulphuric acid, and in British Guiana ammonia also, and this "wash," as it is then called, is allowed to stand in large wooden vats, in which it ferments. In British Guiana this process requires from thirty-six to forty-eight hours, and in Jamaica a week and upwards. When the fermentation ceases and the wash has settled, it is transferred to the "still," a copper vessel preferably heated by fire underneath. The spirit is boiled off from the wash, and after being rectified in a vessel containing vertical tubes surrounded with water, is condensed in a spiral tube cooled with running water. In some cases a "Coffey" still is used. This is a vertical still consisting of two columns of considerable height, with an internal arrangement of alternate shelves. The wash is introduced at the top of the first, and drops from shelf to shelf until it reaches the bottom, meeting on its way down a current of steam, while the vapour from it passes to the bottom of the second column, where it is rectified by the cold wash passing through it in tubes, and condensed in the upper part. The process is continuous, and the separation is so complete, that the hot spirit constantly passes off to the cooler from near the top of the second, while the waste liquor runs off at the bottom of the first. As it comes from the still the spirit is colourless, but prior

WEST INDIAN SUGAR EXPORTS

to shipment it is coloured to meet the market requirements with burnt sugar or molasses.

The exports of sugar, molasses, and rum from the principal sugar producing colonies in the British West Indies and the areas devoted to cane cultivation, in the latest year for which figures are available, are as follows:

		Sugar Tons	Molasses Gallons	Rum Gallons	Area under Sugar-Cane
Barbados		35,910	7,772,200	1,950	74,000
British Guia	na	108,533	293,630	3,007,734	73,894
Jamaica		9,964	_	1,652,832	30,153
Trinidad		46,247	743,679	191,641	62,000
Antigua		8,619	408,500		16,179
St. Kitts Nevis		11,621	304,700	25,839	{ 12,332 3,204
Montserrat		38	743,679		461
St. Lucia		5,520	60,099	27,883	(no returns)

The Spaniards not only introduced the sugar-cane into the West Indies, but also the cacao or cocoa tree. This tree is indigenous in the tropical regions extending from Mexico through Central and South America, and cacao is still found in its wild state on the banks of the Upper Amazon and in the interior of Ecuador. The name cacao is derived from the Mexican Cacaoquahuitl, which still survives to some extent in our word chocolate. Cacao is now the generally accepted name of the tree, and the word cocoa is the commercial name for the product manufactured from it.

The Spanish established cacao plantations or cacao walks in Jamaica, and the cultivation of cacao spread rapidly to other islands where the soil and climate suited it.

The cacao plant (called by Linnæus *Theobroma*, the Food of the Gods) is an evergreen which grows to the height of 15 to 30 feet, with bright pointed leaves from 8 to 20 inches long. The flowers and fruit, which it

bears at all seasons of the year, grow off the trunk and the thickest part of the branches with stalks only an inch in length. The fruit is a large five-celled pod from 7 to $9\frac{1}{2}$ inches in length and 3 to 4 inches in breadth, the colour varying from bright yellow to red and purple.

Cacao plants in suitable positions begin to bear fruit in about the third or fourth year after they are planted; but to strengthen the tree the flowers are cut off for the first few years, and as a general rule a cacao plantation does not begin to bear to any appreciable extent until its fifth year, the yield increasing gradually until its twelfth vear. On some estates there are trees a hundred years old still producing, though on a reduced scale, the finest cacao. The principal crop begins in October and November, and continues till the end of April, while there is a smaller one in June. The ripe pods are gathered with cutlasses and piled in heaps. These pods, which contain about 11 ounces of dried beans, are then broken and the beans are collected in baskets and removed to the "sweating" house, where the pulp which surrounds them is removed by the process of sweating or fermentation. The beans are packed closely together in boxes and covered with plantain leaves, and left for four days or a week, being, however, occasionally "turned over" during that time. Fermentation takes place, and the beans are then spread out on large flat trays, called "barbecues" or "boucans." On these trays they are "danced," that is to say, the black labourers dance or trample on them in order to remove the dry pulp, and the beans are then dried in the sun. The boucans have sliding roofs, which are closed over them when, as is often the case in the middle of the day, the sun is too powerful, or when it comes on to rain. When the cacao is quite dry or "cured," it is shipped in bags, each bag containing roughly 11 cwt.

The acreage under cacao in the British West Indies

WEST INDIAN CACAO CROPS

and the exports of cacao beans in the latest year for which statistics are available are given below:

British Guiana,	2,223 acres	, 75,355 lbs.
Jamaica,	11,350 acres	, 6,662,310 lbs.
Trinidad,	290,200 acres,	58,018,058 lbs.
Grenada,	(no returns	13,835,340 lbs.
St. Lucia,	(no returns)	
St. Vincent,	(no returns)	241,294 lbs.
Dominica,	7,500 acres,	1,214,532 lbs.
St. Kitts,	22 acres	, 125 lbs.
Nevis,	40 acres	lbs.
Montserrat,	131 acres	7,278 lbs.

Blue Mountain coffee, which is claimed to be the finest in the world, is produced, as its name suggests, in the glorious Blue Mountains of Jamaica. It is grown at a height of from 3,000 feet to 4,000 feet, and the yield is limited, only about four hundred tons being shipped annually. Abundant land suitable for the cultivation of this crop can be obtained in Portland and St. Thomas, and as the price of Blue Mountain coffee does not seem to be much affected by market fluctuations, there would appear to be a good opening for its growth on a larger scale. Liberian and Arabian coffee are also grown in Jamaica, the former being at its best on low, rich, and well sheltered land.

In the earlier part of last century British Guiana, and especially the county of Berbice, was celebrated for the high quality of coffee which it produced, but labour troubles consequent upon the abolition of slavery led to its practical abandonment. Now, however, there are 1,240 acres under coffee in British Guiana, the two varieties favoured being the Arabian or Creole and the Liberian. There are large areas of low lying-lands in the colony on which coffee is said to grow to perfection. In a pamphlet issued by the Permanent Exhibitions Committee it is stated that many of the river lands yield good crops, and coffee often thrives on lands of that kind that are not well suited for the cultivation of cacao;

therefore cacao and coffee growing is often practised on the same property. In the Pomeroon district there are some excellent cultivations of coffee, and the returns are on the whole satisfactory, whilst other thriving coffee estates are to be found along the Berbice and the Demerara Rivers. The area under coffee increases but slowly, as there is frequently a limited supply of labour in the coffee districts, and the prices for coffee are frequently low.

The acreage under coffee in the British West Indies and the exports of that commodity in the latest year for which statistics are available are given below:

British Guiana, 1,240 acres, 96,952 lbs.
Jamaica, 25,230 acres, 8,253,616 lbs.
Trinidad, 4,120 acres, 896 lbs.

It is only in comparatively recent years that rubber cultivation has engaged serious attention in the West Indies; but it has already taken a strong hold on the planters, and within a few years' time the exports of rubber from those colonies are likely to increase very rapidly. Rubber has been extensively planted in Trinidad and Tobago, and there are now upwards of 30,000 acres of Castilloa and 3,000 acres of Hevea brasiliensis established in the joint colony. In St. Lucia there is a good number of Castilloa and Hevea trees, and rubber has also been planted on a considerable scale in Dominica and Grenada. In Jamaica, too, experiments are being made with Castilloa, and the results so far attained in a few localities are promising, the trees growing with great rapidity.

British Guiana enjoys the advantage of having several varieties of indigenous rubber in the great forests of its interior. The more important of these are species of Sapium and Forsteronia; and the carefully prepared biscuits of Sapium Jenmani—so called after Mr. G. S. Jeman, the Government Botanist from 1879 to 1902—

RUBBER CULTIVATION

have been valued by experts in Mincing Lane at a figure only slightly lower than that quoted for fine hard Para. The true Para rubber or *Hevea brasiliensis* does not, as far as is known, occur in the colony, although in some

parts other species of Hevea are plentiful.

The Government of British Guiana are experimenting with rubber cultivation at five experiment stations, where the results obtained have proved of considerable value; and practically every important district in the readily accessible parts of the colony is now provided with a rubber trial station. The experiments so far have demonstrated that the true Para rubber, and also the indigenous Guiana rubber, Sapium Jenmani, grow vigorously in almost every situation in which they have been tried, outside the flat coastal region. In British Guiana Hevea brasiliensis is favoured for cultivation, and it is estimated that at least 1.700 acres are under rubber cultivation, 1,000 acres with Hevea brasiliensis, and 700 with Sapium and other kinds of rubber producing plants. Further planting is being rapidly carried on, and during the next year or so, at least double the above area will be under rubber cultivation.

Professor J. B. Harrison, the Director of Science and Agriculture, and Mr. F. A. Stockdale, the Assistant Director, who have devoted much time and energy to the development of the resources of the colony, have reported that "rubber grows the best on the flat lands along the banks of the rivers and also upon the lower slopes of the hills." It is estimated that there are 10,880,000 acres of readily accessible lands of which fully 9,000,000 acres are unalienated from the Crown. Of this vast area a very large proportion is eminently suitable for the cultivation of rubber. The forest region of British Guiana closely resembles those regions of Brazil where indigenous Hevea brasiliensis grows, and the climatic and general conditions in Guiana are very like those of the

natural habitat of the plant in Brazil, which is only a few degrees to the south-west.

The same authorities estimate the cost of cultivation on flat lands, which have to be thoroughly drained and also empoldered to prevent flooding at high spring tides, to be from \$65 to \$70 (approximately £13 to £14) per acre during the first year, and from \$25 to \$30 (about 45 to 46) per acre in the subsequent years, including application and survey fees, superintendence and purchase of plants. They add that on higher land where the initial expenses of drainage are not so heavy, the cost during the first year could possibly be reduced to \$48 (£10) per acre.

In a pamphlet entitled Rubber and Balata in British Guiana, published this year, some particulars are given regarding the tapping of local Para rubber trees which are decidedly encouraging. Tapping was begun in 1910 on two estates situated on the Demerara River, on one of which twelve trees, and on the other nearly sixty trees of different sizes, were tapped. This year tapping has been commenced at the Experimental Station at Onderneeming.

At one estate, on the Demerara River, tapping was continued for three months, and a yield of over 3 lbs. per tree was obtained in that time. The quality of the rubber was good and it was valued very highly on the London market, one sample being valued at the top price of the market last April, namely, 12s. 6d. per lb. At the other estate over 75 lbs, of rubber have been obtained for nine months' working, and very favourable reports have been received of the samples sold.

The latex is being coagulated with acetic acid, and smoking with the fruit of the cokerite palm (Maximilliana regia) is now being practised, as the quality of the smoked product appears to be much better than that of the

unsmoked.

RUBBER-TAPPING IN GUIANA

These tappings have demonstrated that very satisfactory yields are to be obtained from Para rubber in British Guiana, and that the product is of good quality.

Since these results have become known there has been a more general desire in the colony to plant *Hevea brasiliensis*, and as the Government of the colony offers land on liberal terms for rubber cultivation, rapid

development of the industry may be expected.

The rubber industry of Trinidad and Tobago owes its inception to Mr. Henry Prestoe, the Government Botanist from 1864 to 1886, who first introduced rubber-yielding plants into the colony. He planted Hevea brasiliensis, Castilloa elastica and Ficus elastica, fine specimens of which are now to be seen in the Botanic Gardens at Port of Spain. His successor, the late Mr. John Hinchley Hart, F.L.S., continued the work and introduced plants of Funtumia elastica, Ficus Vogelii, Landolphia, Klainei and Manihot Glaziovii, and when the experiment station at St. Clair in Trinidad, and the Botanic Station at Tobago were started, he laid out experiment fields of all the more important rubber-yielding plants. It was under Mr. Hart's regime that the earliest rubber plantations were established in the colony.

During the "rubber boom" of 1909-10, a stimulus was given to rubber cultivation in Trinidad and Tobago by the appointment of Mr. J. B. Carruthers, who had gained much experience in Malaya, to be Assistant Director of Agriculture, but he unfortunately did not live to see the results of his work. He left behind him, however, valuable testimony as to the suitability of the colony for rubber cultivation, and in one of his reports he wrote:

"From general observations, I am of the opinion that the growth of Para Rubber under the local conditions is very little if at all inferior to that of the trees of the same species in Malaya and Ceylon treated in the same way.

"Observations in different parts of Trinidad and Tobago lead me to the belief that Castilloa and Hevea (Para) grow equally well and vigorously here. It is true that in places Hevea seems to thrive more than Castilloa, but the reverse can be observed, and I do not think there is any reason to suppose that, taking the island as a whole, either plant grows more vigorously than the other.

"The results of all observations and experiments which have been carried on in Trinidad and Tobago are most encouraging in regard to the amount and quality of the latex in the tissues of *Castilloa* trees of age and size, but the methods of extraction are at present by no means

satisfactory.

"It is, however, certain that both Hevea brasiliensis (Para) and Castilloa elastica grow vigorously and yield latex in good quantity in Trinidad and Tobago. No data exist as to yields, only spasmodic tappings having been made, and no rubber has been prepared but by the crudest methods, but all these attempts have been encouraging, and contain no evidence that the trees of Trinidad and Tobago possess any less of the profitable characters than the Para and Castilloa trees of other rubber-producing countries."

Professor P. Carmody, the present Director of Agriculture, assisted by Mr. W. E. Broadway and Mr. A. E. Collins, has also encouraged the rubber industry. Castilloa and Hevea are now the principal varieties of rubber cultivated on the low lands in Trinidad and Tobago, and Funtumia and Ceara are also grown to some extent in the

drier localities.

In the south-eastern part of Trinidad there are many thousands of acres of land, as yet unalienated, which are eminently suitable for rubber cultivation, and the entire northern half of Tobago has both soil and environment well adapted to rubber production. Many estates have already entered the producing stage, and the yield per

TOBAGO A RUBBER ISLAND

tree, as well as the quality of the product, indicate that Tobago must be regarded as one of the most important rubber-producing islands in the West Indies. Some idea of the rapidity with which the Tobago rubber industry is growing may be gathered from the fact that in six years the exports of rubber have risen from 91 lbs. to 4,348 lbs.; but only an insignificant area has so far been tapped, and it is estimated that about 120,000 rubber trees are now under cultivation in the island.

In the early days of rubber planting in Tobago, close planting combined with cacao was the usual method pursued, the rubber seedlings being planted at various distances, 7×8 feet, 8×8 feet, 10×10 feet, etc., with the idea of tapping one half to two-thirds of them for scrap rubber in the 6th, 7th and 8th years, and then cutting them out. In 1905 there were about 90,000 Castilloa trees growing, but more than half of these were cut out on the above principle, the permanent trees then standing at 16×16 , 18×18 , 20×20 feet, etc.

Down to two or three years ago, the cultivation of Castilloa was almost invariably combined with that of cacao, so that all the rubber trees now being tapped have cacao planted through them, usually at 12×12 feet. This combined cultivation answers very well where the soil is good, and provided that the rubber trees are not closer than 18×18 feet, or better still, 24×24 feet or 30×30 feet. During the last few years blocks of rubber have been planted without cacao, but as none of these trees have reached the tapping age, the yield per acre cannot as yet be determined, but it would seem probable that the yield per tree would be more than where the Castilloa is grown with cacao.

The West Indies were represented at the first International Rubber Exhibition, held at Olympia in London in 1908, and also at the second which took place at the Royal Agricultural Hall, Islington, in 1911. The colonies

which participated in both exhibitions were British Guiana, Trinidad, Tobago and Dominica, while at the second exhibition Jamaica took the place of St. Lucia, which was represented in 1908. The general arrangements were entrusted to the West India Committee, while Trinidad and Tobago and British Guiana were also represented officially by Professor P. Carmody and Mr.

F. A. Stockdale respectively.

With the object of stimulating the West Indian rubber industry, the West India Committee offered two silver cups for competition for the finest specimens of plantation rubber and of balata at the recent International Rubber and Allied Trades Exhibition, and these were supplemented by cups offered by Mr. W. Middleton Campbell, the Chairman, and Messrs. Booker Bros., McConnell and Company for the best exhibits from a Permanent Exhibition Committee and a West Indian Botanic Department respectively. The rubber cup was won by Mr. W. Hodgson, of Plantation Noitgedacht, British Guiana, for a very fine specimen of Para rubber, and the balata cup by the Consolidated Rubber and Balata Estates, Ltd., also of British Guiana. On the other hand. the Permanent Exhibition Committee of Trinidad and Tobago won Mr. Campbell's cup, and the Department of Agriculture of the same colony the cup offered by Messrs. Booker Bros., McConnell and Company.

The acreage under plantation rubber in the principal rubber-growing colonies in the West Indies is at present

as follows:

		Acres.
British Guiana		1,700
Trinidad Tobago	• 0	2,837

These figures are only approximate, and the Trinidad and Tobago figure probably does not include all the rubber planted among cacao trees.

Closely allied to rubber is the balata industry, which

SIR H. DAVSON AND BALATA

is confined to British Guiana. Balata, it should be explained, is a gutta-percha-like substance which is "bled" from the bullet or bully tree (Mimusops globosa), found growing in the forests all over the colony, but most abundantly in the county of Berbice and on the Upper Essequibo. This tree takes a prodigiously long time to reach maturity, and consequently no attempt has as vet been made to cultivate it in plantations. At the same time, it must not be overlooked that the rubber tree of Brazil also takes a remarkably long time to reach maturity in the forest. Balata is like gutta which has been planted in the East. Gutta can be obtained from leaves at six years and onwards and from trees at ten years. There is the same possibility before balata, and it is understood that this question is likely to be investigated in British Guiana in the near future.

The first sample of balata was brought to London in 1859 by the late Sir Henry (then Mr.) Davson in a pillbox! The manufacturers reported unfavourably upon it, and it was not until 1862 that the substance was brought into prominent notice by Sir William Holmes, the British Guiana Commissioner at the International Exhibition of that year. The advantages of balata then began to be appreciated, and in 1865 over 20,000 lbs. weight of it were exported. The demand for it fell off until 1874, but since then it has steadily increased, and by 1909-10 the exports of balata rose to no less than 1,034,076 lbs. valued at \$468,034.81. The balata industry is at present in the hands of several large companies, which periodically send expeditions into the interior, where they remain for two or three months at a time.

The terms on which licences to collect balata can be obtained are given in another chapter. The Crown Lands department have very wisely laid down strict regulations to prevent the destruction of trees, and the work of "balata bleeders," as the collectors are called, is

carefully supervised by forest rangers, who assist the Land Officers. The industry is now being developed by several large companies, and its prospects are decidedly bright, as new uses for balata are being found. At present it is principally used for insulating cables and in

the preparation of belting for machinery.

The tapping of balata trees is thus described by Mr. Stockdale: "It is done with the cutlass, incisions being made not more than 1½ inches wide, about 10 inches apart, in a 'feather-stitch' pattern up the trunks of the trees. The latex runs zig-zag from cut to cut into a calabash at the base of the tree. The latex is collected from the calabashes into gourds (goobees), and then it is taken to the camp, where it is poured into shallow trays (dabrees) which hold from five to thirty gallons. The latex coagulates in these trays and the balata is taken off in sheets, dried and despatched to town for transhipment. The labourers are paid by results, according to the amount of balata collected."

Another use to which balata is now being put, is for the manufacture of resilient heels for boots and shoes.

CHAPTER VIII

WEST INDIAN INDUSTRIES (continued)

The history of the banana industry reads almost like a fairy tale, so quickly has it been made. Without wearying the reader with many statistics, some idea can perhaps be conveyed to him of what bananas have done for Jamaica, when it is mentioned that from 1,758 bunches in 1865 when they first figured among the exports, the shipments of this fruit reached 16,712,220 bunches last year. As each bunch has on the average 120 fingers, the number of bananas shipped every year from Jamaica must be over two thousand and five millions.

In 1867, Sir John Peter Grant, the then Governor of Jamaica, complained that the fruit trade, which in the Bahama Islands afforded an important staple of export in the article of pine-apples alone, was still neglected, although there was no place in the world more suited by nature for the production of exportable fruits of great market value. In that year the exports of fruit from

Jamaica were valued at £728 only.

Meanwhile, the skippers of the small schooners trading between America and Jamaica used to take a few bunches of bananas with them for consumption on their homeward voyage and for distribution among their friends. One of them was Captain L. D. Baker, and the bananas which he took with him on one occasion to Boston were so much appreciated by his friends that on each succeeding voyage he took home a larger number. Then it occurred to him that a trade in this fruit might be established, and it is from such small beginnings that the great banana industry of Jamaica has been built up, and the all-powerful United Fruit Company of America, with its vast ramifications in Cuba, Porto Rico, and Central America, and on the Spanish Main, evolved. In 1869 an

agency was started at Port Antonio for certain fruit houses in the United States, and seven schooners loaded with bananas were despatched from Jamaica.

Referring to this infant industry in his report on the Blue-book of the colony for the following year, Sir John Peter Grant said, "The most encouraging event of the year is the springing up of a new trade with North America chiefly in fruit and yams, conveyed in small American schooners. . . . This young trade is still increasing month by month, and shows a tendency to spread all along the north side of the island. . . . It is my conviction that in oranges, limes, pine-apples and bananas, all producible here of a quality not to be surpassed in any part of the world; and in coco-nuts and other fruits Jamaica might become in a very short time capable of supporting an export trade of immense value." How accurate the forecast of this far-seeing governor was is demonstrated by the export returns, which show that the shipments of fruit from Jamaica last year were valued at no less than £1,403,830 sterling.

In 1887, the Boston Fruit Company of Boston, Mass., was formed, with Captain Baker as its president, and under its auspices the banana industry expanded very rapidly. Several other fruit companies were established at various times, but most of them were soon absorbed by the Boston Company, the influence of which was immense. Many a man's head would have been turned by such phenomenal success, but this was not the case with Captain Baker, who, as the president of this great organisation, was—as the writer, who was privileged to meet him in Port Antonio in 1900, can testify—still the kindly and genial skipper who carried the first bunch of bananas to Boston in the 'sixties.

The Boston Fruit Company was merged in 1900, with several other concerns, into the United Fruit Company of America, which, with a capital of \$35,000,000,

THE LATE SIR ALFRED JONES

practically controls the tropical fruit industry of the New World. There is, however, now a new Richmond in the field, a new company, called "The Atlantic Fruit and Steamship Company," having been formed this year, with a capital of \$15,000,000 to consolidate various fruit companies and concerns owning and controlling property

in Jamaica, Nicaragua and Cuba.

If it was Captain Baker who first introduced the banana into America, it is to that staunch Imperialist, the late Sir Alfred Jones, that the credit is entirely due for proving the practicability of importing it into England. When a scheme with that object in view was first mooted, it was generally pooh-poohed, but Sir Alfred Iones was not disheartened. In 1900 the Imperial Direct West India Mail Service was formed under his auspices, and a contract was entered into between it and the Crown Agents for the Colonies, for the conveyance of 20,000 bunches of bananas fortnightly from Jamaica to the United Kingdom, in return for a subsidy of £40,000 per annum, half to be paid by the Imperial Government, and half by the Government of Jamaica. Avonmouth, Bristol, was chosen as the terminal port of the new service, and after a few voyages it was conclusively proved that Jamaica bananas could successfully be marketed in this country in perfectly sound condition.

The object which the Government had in view in granting a subsidy for the new service was twofold, being, firstly, that of strengthening the commercial ties between Jamaica and the mother country, and of counteracting American influences, and, secondly, the encouragement of the smaller planters by the provision of an additional market. Whilst the first of these objects was, to a great extent, accomplished, the second, unfortunately, was not. At the outset the company had difficulty in obtaining regular supplies of fruit from the planters, and it was compelled to form a subsidiary concern to

purchase fruit. This company was Elders & Fyffes, Ltd., and all went fairly well until 1903, when, owing to a cyclone in Jamaica, that firm was unable to obtain an adequate supply of fruit, and had to rely on Central America for its cargoes. Then the American United Fruit Company secured a controlling interest in Elders & Fyffes, and an anomalous situation was created. The planters protested, the new service having failed to bring about the competition for which they had been hoping. Nothing could, however, be done, no breach of the contract, which, as results have shown, was too loosely worded, having taken place; but the contract expired on January 15th, 1911, and was not renewed. Tenders for a new service were invited in 1910, but without satisfactory results; and the Jamaica Legislature, influenced, perhaps, by the belief that the Imperial Government would no longer contribute, then expressed their unwillingness to continue their share of the subsidy.

Subsequent, however, to a general election this year, the new Council reversed this decision, and authorised the invitation of tenders for a new service. As the tenders are not returnable until December 31st, no more can yet be said beyond that a resumption of direct steamship communication between Jamaica and the United Kingdom would appear to be extremely desirable from many points of view, not the least being the Imperial one.

Sir Alfred Jones died in December, 1909, deeply regretted by all who were privileged to enjoy his acquaintance. His great Imperial work in the direction of the foundation of the Liverpool School of Tropical Medicine and the British Cotton Growing Association is too well known and appreciated to require any encomium in these pages; and if the Jamaica direct steamship service did not realise all the expectations which were formed of it, it must not be forgotten that it was Sir Alfred Jones who made Jamaica more talked of than

SHIPPING BANANAS IN JAMAICA



BANANAS AND IMPERIALISM

any other colony in the West Indies. Thanks to the publicity which he gave to the colony in a variety of ways, the West Indies became "Jamaica" in the mind of the man in the street. Further, he successfully demonstrated that bananas could be brought from the far-away tropical islands and profitably marketed in Great Britain. In gauging the results of his connection with Jamaica, it must not be overlooked that during a period of eight years he experienced a cyclone, an earthquake, and a drought. Shortly before his death he told the author that it only required a fire to fill his cup of bitterness to the full.

Bananas are also cultivated on a commercial scale for export in British Honduras and Trinidad, and, to a very small extent, in Barbados. In British Honduras the bulk of the fruit is purchased by the United Fruit Company, which owns plantations along the line of the Stann Creek railway, and in Trinidad the small industry is fostered by the British West Indian Fruit Company, in which the Royal Mail Steam Packet Company is interested.

Except in Barbados, the bananas cultivated are of the large Martinique or *Gros Michel* variety, but in Trinidad the "claret banana," so much appreciated for dessert, is also produced. In Barbados the small Canary banana, (*Musa Cavendishii*) is favoured, and for several years quite a good quantity of this fruit was exported. Unfortunately, however, shipping facilities were lacking, and in consequence the industry has dwindled to very small dimensions.

While the *Gros Michel* banana is shipped "naked," that is to say, without any packing, the smaller and more delicate Canary banana is invariably crated.

The banana tree, it may be explained, is cultivated from suckers which spring from the root when the tree is cut down and the fruit gathered. The tree, which only

carries one bunch, takes about twelve months to reach the stage at which the fruit is fit to be gathered for markets across the sea. The bunches before they are shipped are checked as to size, a full-sized or "straight" bunch having at least nine hands, or groups of from fifteen to twenty "fingers" each, on it, and these, of course, fetch the highest price. Mr. Cradwick, of the Jamaica Department of Agriculture, has estimated the cost of planting an acre of bananas and of bringing them to a producing stage at £11 14s. per acre, but the cost necessarily varies according to locality.

The area under bananas and the exports of this fruit in the latest year for which particulars are available,

are shown in the table given below:

Jamaica	69066, acres,	16,712,220	bunches.
British Honduras	750 ,,	390,350	,,
Trinidad (no	returns) ,,	110,000	,,
Barbados	50 ,,	9,272	,,

Next to bananas, the lime is the most important fruit produced in the West Indies on a commercial basis. The cultivation of the lime tree (Citrus acida var. medica) is by far the largest industry of Dominica. The exports of limes and lime products from that island are now five or six times as great as those from Montserrat, which, thanks to judicious advertisement, has been so closely identified in the mind of the public with the fruit.

When the price of sugar fell to such an extent as to make that crop no longer remunerative, Dr. John Imray induced the planters of Dominica to turn their attention to citrus fruits, and so successful were his efforts in this direction, that the island is now the largest producer of limes in the world. The lime industry was started in Montserrat by a Mr. Burke in 1852, and is now carried on by the well-known family of Sturge, who pluckily reinstated their plantations, which were devastated by a hurricane on August 7th, 1899.

THE MERITS OF FRESH LIMES

The fruit of the lime tree which the *Grocer* has aptly described as a "little globe of juice," yields a number of products, namely, raw and concentrated lime juice, essential oil of limes, otto of limes and citrate of limes, and the fruit is also shipped to America, Canada and England in its natural form or pickled in brine.

Fresh limes have for many years found a ready market in the United States, where they are much preferred to lemons in the bars and restaurants, and attempts made by the West India Committee in conjunction with the Permanent Exhibition Committee of Dominica, to introduce them to the London market, have recently met with considerable success. So high an authority as the Lancet has pronounced a very favourable opinion regarding this fruit. Reporting upon a sample case of limes on March 28th, 1908, that journal stated: "The lime is not so well known, although from the point of view of flavour it is regarded by many as being even superior to the lemon. In view of the fact that there is now a good and abundant supply of limes to this country it is interesting to contrast the analysis of this fruit with that of the lemon. According to an analysis which we have recently made it would appear that the lime, although smaller than the lemon, yields, weight for weight, a good deal more juice. Thus, the average amount of juice expressed from a lemon was 37.50% of its weight, whereas the lime gave 59.00%. Moreover, the lime gives more citric acid but less sugar, as the following analyses show :-

	Juice of the Lemon.	Juice of the Lime.
Total solid matters	 8.80 %	8.62 %
Sugar	 2.30 %	0.70 %
Citric Acid	 4.57 %	5.60 %
Mineral matter	 0.35 %	0.35 %
Potash	 0.15 %	0.12 %
Phosphoric Acid (soluble)	 0.010%	0.065%

[&]quot;The lime, therefore, yields a 'drier' juice, and contains

a third of the quantity of sugar present in the lemon. The antiscorbutic properties of lime juice may be regarded as more marked than those possessed by the juice of the lemon. While the alkaline salts amount to practically the same in both fruits, yet the phosphoric acid is greater in the lime than in the lemon. It is probably owing to the richness in alkaline salts that the use of lemon juice as well as other fruit juices is helpful in some diseases of the skin and in preventing eczema. The juice of the lime is equally valuable in this respect if, indeed, in regard to some dietetic points it is not superior. To those who are asked 'to think imperially' there is another point about the lime which may appeal to them: it comes from British colonies and not from foreign countries. Fiscal reasons apart, the lime is an excellent and wholesome fruit and it seems a pity that we do not hear as frequently of a 'lime squash' as we do of a 'lemon squash.'" What better recommendation of the lime-which an old Tamil work described as "a fit and proper thing to be presented by an inferior to a superior," and as " beautiful to behold, cooling and fragrant to the smell "-could there be than this?

Lime seeds are usually sown in drills about 8 to 9 inches apart, running across the seed beds. When the resultant seedlings are from 4 to 6 inches high they are transplanted into nursery beds. From these again they are raised when from 16 to 18 inches high, and are planted out in the field, and it takes from ten to twelve months from the sowing of the seeds to the time when strong plants are fit for putting out. The planting season is from June to December, and the limes are set out at distances varying from 12 feet by 12 feet on hill slopes, to 25 feet by 25 feet in moist lands which contain much vegetable matter.

Under favourable conditions the lime tree may begin to yield a few fruits in the third year after planting;

LIME CULTIVATION

but it is generally considered that eight to ten years are required before a lime plantation comes into full bearing.

The tree flowers from February until June, and the main crop season extends from June to December, but the period varies according to the weather. The yield per acre is also variable, but where cultivation is good, it should amount to as much as 150 or 160 barrels of fruit per acre annually. A barrel of limes gives from $7\frac{1}{2}$ to 8 gallons of juice, and the yield of citric acid varies from 12 ounces where there is a high rainfall to 14 ounces where it is low.

The fruit, when ripe, falls to the ground, which is a decided advantage as the tree is so thorny, though there are also spineless lime trees which yield seedless limes. The limes are then collected into heaps by women and children, and are taken to the mill-house for the extraction of the juice, if they are destined to provide raw or concentrated juice. In some cases the old cane mills of the abandoned sugar plantations, driven by cattle or water-power, are used to crush the fruit, while in others, the limes are pressed in small mills by hand. The juice from the mills runs by gravitation to storage vats, from them to the still, and from the still to copper tayches, where it is concentrated by boiling. It is then transferred to wooden or copper coolers, and from them into hogsheads for shipment.

Where the fresh fruit is to be shipped, it is picked green, and after being allowed to "quail" for a few days, each lime is carefully wrapped in stout brown paper and packed in well-ventilated barrels, or in crates holding 220 limes. Limes for pickling are gathered when yellow, and are placed in vats containing sea water, which is renewed every two or three days, until the fruit is cured. The pickled limes are packed in casks containing sea

¹ The "tayche" is the time-honoured open pan in which sugar is boiled under the old muscovado process.

water, and are shipped principally to Boston, Mass., where

they are much appreciated.

Lime juice for making the well-known cordials, etc., is merely expressed between the mill rollers, strained and exported in hermetically sealed hogsheads. Limes are also grown to form the basis of manufacture of citric acid. When intended for this purpose, the juice is concentrated with the object of reducing its bulk and consequently of effecting a saving of freight, the usual practice being to reduce 600 gallons of juice to 50 gallons of concentrated lime juice.

The manufacture of citrate of lime has also been introduced recently into the West Indies with success. It is preferred by acid makers to concentrated juice, being simpler to handle and more easily worked. Several citrate plants have been established. Chalk is added to the juice, which is poured into vats, to neutralise the acidity. The mixture is then allowed to subside and the mother liquor is run off by a tap in the side of the vat. The citrate which remains is then washed by hot water and steam, and is finally drained by filter bags, pressed, and dried ready for shipment.

The products of the lime fruit still to be described are otto of limes or hand-pressed oil, and essential oil of limes or distilled lime oil. The former, which has an exquisite smell, is largely used for perfumery and soap making. The limes are pressed by hand over a small concave pan, called an écuelle, shaped like a saucer, but studded with small spikes, and with a receptacle at its base to catch the oil. The spikes lightly pierce the oil cells in the skin of the limes, and the oil runs into the receptacle from which, after filtration, it is transferred to bottles; it is then ready for shipment. It is calculated that a barrel of limes will yield 3 to 4½ ounces of oil.

When lime juice is to be concentrated it is first distilled in order to obtain the oil, and in the case of estates which

CITRUS FRUITS AND TARIFFS

ship raw juice, the scum which collects in the vats alone is distilled. The oil produced by distillation is then shipped in copper or tin vessels. The yield of oil by distillation is from 3 to 5 ounces per barrel of limes, but the price of distilled or essential oil is less than that of otto of limes.

The cultivation of limes is quite a new industry in British Guiana, and was started by a company formed of some of the largest users of citrate of lime. Two small factories for the manufacture of that product have already been erected, one in Georgetown and the other in Essequibo. Limes are on occasion bought from the small growers for these factories, freight and cartage being paid by the purchasers. A prize scheme has been drawn up, by which liberal bonuses are offered to small cultivators for planting and caring for small areas of lime trees, while substantial prizes are to be offered, when the plants are three years old, for the best plots.

There is abundant land suitable for lime cultivation in the colony, and judging from the fine fruit yielded by the many established trees up the rivers and by the various settlements in the interior, there should be a prosperous future before the industry. The exports of limes and lime products from the chief lime producing colonies in the latest year for which statistics are available were:

Dominica . £63,098 St. Kitts Montserrat . 9,403 Nevis } £3,390 Antigua . 4,686 Virgin Islands £4,282

The citrus fruit industry of the British West Indies—limes excepted—is hampered by the protective tariff in the United States and by the lack of facilities for the regular shipment of fruit to the United Kingdom. The result is that oranges are allowed to lie and rot under the trees, while no extension of cultivation is possible, excepting of such choice varieties as the Washington

Navels and Jaffas, which command special prices on the London market. Oranges (Citrus aurantium) grow to perfection in the West Indies, and in Jamaica there is quite a considerable orange industry. Plantations of oranges of the better varieties have been established in the highlands of the interior of Dominica, but are still in the experimental stage, though they have good prospects of success. Owing to the favourable natural conditions to be found there, oranges can be produced at the season when the London markets are usually badly supplied. The orange industry suffers from the selfish policy of some shippers, who send home immature and badly packed and graded fruit in the hope of snatching a profit early in the season, with a result that the fruit gets a bad name in Covent Garden.

Orange shipments from the West Indies in the latest year for which statistics are available were as follows:

Jamaica; 33,136,600. Valued at £31,953 Trinidad, 4,464 packages. , 1,299

From other islands shipments are only negligible in

quantity.

Until about 1897, grape-fruit (Citrus decumana) was only gathered from trees growing wild in the pastures of Jamaica, and in many districts they were not distinguished from shaddocks. But even then, quite a fair number of grape-fruit were exported to America, where they realised good prices. They were from the first greatly appreciated, and as soon as their tonic and health-giving properties became fully known, they attained wide popularity and realised as much as \$5 per barrel. Then the regular groves of grape-fruit were planted out in Jamaica, Florida and California, and prices fell to a far lower level. This was bad enough; but what made matters worse was the imposition of a heavy customs duty on foreign citrus fruit in New York, which went far towards killing the Jamaica grape-fruit trade. The late

COTTON IN THE WEST INDIES

Sir Alfred Jones did much to popularise the grape-fruit in the United Kingdom, and met with a fair measure of success, but for some incomprehensible reason the English public has been rather slow to adopt the grapefruit habit, although there is nothing more delicious than a grape-fruit, especially at breakfast.

The shipments of this fruit from Jamaica in 1909-10

amounted to 43,580 packages, valued at £16,145.

About a hundred years ago the British West Indian Islands supplied Great Britain with over six and a half million pounds weight of cotton annually. Bryan Edwards, the historian, recorded that the finest grained, and most perfectly cleaned cotton which was brought to the British market, came from the Dutch plantations in Berbice and Demerara—now counties of British Guiana—and Surinam, and it is interesting to note that Berbice cotton fetched at that time 2s. 1d. per lb., Demerara 2s. 1d., Tobago 1s. 9d., and Jamaica 1s. 7d. But other crops proved more remunerative, and the cultivation of cotton in the British West Indies was gradually abandoned.

At the time of the American civil war an attempt was made to revive the industry, but it did not succeed, and until 1902, Carriacou, the small dependency of Grenada, was the only British island which continued to export cotton, a crop which is still its staple. It is an ill wind that blows no one any good, and the shortage of cotton from which Lancashire suffered in 1901 gave the West Indies their opportunity. Mr. George Carrington experimented successfully with Sea Island cotton in Barbados and Mr. P. A. Wade obtained equally favourable results in Montserrat. In 1903, Sir Daniel Morris, then Imperial Commissioner of Agriculture in the West Indies, while on a visit to the United States, obtained £500 worth of cotton seed from one of the finest estates in the "Sea Islands," off the coast of Carolina, and the foundation of a valuable new minor industry was in this way successfully laid.

Meanwhile, the British Cotton Growing Association, which had been founded in Manchester in 1902 by the late Sir Alfred Jones, at the suggestion of Mr. J. E. Newton, of Oldham, rendered valuable assistance to the young industry by contributing towards the salary of experts, and advancing money for the erection of ginneries. Cotton may now be said to be fairly established as a useful subsidiary industry in Barbados, Antigua, Nevis, St. Kitts, and Montserrat, while in St. Vincent it now ranks as the chief staple.

Except in Carriacou, where a short stapled cotton is grown, the Sea Island is the variety cultivated. This cotton, as its scientific name (Gossypium barbadense) implies, had its original habitat in Barbados. From the West Indies its cultivation was introduced into the "Sea Islands" of America in 1785. It is very silky, and having also a long staple, it commands a high price, being largely used for making Brussels lace, chiffon, gloves, fine handkerchiefs, sewing cotton, lingerie, etc. Leaders of fashion, by adopting the wretched hobble-skirt habit, unconsciously did enormous harm to the cotton industry; and it is much to be hoped that they will, before long, demonstrate their patriotism by bringing about a restoration of the use of such garments as require materials made from "Sea Island" cotton.

Cotton is planted in August and September before the rains set in. The seeds are planted 20 inches apart, in rows 5 feet apart, four seeds being planted in each hole, 6 lbs. of seeds being required per acre. When a fortnight old the weaker plants are pulled up leaving two in each hole, and a fortnight later the weaker of the two remaining plants is removed. In about three months the plants burst into flower, and the appearance of the cotton fields at this period is exceedingly pretty; two months later the cotton should be ready for picking. This operation is conducted by men, women and children, the most

HOBBLE-SKIRTS AND COTTON

expert labourers being able to pick about 100 lbs. of seed-cotton in a day. They hold the boll firmly with the left hand and remove the seed cotton with the right. The cotton is then sunned until thoroughly dry, stained cotton or immature bolls being removed, and any cotton which is at all dirty is "whipped," a process which consists in striking handfuls of seed-cotton with a whipping motion on wire netting.

The next operation is ginning, or separating the seed from the cotton-lint. This process is conducted in a ginnery, and it is much to the credit of the British West Indies that they have—at Barbados—the largest Sea Island cotton ginnery in the world. The cotton on entering is weighed and hoisted to the top floor or cotton loft. Here it is spread out to dry still further before it is passed through hoppers to the next floor, to the gins to which it is fed by labourers. In these the "lint" is separated from the seeds, the former passing over a leather roller on to an endless conveyor, while the seed falls through grids on to an inclined plane and passes through the floor to the ground floor. From the conveyor the lint is taken to the baling room, where it is baled under immense pressure. The cotton is then ready for shipment. The seed is either stored for planting for the next year's crop, is used for feeding the animals or making manure, or is crushed with a view to the extraction of the valuable oil which it contains.

According to the latest figures available, the area under cotton in the West Indies and the exports of cotton lint may be given as follows:

Barbados .	4,000	acres,	800,000	lbs.
St. Vincent .	2,000	,,	350,000	,,
Antigua and Barbuda	600	,,	85,000	,,
St. Kitts .	1,500	,,	306,000	,,
Nevis .	1,700	,,	335,000	,,
Montserrat .	2,000	,,	402,000	,,
	004			

Rice is another West Indian industry which has only lately received the attention that it deserves. Considering the large East Indian and therefore rice-consuming population which there is in British Guiana and Trinidad, it is surprising that it is only in the last ten years that the cultivation of rice has assumed any dimensions in the first-named colony, which, as has been proved, is so eminently suited to it. Rice was introduced into Demerara in 1782 from Louisiana during the French occupation. For years the runaway slaves used to grow it, for their subsistence, near their hiding-places, and in 1810, such a quantity was being produced by them at the back of Mahaicony that the despatch of a special expedition was recommended to destroy it.

After 1813, when supplies of rice from America were stopped, various attempts were made to cultivate paddy systematically, but it was not until the arrival of East Indians on the scene, that any material progress was made. In 1865 some East Indian immigrants from the Hill districts in India began to grow it on the West Coast of Demerara, and the industry, which was of modest dimensions, grew until 1870, when it was reduced to such an extent that it was almost entirely confined to the Abary district. Then, encouragement was given to rice cultivation in Essequibo where some 200 acres were devoted to the crop in 1886. From that year the industry developed steadily, though it was not until 1901, when there was a shortage of the Indian crop, with a consequent rise in prices, that it became a really important one to the colony. In that year the acreage reached 19,000 acres, but in less than ten years from that time the area under rice has risen to no less than 38.000 acres.

The rise of this industry has been entirely due to the beneficial system of East Indian immigration, which is described in another chapter, and it has proved of great

BRITISH GUIANA'S RICE

advantage to the colony in many ways. Not only has it rendered British Guiana entirely self-supporting as regards an important item of its food supply, but it has also afforded an inducement to East Indians and their families to settle permanently in the colony after their period of indenture has expired. Mr. F. A. Stockdale. whom the writer has had occasion to quote more than once, gives, in an admirable pamphlet issued by the Permanent Exhibitions Committee of British Guiana. some interesting figures to show the rapid development of the rice industry. In 1899 the yield was 5,000 tons of paddy, equivalent to 3,600 tons of rice. Ten years later it was 51,600 tons of paddy, equal to 38,000 tons of rice. In the same period, the average yield per acre has risen from 20.3 cwts, to 26.5 cwts., a result which is attributed largely to the good work of the Board of Agriculture in introducing and distributing, after careful experimentation, improved varieties of rice.

Rice was first exported from British Guiana in 1902-3, when about 5 tons, of a value of £60, left the colony; in 1908-9 the exports were 3,120 tons, of a value of \$59,000, while during the past year they amounted to 5.490 tons, valued at £62,531. The greater part of this rice is being exported to the West Indian Islands and to French and Dutch Guiana, and the British Guiana "long-grain" variety is now preferred in these markets except when the prices are greatly in favour of East Indian rice. The effect that the local production of rice has had on the quantities imported into the colony in recent years has been very marked. In 1899 the quantity of rice imported into British Guiana was 11.300 tons, while in 1910 the imports had fallen to 19 tons. Rice, as a rule, is shipped in bags of 170 lbs. each, the average export value being 16s. to 17s. per bag.

There are now several large rice mills in the colony, and a number of small ones. The rice is not polished

locally, but is marketed in the form of "brown" rice, when the paddy is steamed before milling, and "white" rice, which is less nutritious. Rice meal is also made, besides a cattle food called "Colco" manufactured from rice husks and ends soaked in molasses.

The methods of cultivation at present in vogue are those practised in the East, and are decidedly primitive. Experiments are, however, being conducted by an American syndicate in the direction of mechanical cultivation. If they prove successful there is no knowing how great a future there may be in store for the industry.

The latest statistical figures regarding the rice industry of British Guiana, show that there are now 36,230 acres under this form of cultivation.

Rice is also grown by the East Indian immigrants in Westmoreland, Jamaica, and in Trinidad, but it has never developed into a large industry in those islands.

In the East, coco-nuts (Cocos nucifera) are known as the "Consols of the East." They might with equal fairness be called the "Consols of the West," for they thrive in the West Indies and yield a steady income to the investor. The great advantage of the coco-nut tree is the number of uses to which its products can be put. A Mr. Brown has pointed out that "a ship can be made from stem to stern entirely of the coco-nut palm, with ropes and hawsers and sails made of the fibre. She may be laden with coco-nut rafters, coir, yarn, mats, rugs, brushes, coco-nuts, arrack, copra, oil and poonac. the vessel may be actually built and laden with the coco-nut tree alone. In 1883 a shipwrecked crew lived on an island for a full month on nothing but coco-nuts and occasionally fish. It is recorded that they flourished and gained weight."

The principal coco-nut producing colony in the West Indies is Trinidad, where there is a number of estates

THE "CONSOLS OF THE WEST"

devoted to the cultivation of this homely nut. From this island upwards of 20,000,000 coco-nuts are exported

every year, besides 25,000,000 lbs. of copra.

The eastern shore of the island is fringed for the greater part of its length with coco-nut trees, which form the Cocal described by Charles Kingsley over forty years ago. "The surf was growing louder and louder; and it was worth coming all the way from England to see it alone. I at once felt the truth of my hosts' saying, that if I went to the Cocal I should find myself transported from the West Indies to the East. Just such a sight must be a coral island in the Pacific." It is said that this Cocal had its origin in a French vessel from the East Indies, laden with coco-nuts, being wrecked on the surf-beaten coast. Many of the nuts germinated, and the trees rapidly grew and multiplied.

Coco-nuts are not so largely cultivated in the smaller West Indian islands, owing to the absence of large stretches of sandy beaches suitable for coco-nut groves.

In Jamaica there are at present about 11,800 acres devoted to coco-nut cultivation, and the area under this crop in British Guiana has been steadily increasing until it now amounts to about 10,000 acres. Coco-nuts are grown nearly everywhere in Jamaica, and the returns there are above the average, the yield being as much as 100 nuts per tree on well conducted plantations. The coconut plantations suffered severely from a hurricane in 1903, but replanting from selected seed-nuts has been carried on energetically, and the industry is rapidly recovering.

In British Guiana, coco-nuts thrive well on the coastal lands, especially where the soil is more or less of a sandy nature, and a considerable expansion of their cultivation

is possible.

The coco-nuts are owned chiefly by small growers, but there are a few fair-sized coco-nut estates. Reefs of light sandy loams exist on the Corentyne coast, along the east coast of Demerara, and in Essequibo, where coco-nuts flourish, and even on the heavier coastal lands they grow satisfactorily. On the other hand, they do not grow so well nor yield so satisfactorily on lands away from the

coastal region.

The yield of the trees varies greatly according to soil, climate and cultivation, and while some yield only twenty to thirty nuts a year, others are far more prolific. Dr. H. Alford Nicholls has stated that, with a good climate, a fair average soil, and judicious cultivation, the returns ought to be at least fifty nuts a tree, and with a 25 feet distance between the trees this would give an annual yield of 3,500 nuts per acre. By the application of manure, the returns may be increased to eighty nuts per tree.

It is, as a rule, considered more profitable and convenient in the West Indies to sell the fresh nuts than to prepare copra or the dried kernels. This copra is, on the other hand, largely produced in the Pacific Islands, because they have no large and convenient markets for the fresh nuts.

The extension of coco-nut plantations is regulated purely by the returns obtained from them compared with other crops. If the land is rich and deep it pays better to grow bananas, cacao and limes. On the other hand, coco-nuts are bulky and difficult to transport, and require to be grown near where there are shipping facilities. The people in the West Indies are, however, fully alive to the advantages arising from coco-nut plantations, and increased attention is being devoted to them. It is purely a question of which crop pays the best and whether it is suited to the condition existing in each district. The area under coco-nuts in the British West Indies and the exports are as follows:

		Acres.	Nuts.
Trinidad	. '	18,700	18,872,962
Jamaica		14,510	13,400,530
		000	

NUTMEG CULTIVATION

The spice industry is chiefly identified with Grenada, which is, in consequence, often called "The Spice Island of the West."

Nutmegs (Myristica fragrans) are sown in nursery beds 2 or 3 feet apart. After from four to six years the young plants begin to flower or "declare." The trees are male and female, and the males usually "declare" first, bearing a different flower. When the females "declare" they are planted out at distances varying from 15 to 30 feet apart, with male trees distributed evenly between them. After about fifteen years the trees are considered to be well established and require little attention, as weeds fortunately do not grow under nutmeg shade. The period of waiting is, however, soon compensated for when the trees come into bearing, for they then yield, on the average, no less than 5,000 nutmegs each per annum. Harvesting is a simple operation, the nutmegs merely being picked up day after day as they fall from the trees.

When they are first gathered, they are covered with a scarlet lace-like substance, which, when dried in the sun, becomes the "mace" of commerce. The nuts are dried in a current of air, and afterwards in the sun. The hard shell is broken with a small mallet, care being taken not to bruise the inside. The kernels are then assorted according to size, and packed in barrels for export.

The exports of spice from Grenada in 1909-11 amounted to 7,589 bags.

Pimento (Pimento acris), also known as "Jamaica Pepper" or "Allspice," is exported in considerable quantities from Jamaica. The tree, which is a species of myrtle, grows to a height of some 30 or 40 feet, with a circumference at the base of about 3 feet. Its wood is covered with a greenish-grey bark, smooth and shining in appearance; the leaves are a dark and very glossy green, and, when crushed in the hands, emit a strong aromatic odour. It used to be supposed that the seed

of this tree would not germinate if planted by hand, and that it was only when it was dropped by birds that it would grow; there are, however, no grounds for this belief, and if a ripe seed is washed and cleared of the external pulp and then planted, it germinates readily.

Like nutmeg trees, pimento trees are male and female, and only the latter are fruitful or bearing. Botanists declare, however, that the so-called male trees are not necessary to the fructifying of the bloom of the bearing trees, though many growers find it difficult to reconcile

this with their actual experience.

Under favourable conditions a pimento tree comes into bearing when from about eight to ten years old; but it is not in its prime until in its eighteenth or twentieth year. The berry, which is the marketable product, a small round fruit about the size of the ordinary black currant, is the "allspice" of commerce. These berries grow in clusters, and are gathered just before they are ripe. When ripe, they are glossy and black in colour, and sweet and very spicy to the taste.

The berries are gathered by boys who are sent up the trees with a crooked stick, and they prune the tree at the same time—a very necessary operation; women and children pick off the berries, which are then placed on a barbecue or drying floor, and prepared for market. Apart from its use as a spice in cookery, the berry also serves as the basis of a delightful appetising drink identified with Jamaica, and known as Pimento Dram.

The average production of pimento in Jamaica is about 50,000 to 60,000 bags, of about 150 lbs. weight, per annum for the whole island. The principal pimento growing parish is St. Ann, but pimento is also largely grown in St. Elizabeth, St. Mary, Trelawny and Manchester.

Ginger (Zingiber officinalis), which is also at its best in Jamaica, is mainly cultivated by the negro peasantry. The crop rapidly exhausts the soil; but this difficulty,

TOBACCO AND PEN-KEEPING

can, fortunately, be overcome by suitable manuring. The best results are attained at a height of at least 2,000 feet above sea level. The cost of establishing ginger plants is estimated at about £10 per acre. The exports of ginger from Jamaica in 1909-10 were 37,180 cwt.

The cultivation and manufacture of tobacco is an industry which has made very rapid strides in Jamaica since the troubles in Cuba before the Spanish-American War of 1898, which led to a number of Cubans migrating

to the colony. Cuba's loss was Jamaica's gain.

Tobacco is a plant which requires a good deal of care to cultivate successfully, and the curing of the leaves can only be properly done by experts. There is plenty of land suitable for its growth on the south side of the island, from the Blue Mountain Valley in St. Thomas to the borders of Hanover and Westmoreland, in valley or on gently sloping or flat lands; and, with the exercise of intelligence and care, tobacco cultivated in Jamaica yields good results. Cigars and cigarettes are manufactured in Kingston, and the trade is rapidly extending. Several brands are already well known.

The area under tobacco in 1909-10 was 837 acres, and the exports were as follows: Cigars, 82,200 lbs., valued at £36,685; Cigarettes, 4,829 lbs., £528; and Tobacco

(unmanufactured), 45,394 lbs., £1,159.

Pen-keeping is also an industry identified with Jamaica. A pen, it may be explained, is a large farm or ranch, and pen-keeping includes horse, mule and cattle breeding, dairying, sheep farming, and the keeping of small stock.

From the time of the first British occupation, horse-breeding has been carried on in Jamaica as a distinct branch of agriculture, and it is still a profitable industry The ordinary Jamaica horse is very hardy and as near thoroughbred as can be, and it is estimated that there are now about 53,200 in the island. There is a great demand for them in the other West Indian islands.

The chief centres of horse-breeding in the island, are, according to the official information supplied by the Jamaica Government, the parishes of St. Elizabeth and St. Ann, the best horses coming from the former parish. Horses are, however, bred all over the island and do well in every part. The value varies, as it does everywhere else, with the quality of the animal and the purpose for which it is required. The ordinary price for a pair of 14-hand ponies for polo, riding, and driving, ranges from £30 to £40. Common mares for breeding purposes are worth £12 to £18, but a pair of well-matched carriage horses standing 15:2 and upwards will fetch from £80 to £100. The most valuable horse in the country is a thickset, sturdy, general-purposes animal, that stands 14.1 to 14.3, goes in harness, and is a good hack. Such a horse will travel 40 miles a day in a buggy or under saddle for a week on end and not show any signs of fatigue, and will always fetch £20 to £30. There should certainly be an opening in Jamaica for the breeding of stout harness horses. At present all the heavy draft work in the country is done by mules, which fetch from £20 to £30 a head.

In Jamaica, cattle are raised both for the planter and the butcher. For butchers' purposes all the English breeds of cattle, such as Shorthorn, Hereford, Devon, Aberdeen-Angus, and Suffolk, are bred. Fat cows are estimated to yield about 400 lbs. to 450 lbs. of beef, and fetch £7 to £8. Fat four-year-old steers will weigh from 550 lbs. to 650 lbs., and their value ranges from £9 to £10 on an average. For planters' purposes nothing can be better than crosses with the four different breeds of Indian cattle, which have been introduced, and do well in Jamaica and Trinidad; and it is found that they are good beef-producing animals also. One advantage of Zebu cattle over ordinary kinds is their power of resisting disease. Since using Zebu bulls, the loss of

THE ADVANTAGES OF ZEBUS

calves has fallen from an average of 25% to between 5 and 6% on one pen in Hanover, and on another the loss has only been one calf out of a hundred. Zebus seem to do equally well either in the lowlands or the mountains, in dry weather or in wet. They will live and thrive on the shortest bite, on which other cattle starve and die. Zebus have another advantage over ordinary cattle, inasmuch as they appear to be proof against the attacks of ticks and other insects.

Oxen for draft are cheap, varying from about £8 for three-year-old steers, to £10 for stock broken to draft.

Good milch cows fetch £10 or more.

All through the country there are hills covered with rich pasture suited for the feeding of young steers and heifers, the exercise of climbing the hills being beneficial to their health and growth. There are also plenty of shady glades where breeding cows and their young calves thrive well, and, on the more level lands especially, there is luxuriant guinea grass, than which no finer natural feed for fattening cattle has ever been found.

The pens range from about 200 to 4,000 acres, subdivided by stone walls or wire fences into pastures, those in guinea grass from 20 to 60 acres each, and the "commons" from 60 to 150 acres each, according to the size of the property, and the number of cattle feeding on it.

The milk of the Jamaica cow compares favourably with that of imported animals. The fat of milk is naturally higher than in temperate climates, provided the cows are in good health. There is a plentiful demand for milk in all the larger towns, but especially in Kingston and Port Antonio during the tourist season. It is sold generally at from $4\frac{1}{2}$ d. to 6d. a quart. Much of the Kingston supply is sent in from the country. It is a rather remarkable fact that fresh butter has not hitherto been in great demand owing to the cheapness of good

Canadian and Danish butters in tin, but lately a successful attempt has been made to found a creamery on improved lines. The price of local butter is 1s. 9d. to 2s. per lb. Holsteins, Jerseys, Ayrshires, and Shorthorns and crosses with native cows are used, but there is a greater demand for milch cows than there is supply.

The breeding of sheep is carried on in nearly all parts of the island. Southdown, Shropshire, and the Down breeds generally, and crosses of these have done best. Sheep in Jamaica require much less care than in colder climates. They thrive best in the well-drained districts -the plains of St. Catherine, Vere, the lowlands of St. Elizabeth, and the mountains of Manchester, St. Ann, St. James, and Hanover.

Berkshire pigs do well in Jamaica and so, too, do goats in the lowlands, where they supply "mutton." Poultry also thrive well, and there is always a ready sale for chickens and eggs. Plymouth Rocks, Leghorns, Black Minorcas, Orpingtons, Wyandottes and game fowls are all kept, and turkeys, guinea fowl, geese and ducks, are also found on many pens.

CHAPTER IX

WEST INDIAN INDUSTRIES (continued)

TRINIDAD is exceedingly fortunate in possessing so valuable an asset as the world-famous Pitch Lake. This remarkable deposit of asphaltum is not only a neverfailing attraction to visitors, but also a constant source of revenue to the government of the colony, which receives from the concessionnaires—of whom more anon—a royalty of 1s. 8d. for every ton of asphalt exported from it.

The lake is situated at La Brea, about 12 miles as the crow flies from San Fernando, the second town of the island, from which it can be reached by steamer in about three-quarters of an hour. La Brea is only a village of very modest pretensions, and as it is quite the hottest and by no means the healthiest spot in the island, the white employees connected with the asphalt industry used to reside, until the advantages of mosquito-proof houses were appreciated, upon a long pier, known as Brighton Pier, which looks, in consequence, like the models one sees of the old lake dwellings. From this pier, by the way, those of them who are disciples of Isaac Walton obtain such excellent sport as the "Cuffum" or tarpon, and sharks can afford. The number of white employees has largely increased in connection with oil developments, and all, except the manager-in-chief, now live in large "hotels," admirably protected from insect attack by wire gauze, which have been erected by the company for the purpose.

From the pier, which can accommodate four vessels at the same time, a winding road—of course made of asphalt—rising by degrees to an elevation of 130 feet or thereabouts, leads to the brink of the lake, which one reaches either on mule-back or in a springless cart, walking

being out of the question in such a tropical sun trap. Here a remarkable scene presents itself to the eye. Before one stretches a vast basin of asphalt, not the hard asphalt as we know it on the pavements and roads at home, but asphalt of the constituency of fresh Gruyère cheese—as the Commissioners who visited the lake in 1901 unromantically described it—but in colour, dark brown,

verging on black.

All round this basin is a thin fringe of tropical vegetation, which extends also on to the lake itself, wherever there is a sufficiency of soil mixed with the asphalt to afford it foothold. In places, the lake rises in gentle hummocks, round which runnels of rainwater trickle, but beyond the grasses and scrub on the small "islands," as various oases in this desert of pitch are called, the only other signs of life are the labourers at work busily digging the stuff out with their pick-axes and shovelling it into buckets on a tramway supported on a road made of palm branches. These buckets, heavily laden, are subsequently suspended on an overhead cable, down which they glide to the pier (passing on the way their empty fellows), where they are emptied into vessels waiting in readiness to take the asphalt to the various markets of the world.

Where the pitch is covered with the soil, ground provisions, cassava, and plantains can be grown to perfection, and the neighbourhood of the lake has for many years enjoyed the reputation of producing excellent pine-apples.

One can wander over the asphalt in perfect safety, and it is only when standing still on any given spot that you are in danger of sinking in to the extent of a few inches. One can also handle the pitch with perfect impunity, for, curiously enough, it does not soil the hands or clothes.

The late Lady Brassey described the lake as a "hideous

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RALEGH AND THE PITCH LAKE

looking place." Kingsley went one better and called it a "foul place," and agreed that it was well for the human mind that the Pitch Lake was still unknown when Dante wrote his Interno. Anthony Trollope only gave it passing reference: "There is also here in Trinidad a great pitch lake . . . out of which that indefatigable old hero, Lord Dundonald, tried hard to make wax candles and oil for burning. The oil and candles, indeed, he did make, but not, I fear the money which should have been consequent upon their fabrication. I have no doubt, however, that in time to come we shall all have our wax candles from thence: for Lord Dundonald is one of those men who are born to do great deeds of which others shall reap the advantages. One of these days his name will be duly honoured, for his conquests as well as for his candles."

Truth to tell, the Pitch Lake is rather a desolate and depressing spot, and there is little to tempt a visitor to stay there beyond the unique geological interest of the deposit, and the generous hospitality furnished by the employees on Brighton Pier.

Opinions differ as to the size of the lake. The Encyclopædia Britannica, for instance, gives it as 99.3 acres in its reference to it under "Asphalt," and as 104 acres when dealing with it from the point of view of Trinidad! It may, however, be accepted that the actual area of the bituminous matter is at least 118 acres.

Sir Walter Ralegh is credited with having been the first European to discover the existence of pitch in Trinidad. He left England on February 6th, 1595, and after coasting by Grand Canary and touching at Teneriffe, directed his course for Trinidad, where he arrived on March 22nd, casting anchor at "point Curiapan, which the Spaniards call punta de Gallo." After remaining there four or five days, he visited a place called Parico, and in his

History of the Discouerie of Guiana, he wrote: "From thence I rowed to another port, called by the naturals Piche, and by the Spaniards Tierra de Brea.... At this point ... there is that abundance of stone pitch, that all the ships of the world may be therewith loden from thence, and we made trial of it in trimming our shippes to be most excellent good, and melteth not with the Sunne as the pitch of Norway, and therefore for shippes trading the south parts very profitable."

In the first volume of the transactions of the Geological Society, Dr. Nicolas Nugent gives an interesting account of a visit which he paid to the lake in 1807, and states that he had heard it related that "when the Spaniards undertook formerly to prepare the pitch for economical purposes, and had imprudently put their cauldrons on the very lake they completely sank in the course of a night, so as to defeat their intentions." This indicates that some local use was made of the pitch, and Dr. Nugent continues: "It is sufficiently evident that this substance may be converted to many useful purposes, and accordingly it is universally used in the country wherever pitch is required; and the reports of the naval officers who have tried it are favourable to its more general adoption. . . . This lake is of vast national importance to a great maritime power. It is indeed singular that the attention of Government should not have been more forcibly directed to a subject of such magnitude." It seemed to Dr Nugent that this vast collection of bitumen might form an inexhaustible supply of an essential article of naval stores, and he mentions having seen a transport arrive at English Harbour, Antigua, in 1809, laden with pitch from the Trinidad Lake for use at the naval dockvard there.

The commercial possibilities of the lake appear, however, to have been comparatively overlooked until 1805-10. It was then that Admiral Sir Alexander



THE PITCH LAKE AT LA BREA, TRINIDAD



PITCH AS AN ILLUMINANT

Cochrane, an ancestor of the present Lord Dundonald, when in command of the Leeward Islands station, sent two ship-loads of pitch from La Brea to England. This experiment was not a success, however, and the reason for its failure is, in the light of a subsequent event—the discovery of oil in the island—decidedly interesting. "After a little examination," wrote E. L. Joseph in his History of Trinidad, 1 "the substance was found to require too much oil in order to render it useful." This same writer added, however, prophetically: "The improved and improving state of chemistry may reverse this decision. Should any discovery be made which might render the asphaltum a fit article for ordinary use, as pitch and tar, Trinidad could easily supply the commerce of the world with it."

Sir Ralph Woodford, who was Governor of Trinidad from 1813 to 1828, during which period he did much the same for Port of Spain, though of course on a smaller scale, as Haussman did for Paris, was the first to experiment with the asphalt for paving purposes. He caused it to be laid over the soil of a part of Brunswick Square, in Port of Spain, in order to check the growth of the grass and weeds there. The result of the experiment was very surprising. Far from checking the growth of weeds, "the asphaltum mixing with the soil, added to its fertility, and of course made the grass grow luxuriantly." Indeed, opinion was even expressed at the time, that this failure might lead to the pitch being used as a manure; but there is no record of its ever having been applied to this purpose.

Nothing daunted, the enterprising Governor next experimented with the pitch as an illuminant. Carburetted hydrogen gas was distilled from it and this was used to light a beacon in the tower of Holy Trinity Cathedral. It burnt admirably, but the smell was so intolerable, and the

¹ History of Trinidad, by E. L. Joseph. London: A. K. Newman & Co., 1837.

complaints of the distressed inhabitants were so numerous in consequence, that the experiment had to be abandoned. But Joseph, from whose history these facts were elicited, was no lover of the lake, for he once had the disagreeable experience of being marooned there for a whole night, when endeavouring to cross it; and on this occasion he was, in his own imagination, in some danger of "being turned into bitumen asphaltum, petroleum, or even, converted into naptha."

Years went on, and this wonderful deposit of asphalt was put to little or no practical use. At the instance of Sir William Molesworth, the then Secretary of State for the Colonies, Mr. G. P. Wall and Mr. I. G. Sawkins were, as already stated, appointed in 1855 to conduct a geological survey of Trinidad and the other West India colonies, and it was natural that they should turn their attention to such a remarkable geological phenomenon as the Pitch Lake. They made it a subject of close investigation, and in their report on the Geology of Trinidad, which was published in 1858, they quoted Mr Cowling Taylor's opinion that "the entire chain of West India and Windward Islands present similar phenomena to those on the mainland, of petroleum springs." After dealing at some length with the asphaltum deposits and the mud volcanoes. these two eminent geologists referred to the experiments made during half a century with the object of finding use for the local bitumen, especially by Lord Dundonald, and they, too, foreshadowed that "many of these will probably be eventually successful."

Wall and Sawkins pointed out that a number of oils could be extracted from the pitch, and regarding the origin of the bituminous substances, they came to the conclusion that whether fluid or solid, they were formed from vegetable matter by direct conversion at the ordinary temperature, the first part of the process consisting in the formation of a black oily substance similar

OIL-FINDS ANTICIPATED

to that which arrives in liquid form at the surface of the lake, and has been termed asphaltic oil. "There is a constant endeavour on the part of this fluid to escape from the material in which it is formed. Some specimens of wood in the earliest stages of conversion continued to discharge the oil for several months after being placed in the Museum of the survey of Port of Spain; and nothing is more common in the La Brea district than to observe it exuding from the soil or issuing from the fissures of the cliffs." This statement seems to indicate with sufficient clearness that Wall and Sawkins were satisfied as to the existence of oil in the island, a fact on which doubts have been thrown by some later experts.

In a pamphlete ntitled Brief extracts from the Memoranda of the Earl of Dundonald, in the Use, Properties and Products of the Bitumen and Petroleum of Trinidad, published by Ridgway in London in 1857, the following uses of asphalt were suggested: (1) as a cement for piers, moles, breakwaters, sea walls, and shores defences; (2) as bituminous concrete for foundations of lighthouses, bridges and other hydraulic works; (3) as a flexible adhesive bituminous compound for forming the joints of earthenware pipes; (4) as a covering for galvanic wires; (5) as pipes for the conveyance and distribution of water; (6) as a preservative from rust and decay, and (7) for coating water channels in porous strata. The author was the tenth Earl, the famous Admiral.

Theoretically this was all very well and good, but the efforts to market the asphalt met with little success. For several years Mr. Conrad Stollmeyer, for many years Admiral Lord Dundonald's agent in Trinidad, had been shipping asphalt occasionally, but the shipments generally resulted in a loss, and it was not until the late 'sixties that the industry could be said to be established on a business-like basis.

In 1864 the late Mr. Henry A. Greig, partner of Mr.

J. W. Previté, visited Trinidad in connection with the Trinidad Petroleum Company, which was promoted in that year by the late Mr. H. B. Sheridan, M.P., and the eleventh Earl of Dundonald. A dispute had arisen as to the purchase price to be paid for the properties to be acquired, and the Trinidad Petroleum Company did not long survive. While in Trinidad, Mr. Greig made the acquaintance of Mr. Finlayson, a local sugar planter, who had acquired the assets, including the freehold land. These two gentlemen appear to have seen a future before asphalt through the use of it for industrial purposes, apart from the extraction of oil from it, and after putting their heads together, they set about digging and shipping the substance. This was really the foundation of the business which has now assumed such immense dimensions.

The Pitch Lake at this period was the property of the Crown, and it was divided up into five-acre lots, which were leased at almost nominal rates to private individuals and companies, one lot being, however, reserved by the Crown, to prevent any monopoly being established. As these lots came on the market from time to time they were acquired by the partnership, until Messrs. Previté, Greig and Finlayson became the holders of the entire lake, with the exception of the one lot reserved by the Crown.

At this period the asphalt was shipped as either crude asphalt or "epuré"—the latter being merely the asphalt with the water evaporated from it by boiling,—and it is of interest to note that this epuré was prepared in those days by Mr. Stollmeyer in exactly the same way as it is still made by his son and grandson. By the 'seventies the annual shipments rose to thousands of tons, and competitors began to evince a desire to participate in the business. Prominent among them were Mr. J. G. Douglas and the Dowager Countess of Dundonald, who began to ship asphalt dug from the land adjoining the lake.

OWNERS OF THE PITCH LAKE

an operation which, involving as it did such questions as the right of support, eventually gave rise to much tiresome

litigation.

By this time the attention of the late Mr. A. L. Barber, an astute American, who had been developing the asphalt-paving business in his own country under what are known as the de Smedt's patents, was attracted to the lake, and finding that the Trinidad asphalt was well suited to his requirements, he soon became a large consumer of it. Gifted with a keen power of perception in business matters, he recognised the lines on which the asphalt industry should be developed, and entered into an arrangement with Messrs. Previté, Greig and Finlayson. The trade was now thoroughly established, and the exports rose by leaps and bounds. The bulk of the asphalt shipped was dug from the lake, but the shippers from the land, who maintained a guerilla warfare, also contributed their quota to the exports.

In the year 1886, the local Government began to realise that the lake might become an important source of income, and that it should yield a far greater revenue than that which the rents of the five-acre lots afforded. They accordingly gave notice in November of that year, that on a certain day licences to dig on the five-acre lot reserved by them, would be issued at a price to any who

might apply.

It will be readily appreciated that the position thus created was a dangerous one for the leaseholders, who had understood that the Government's five-acre lot would be used only for the purpose of supplying the official demand for asphalt. With the approval of the Colonial Office, a test case was brought against the Crown, but it was finally decided by the Privy Council against the leaseholders. This threatened to prove a serious blow to them, but it was averted through the action of Mr. Barber, who now applied for and succeeded in obtaining,

a concession of the whole lake for a period of twenty-one years, in return for the payment of an export duty of 5s. per ton, and a royalty of 1s. 8d. on a minimum export of 30,000 tons of asphalt per annum. The minimum payment was thus fixed at £10,000 a year, which was very largely in excess of the annual income formerly derived from the Pitch Lake.

The granting of this concession gave rise to vehement protests in the colony, but the Government stood their ground. Questions were asked in the Imperial Parliament, but the reply was that no better offer had been made, and it is now very generally recognised, even in Trinidad itself, that the decision of the Government was a good one for the colony, which it has enriched to the extent of upwards of £833,271 by duties and royalties in the twenty-three years during which it has run. In his report on the Blue-book of Trinidad for 1888. Sir William Robinson, the then Governor of the colony, said: "It is idle now to speculate on what might have happened if any other arrangement had been made. The bargain has been concluded. That it is working very satisfactorily cannot be gainsaid by those who were most inimical to it, and it is sufficient to congratulate the colony on having turned to profitable account a mine of wealth. which has for so long been regarded as little more than a natural curiosity and a show place for persons visiting the island." In the following year, he further justified the action of the Government. "While for the twenty years previous to the granting of the monopoly," he wrote, "the aggregate revenue yielded by the lake amounted only to £25,645 3s. 8d., or on an average about £1,230 per annum, the receipts on account of pitch for the year under review, being the second year of the concession, reached the handsome total of £26,807 16s. 8d. These figures speak for themselves."

In 1890 the extension of the concession was approved

ROYALTIES FROM ASPHALT

for an additional year (not exceeding in the whole twenty-one years), from February 1st, 1909, for every £4,000 paid over by the concessionnaires before that date over and above the minimum sum of £140,000 payable in respect of the first term of fourteen years, and the further sum of £28,000 payable in order to obtain an extension of seven years from February 1st, 1902. The conditions imposed were, amongst others, that on February 1st, 1891, the concessionnaires should make a special payment to the colony of £10,000, besides the regular payment of the same amount due on that day under the term of the concession, both payments being taken as against shipments of the year beginning on that day.

Further, the Trinidad Asphalt Company agreed that if by February 1st, 1892, the concessionaires had not paid to the colonial Government £100,000 in addition to the permanent deposit in London of £10,000, the Company should on that day give to the Crown a mortgage on all the land it possessed in Trinidad as collateral security for the balance then remaining of the £140,000, the payment of which to the colonial Government the

company had undertaken.

Simultaneously with the granting of the original concession, Mr. Barber formed the Trinidad Asphalt Company to consolidate the several interests concerned, and this company, after a prosperous existence, was succeeded in 1898 by the New Trinidad Lake Asphalt Company, which still controls the enterprise, with Mr. John M. Mack of Philadelphia as chairman, and Mr. H. F. Previté as London director. In 1888 Mr. Greig withdrew from the firm of Previté & Greig, which, now, as Previté & Company are still the consignees for the United Kingdom and Europe, the American interests being watched by the Barber Asphalt Paving Company, while the New Trinidad Lake Asphalt Company, Ltd., supplies the asphalt under the term of the concession, one of the

principal consumers being the Trinidad Lake Asphalt Paving Company, Ltd., a purely English concern, of which Mr. F. M. Bond is managing director. This company has undertaken many important contracts in this country, of which one of the largest has been the paving of the Victoria Embankment in London for the greater part of its length. Who realise as they drive along this busy thoroughfare that they are really passing over what was once an integral part of the island of Trinidad?

Prosperous though the asphalt industry now became. it was hampered by litigation between the concessionaires of the lake and the diggers of land asphalt; and as many as thirty cases in which the Trinidad Asphalt Company were concerned, were pending at one time. The Government was periodically involved in these law suits, and in 1901, during the governorship of Sir Alfred Moloney, it was decided to appoint a Commission to ascertain if it might not be possible to devise some means of reconciling the conflicting interests concerned. Mr. I. W. Gordon and Professor Henry Louis, F.G.S., F.I.C., were accordingly appointed Commissioners, and they arrived in the colony on August 19th, 1902, and conducted a searching enquiry, remaining until September 27th. In their report, dated January 3rd, 1903, they made a number of recommendations which they hoped would enable the industry to be carried on without continuous recourse to litigation. These recommendations did not meet with the approval of either the home or colonial authorities, or of any of the parties concerned, and were consequently not carried into effect. Much discussion and correspondence ensued, and finally an asphalt ordinance, as to the terms of which the commissioners were consulted. was passed, and now, whether as a result of this or not, litigation is to all intents and purposes at an end, while the industry continues in a prosperous condition.

Such being what might be termed, the commercial

TRINIDAD'S OIL RESOURCES

history of the Pitch Lake and of Trinidad's asphalt industry, it will be of interest to trace the steps which have been taken to develop the oil resources of the island, from which so much is expected. As far back as 1807, Dr. Nicholas Nugent, to whose visit to the Pitch Lake reference has been made above, noticed the resemblance between part of Trinidad and the country bordering on the Gulf of Taman in Crim Tartary, where "springs of naptha and petroleum equally abound." Here, then, was a learned man who came very near to discovering petroleum in Trinidad more than a century ago.

The earliest attempt to obtain oil in Trinidad was made by the Merrimac Company, which experimented with the production of it from asphalt by a process of distillation in 1856-7: but this did not prove a success. Then the Trinidad Petroleum Company, of which mention has already been made, was formed in London with a capital of £150,000, and drilling was started at La Brea in the 'sixties. Oil was struck, but competition with the new oilfields in the United States proved too formidable, and this, coupled with other causes, compelled the company to go into liquidation. The next attempt to win oil appears to have been made in 1866, when a civil engineer, named Walter Darwent, proceeded to Trinidad. and started boring at San Fernando and Aripero. Drilling apparatus was not then as perfect as it is now, and Mr. Darwent had not achieved much success when he died on the island in 1868.

For some years nothing more was done, but in the 'seventies a hunter brought a sample of oil to the then Warden of Mayaro, alleging that he had found quantities of it in the forest. The sample was sent to the Governor, who forwarded it to the Secretary of State for the Colonies; and in due course it was submitted to an expert, but its very excellence proved its undoing. The quality of it was so superfine that the expert declined to believe that

it was crude petroleum, and declared that it was artificial. In spite of this discovery of oil, no one could be induced to credit the possibility of the establishment of a local petroleum industry, much less invest money in attempts to recover oil. There was, however, one exception-Mr. Randolph Rust, a man of irrepressible energy and optimism, who constituted himself a missionary of the reputed oilfields. In spite of discouragement, which he met with on every side, and in spite, too, of ridicule, he was determined to prove the existence of oil in paying quantities, and in partnership with Mr. Lee Lum, he brought oil-drilling machinery into Trinidad, and started boring at Aripero. In 1901 oil was successfully struck there, and in the following year Canadian support was enlisted, and boring operations were conducted with success at Guayaguayare, in the south-east corner of the island, by the Oil Exploration Company of Canada. The concession, which consisted of 23,481 acres at Guayaguayare and 500 acres in the south-west of the island, and was granted in 1907 for twenty-one years upon payment of 10 % royalty to the Trinidad Government, was subsequently acquired by the General Petroleum Properties of Trinidad, Ltd., a company with a capital of £300,000 which has since granted an option over the undertaking to the Consolidated Goldfields of South Africa. The present Earl of Dundonald was also an oil pioneer.

In 1907 a new Trinidad Petroleum Company started to bore on land owned by him and Dr. de Wolf near the Pitch Lake, with so great a measure of success that they were very soon able to dispose of the venture to the Trinidad Oilfields, Ltd., a company which was successfully floated in 1910, advantage being taken of a slight boom on the London oil share market. The capital consisted of £300,000 in £1 shares, and 175,000 shares which were offered were considerably over-subscribed. This successful flotation was the signal for the start of the regular

A TRINIDAD OIL BOOM

boom in oil-bearing lands and licences in Trinidad. The Crown Lands Office in Trinidad was besieged with requests for licences to prospect for oil, and visions of El Dorado rose before the eyes of the successful applicants. Many syndicates and companies were formed, some unfortunately with an absurdly inadequate capital, and excitement reigned supreme. Within a year, companies with a nominal capital of upwards of £2,500,000 were formed.

Meanwhile development work steadily proceeded, and in addition to the Canadian and the English companies above referred to, the concessionaires of the Pitch Lake were themselves boring for oil under the name of the Trinidad Lake Petroleum Company, Ltd., and meeting with very favourable results. They had erected two of the largest tanks in the world, each with a capacity of 64,000 barrels, and by the close of the year both were filled with oil.

It is not often nowadays that the opportunity arises of witnessing the genesis of an entirely new industry in one of our colonies, of watching from their early beginnings the gradual expansion of the exports of an entirely fresh product. Such an opportunity was, however, afforded this year by the Trinidad oil industry, which, on April 29th emerged from its chrysalis and entered upon a new and more practical stage of its career. On that day it was the privilege of a small and select party of guests to visit Brighton, Trinidad, at the invitation of the Trinidad Lake Petroleum Company, Ltd., and to witness the inauguration of the local petroleum industry by the Governor, Sir George Le Hunte, who, with due formality, turned the tap at the extremity of the pipe-line belonging to that company, and allowed the first Trinidad petroleum to be shipped on a commercial basis to flow into the tank steamer Prudentia, which, on the following day, sailed with a cargo of 3.800 tons of crude oil for Perth Ambov. New Jersey.

Passing now to the timber industry, an inspection of the forests in British Guiana was begun in 1908, when Mr. C. Wilgress Anderson was appointed forestry officer. A general survey of the forest resources is now being made, and botanical material for the identification or determination of the forest trees is being collected. Specimens of the various woods which are being cured will, in due course, be submitted to experts, whose views will be taken respecting their commercial value.

Mr. Anderson estimates that the forests of British Guiana cover 78,500 square miles of country, or about six-sevenths of the whole area of the colony. At present, however, the timber industry is confined to the more accessible parts, extending from the sea coast to the rapids on the large rivers, which prevent the transport of timber

by water from places beyond the tidal reaches.

The sea coast and the river estuaries are in most parts fringed with belts of Mangrove (Rhizophora Sp.), the bark of which is useful for tanning, and Courida (Avicennia nitida). Higher up the rivers Mora (Dimorphandra Mora), which is largely used for railway-sleepers, grows abundantly, while in the forests of the interior, Greenheart (Nectandra Rodiæi), Wallaba (Eperua falcata Aubl.), and Crabwood (Carapa guianensis Aubl.), are the trees of value which predominate and give their names to the several forests.

Of all the woods in the colony, Greenheart and Mora, both of which are included among the eight woods placed in the first class at Lloyd's, are the most valuable. The former is exceedingly tough and strong, and as it resists the Teredo or "ship-worm," it is much used for submerged works, such as wharves, piles, dock and lock gates, etc. Nansen's ship, the *Fram*, was built of this wood, and it is said that the *Discovery* of Antarctic fame was also made of it. Large quantities of this wood have been exported to Europe during the last eighty years or so, and when the

GUIANA'S GREENHEART

colony is opened up, the shipments of it may be expected to increase, as there are still large quantities of Greenheart untouched by the axe which are as yet inaccessible. Mora is even more plentiful, and as it never grows far from the banks of the rivers and creeks, and in low situations, it is more easily reached.

Two varieties of Crabwood (Carapa guianensis) are found, the red and the white. The former is largely used, locally, for building purposes and in the manufacture of furniture. The seeds yield the well-known "Craboil," and the bark is used for tanning. Crabwood is found growing throughout the forests of all the river valleys, and particularly on the low lying flat lands which are subject to inundation by high tides or heavy rains. It also occurs, to a lesser extent, in the more elevated and hilly country, and is felled chiefly by the aboriginal Indians.

There are several varieties of Wallaba, the chief being the soft (*Eperua falcata*) and the Ituri Wallaba (*Eperua Jenmani*). It is mainly used for house-framing, palings, vat staves, shingles (for roofs), charcoal and firewood. On the slightly elevated and hilly lands of loose white sand, Wallaba trees constitute about 40% of those of the forest. Shingle-making, in which only wood with a straight grain can be used, is confined to the Demerara and Berbice Rivers, and mainly to the lower reaches of the latter.

In addition to those already referred to above, Mr. Anderson mentions the following as being among the more valuable and handsome woods which are sometimes exported: Hard Woods.—Bullet Tree (Mimusops globosa), which is now only cut for special purposes, being of great value as the source of Balata to which reference is made elsewhere; Suradanni (Hieronyma laxiflora); Purple Heart (Copaifera Martii, var. publiflora); Locust or Simiri (Hymenaea Courbaril); Kakaralli (Lecythis Spp.); and

Hububalli. Medium Hard Woods.—Silverballi or Siruaballi (Nectandra Spp.), of which there are several varieties, the Yellow, Brown, Kariti, Yekuru and Mainap, all handsome grained woods with an aromatic scent; Warikuri or White Cedar (Tabebuia longipes) which is mostly used for paddles; and Determa (Nectandra Sp.) is well adapted for making corials or canoes. Soft Woods.—Simarupa (Simaruba officinales), Dalli (Myristic a surinamensis), and Futui or Phootee, which are used for lumber, making match-boxes, etc.

The various branches of the timber industry in British Guiana now consist of wood-cutting for (1) timber and lumber, (2) Wallaba-shingles, palings, staves, and

posts, (3) charcoal, and (4) fuel.

As has been shown in an earlier chapter, settlers originally went out to British Honduras for the sole purpose of cutting and exporting timber; and it was agreed that they should do nothing else. There were no Spanish settlers, or native inhabitants, to carry out agricultural pursuits. The negroes whom the settlers took with them were wood-cutters, and for nearly three centuries the Creole negro has been born to the woodcutting industry. Mr. Wilfrid Collet, the Colonial Secretary of British Honduras, has expressed the opinion that the negro of British Honduras is one of the finest wood-cutters in the world. The negro does not show any great aptitude for agriculture, and so for over 200 years the exports of the colony were practically confined to mahogany, cedar, and logwood. The price of logwood, however, fell, and so did that of mahogany and other timbers, though not to the same extent, and the difficulties of getting timber out increased. In the earliest days it could be obtained close to the river banks. As the most accessible places were cut out, it became necessary to go farther back, and haul the logs some distance to the river banks. But for the fact that nature renews the supply,

HONDURAS MAHOGANY

the mahogany industry must have come to an end before now. But the seeds are scattered by the wind, and fall in places where many take root. Where cutting takes place, trees are found of different sizes. Those of sufficient diameter are cut out and the other trees left. Cutting may cease in a particular area for any number of years from five to twenty-five, at the end of which trees will be found which have reached merchantable size, and are ready for the axe of the wood-cutter.

The timber industry of British Honduras is not at present open to much further development. What is needed is the adoption of a system of reafforestation; but the benefit of this would not be felt by the present generation. There is plenty of untouched mahogany in the country which can only be got at if means of transport are provided, which have hitherto not existed. It is probable, however, that any opening up of new country, and its settlement for agricultural industries, will bring good mahogany within sufficiently easy reach to enable it to be cut at a profit.

Attempts are now being made to work up a trade in the fine timber which at present covers three-quarters of the area of Dominica. There are many varieties of woods which undoubtedly possess a high economic value. Some are of very fine colour and texture, and would, doubtless, prove of great value to cabinet-makers. Experimental shipments of some of these woods have been made on a commercial scale, and hopes are entertained that a considerable demand will be created for this branch of the island products.

The exports of timber from British Guiana last year were 256,845 cubic feet, valued at £6,787, and of lumber 335,108 superficial feet, valued at £19,640. From British Honduras 7,371,835 feet of timber, valued at £89,579, were shipped in the latest year for which statistics are available.

Mention has been made in an earlier chapter of El

Dorado, the fabled city of gold, in the interior of South America, for which Orellana and Ralegh searched in vain. It was, no doubt, the belief in the existence of this wonderful place which prompted the first systematic attempt to find gold in the colonies which now form British Guiana. It is recorded that in 1720, an expedition with this object in view went up the Berbice River, and that in succeeding years, parties of adventurers explored the Essequibo, Mazaruni and Cuyuni Rivers but without success.

In 1863 a company, called the British Guiana Gold Company, which sent an expedition up the last-named river, was rewarded by the discovery of gold-bearing quartz at Wariri, on the right bank, at about 25 miles from its mouth. The ownership of the territory was, however, in dispute between Venezuela and this country,

and the attempt was consequently abandoned.

In the 'eighties, encouraging results were secured in the Essequibo and Cuyuni districts, and in 1884, gold figured for the first time in the colony's exports, with a modest 250 ozs. Mr. Frank Fowler, Commissioner of Lands and Mines, records that in 1886, alluvial washing for gold became a recognised industry in British Guiana. The exports of the precious metal rose rapidly until 1893-4, when high water—or gold—mark was reached, 138,528 ozs. being exported. As soon as it was known that there was really the precious metal in the colony in paying quantities, the usual gold fever ensued. There was a mad rush to the fields, small companies were formed on all sides, and the success which several of them achieved helped to increase the excitement.

In an admirable little pamphlet issued by the Permanent Exhibitions Committee of British Guiana, Mr. Fowler states that the gold-bearing areas are very widely distributed throughout the colony. Gold has been found in all the rivers with the exception of the Corentyne

GUIANA'S GOLD INDUSTRY

and the Berbice, and traces have even been found in the latter.

The districts of the colony where mining has been carried on are those adjoining the Essequibo River, and its tributaries the Potaro and the Konawaruk, the Mazaruni and its tributary the Puruni, the Cuyuni, the Barima, Barama and Waini Rivers in the north-west, and the upper Demerara; and a new field has recently been discovered on the Wenamu, a branch of the Cuyuni, and part of the boundary line between the colony and Venezuela. The gold from the Wenamu is very coarse, the overburden lying on the gravel being very shallow, and the pay-dirt deep and rich.

Professor J. B. Harrison, M.A., C.M.G., Government Geologist, who has made a geological reconnaissance of the gold-bearing areas of the colony, has stated that "the gold is found widely diffused in the districts occupied by the Archean rocks, but usually only in payable quantities near intrusions of basic rocks. The basic rocks belong to at least two periods: (1) those of the gneissose formation, probably originally gabro and diabase, but now quartz-diorite, epidiorite, amphibolite, or hornblende schist; and (2) the unaltered diabase, which is of later origin than the sandstone formation."

All the fields have proved of average value, and rich finds have been made in each, perhaps the most valuable field for its size being at "Omai," on the left bank of the Essequibo River, from which place over 95,000 ozs., equal to about 8,750 lbs. of the precious metal, has been obtained from an area of about 60 acres.

The greater portion of the gold obtained has been from alluvial washing, with the "sluice" and "tom," by hand labour. The "tom" is an open box about 8 inches by $3\frac{1}{2}$ inches by 15 inches deep, with an open screen affixed at one end. This box is hung on pickets driven into the bottom of the pit which has been dug in the gravel to be

worked, generally 14 to 20 feet square. Into the "tom" is thrown all the gravel dug out of the pit, and this is puddled against the screen with a constant stream of water brought in through the opposite end of the "tom." This liberates the gold, the fine particles passing through the screen and being caught in quicksilver in the "riffles" placed in a small box just below the end of the "tom"; the large nuggets remain against the screen and can be picked out by hand.

"Sluicing" is carried on in practically the same manner—in boxes about 12 feet long placed end to end, as many as six being used at one time. A strong stream of water is passed through the "sluice," into which the pay-dirt is thrown. The rush of water carries the mass along the length of the "sluice," and so does the cleaning work, and saves puddling, as in the "tom." The gold is caught in "riffles" placed all along the whole length of "sluice." The "sluice" has the advantage of enabling a larger area of ground to be worked with a comparatively smaller number of men than the "tom."

In both cases the boxes are all cleaned up at the end of the day's work, and the amalgam and spare quick-silver collected in a "battel" or "battea," a shallow conical wooden dish about 18 inches in diameter; the liquid quicksilver is poured off and the remaining amalgam is then placed in a flat iron dish on a fire and roasted until the mercury has volatilised. The gold then remains in the dish in a dull yellow mass.

Auriferous quartz has been discovered and worked successfully at the Peter's mine in the Puruni River, at the Aremu mine in the Cuyuni, and at the Barima mine, near Arakaka in the Barima. The Peter's mine started crushing operations in September, 1905, and up to the 31st March, 1910, obtained 39,017 ozs. of gold.

Dredging is also being successfully carried on in the

GOLD IN THE KONAWARUK

Konawaruk River. Four dredgers are now at work in this river, and from the beginning of operations in December, 1906, the Guiana Gold Company, Ltd., which owns them has obtained 11.946 ozs. of gold. Another Company is also successfully working a dredge on the Minnehaha creek, a tributary of the upper Konawaruk.

Hydraulicing work was carried on for three years at Omai, during which period 27,123 ozs. of gold were obtained. Similar work is now being carried on at the

"Tassawini mine" on the Barama River.

The following is the amount of gold recorded at the Department of Lands and Mines since 1884:

From	1884 to	1905	 1,756,630	ozs.
	1905-06		 94,363	ozs.
	1906-07		 85,505	ozs.
	1907-08		 67,209	ozs.
	1908-09		 73,655	ozs.
	1909-10		 64,830	ozs.
	1910-11		 55,543	ozs.
		Total	 2,197,735	ozs.

The total value of the gold exported from British Guiana since the inception of the industry has amounted

to £7.810.075.

Fine gold occurs in places, but as a rule the gold saved in the colony is coarse and nuggetty. The largest nuggets found have been one of 333 ozs., from the Five Stars district in the Upper Barima River, and one of 111½ ozs., from Tiger creek, Potaro.

Diamonds are also found in the colony on the upper Mazaruni, and in the country round the Kuribrong and Cuyuni Rivers. The stones, which are of good quality, and run on an average from 10 to 15 carat, are obtained by washing the gravel in the same manner as that in which it is washed for gold. The same pamphlet to which reference has been made, gives the following

figures of the production of diamonds for the last five years:

1905-06	 	4,097 5	carats.
1906-07	 	$4,661\frac{3}{8}$,,
1907-08	 	$2,121\frac{1}{16}$,,
1908-09	 	$5,617\frac{5}{8}$,,
1909-10	 	$7,180\frac{13}{16}$,,
1910-11	 0	$3,009\frac{1}{16}$,,

It may seem an anomalous state of affairs that though the waters surrounding the West Indian islands teem with fish, quantities of salt fish should be imported into the West Indies every year. Last year, the imports of that commodity were valued at considerably over £450,000. Attempts to organise and develop the local fisheries, on a large scale, have not, however, so far, met with success. In 1896, as the outcome of persistent representations made by a Mr. Edward M. Earle, who was satisfied that Jamaica could be made, to a large extent, self-supporting as regards its fish supply, the Legislative Council of the island voted an annual subsidy of £750 towards the furtherance of that object, making it a condition, however, that a certain quantity of fresh fish should be offered on the local markets at a minimum rate.

The Caribbean Sea Fisheries Development Syndicate was formed in England in the following year, to conduct preliminary experiments prior to the formation of a larger concern in the event of its proving successful. The syndicate chartered the steam trawler *Capricornus* and operations were begun off Jamaica towards the end of January, 1898, and continued until the middle of March.

It very soon became apparent that the hopes of the promoters of the enterprise were doomed to failure, and at the close of the first season the directors of the syndicate were forced to admit that the results did not warrant any further expenditure. From the Log of the ss. Capricornus, which was published in the Journal

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of the Institute of Jamaica, it seems that the very first time the trawl was lowered and hauled up again, it was found to be torn to pieces. The heavy growth of corals on the bed of the sea had not been taken into account, and day after day, the trawl was ripped up by the corals, what remained of it containing more sponges, coral, sand and shells, than fish. What proved another trouble was that the fish did not appear to exist in any numbers near the sea bottom.

When drift nets were used, the results were scarcely less disheartening, for the bodies of such fish as they contained, had been bitten off by sharks and barracoutas, which were, no doubt, delighted at having their prey

caught for them, and only the heads remained.

Mr. J. E. Duerden, the then Curator of the Museum of the Institute of Jamaica, summarised the results in a paper which he read before the Agricultural Conference in 1901. It would seem, he said, that the endeavour to establish a trawling industry on the large scale attempted would not meet with success on account of the coral nature of the greater part of the sea-floor, rendering the use of a trawl impossible, and owing, also to the general scarcity of bottom fish. "Long line fishing, with two, three, or more miles of line, with several thousand hooks, would evidently never succeed, owing to the presence of sharks and barracoutas, which would bite off the bodies of the fish caught, and owing to the lines becoming fouled by the coral. The seine-net, so long employed in Kingston Harbour and at other points round the coast, vielded little more than sufficient fish to employ the few men engaged in it. Fish-pots were sufficiently successful in the hands of local fishermen: but owing to the coral nature of the sea-floor, their use must be always limited. In the circumstances we recommend a development of the fisheries on less pretentious lines." He added that a small steamer, working more

fish-pots than at present, an increase of short lines, and of trawling and shrimping in such places as Portland Bight and Kingston Harbour, might yield sufficient remuneration, if carried out on economical lines, and would afford the much needed, more adequate supply of fresh fish.

The principal fishing stations in Trinidad are Carenage (S. Pierre and L'Anse Coco) and Corbeau Town, which contribute towards the fish supply of Port of Spain, and San Fernando, which helps to supply the Naparima district with fish. It is of interest to note that a small colony of Italian fishermen from the Mediterranean conduct a modest trawling business off the island. The principal fish caught in the waters round the colony are Grouper, King fish, Mackerel, Salmon, Red fish, Cavally, Mullet, Prawns, etc., but no record is kept of the quantity. Small vessels for the fishing industry are built locally.

Positively only one schooner is sent out from Georgetown for deep-sea fishing. The principal fish caught are the Red Snapper, which reaches a weight of 30 or 40 lbs., and Groupers, with an occasional Dolphin. The Portuguese own a fair number of boats which fish off the shore for Gilbacker, the sounds of which are sold as fish glue, of which 18,062 lbs. weight were exported in 1909-10. The flesh of the Gilbacker finds a ready sale among the Creoles, who value it as a food, and it is not unlike Sturgeon in taste. At every village on the east and west coasts fishing boats are stationed.

According to the colony's Blue-book, the fish most plentiful during a year's inspection of the market was the Bashaw, three or four species of which are found. Next in order comes the Cuirass, a so-called skin fish, which is one of the Siluridae. The Querriman (Mugil brasiliensis), the Gilbacker (Silurus Parkeri), so-called Flounders, (Solea gronovii), the Snook (Centropomus undecimalis), Mullets (Mugil Liza), three or four kinds of Porgies (Stenotomus sp.), Hassars (Callicthys littoralis),

BRITISH GUIANA'S FISHES

Jewfish (Plectropoma chlorurum), Butterfish (which are not unlike Whiting), Snappers (Naeomænis), Garfish (Belone), Shad (Clupea), Cuffum (Tarpon atlanticus), Pacuma (Batrachus surinamensis), Four-eyes (Anableps tetrophthalmus), Houri (Macrodon intermedius), and many species of Siluridae. Three species of crabs, and four of prawns and shrimps are common. The amount of shrimps consumed in the colony is enormous and must run to tons yearly. The coolies use them in their curries and the black people in a dish known as "foo-foo."

The above mentioned are mostly sea and estuarial fishes; but the rivers of the interior also abound in many fine species. The largest perhaps is the Arapaima gigas. There are various species of Perai (Serrasalmo), and Leukanani (Cichla). The Pacu (Myletes pacu) is a valuable food-fish to the Indians as are also the Cartabac (Tetragonopterus latus), the Haimara (Macrodon trahira), Moracot (Myletes), Biara (Cyonodon scombroides), Yarrow, Dawalla (Hypothalmus dawalla), Tubuguri (Prochilodus insignis), and Kurumai (Chalceus Macrolepidotus). The best sporting fishes of the colony are the Cuffum or Tarpon, Leukanani, and Biara, all of which will take fly or spoon eagerly.

Grouper, Flying-fish, Snappers, Bream, Dolphin, King fish, Albacore, and many other varieties make their appearance in the local markets of Barbados at different periods of the year, and about 200 boats are employed in the flying-fish business. These small vessels are about 16 feet in length, and each is manned by two men and a boy, who become very skilful in navigating the frail craft through the coral reefs which nearly surround the island. The owner of the boat gets a third of the profits of each day, and the balance is divided among the "crew." During the hurricane months the flying-fish fleet, whose principal headquarters are at Speightstown, is laid up.

There is also a small whaling industry which was

conducted by two boats, employing about twelve men in 1910-11. In that year about twenty-nine barrels of whale oil were exported, valued at £58, from whales caught off the coast.

At the end of 1903, an attempt was made by the Imperial Department of Agriculture to establish a fish-curing industry in Barbados. Up to the middle of March, 1904, 81,000 flying-fish, besides a quantity of other fish, had been purchased at the factory, and 135 barrels of pickled and salted fish were disposed of. At the close of the first season a small profit was shown, but the experiment did not prove successful over a series of years.

In the Leeward Islands there is no organised fishing industry. Fish are caught to some extent for local consumption, but not for export, except in the Virgin Islands, from which fish are sent to the neighbouring Danish island, St. Thomas. The principal fish caught are King fish, Barracouta, Margate, Mullet and Snapper. Some Turtle are exported. A number of canoes and small boats are also employed among the Windward Islands in fishing, and a small quantity of fish is caught for local consumption, but no record of it is kept. The principal fish seen in the markets are Grouper, Cavally, Hind, Whiting, Jacks, Spanish Mackerel, in addition to those mentioned above.

The principal manufacturing industry in the West Indies is, of course, that of sugar and rum. There are, however, also upwards of seventy local manufactories in Jamaica the most numerous being those connected with the tobacco and tanning industries. The largest tobacco factory in the island is one in Kingston, owned by the Jamaica Tobacco Company. It employs 120 men and about ninety girls, and is capable of turning out 30,000 cigars and 600,000 cigarettes daily. A factory owned by Messrs. B. and J. B. Machado in the same town, has an

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electric motor machine for making cigarettes, and can produce 30,000 cigarettes and 10,000 cigars daily

The output of the tanneries, of which there are upwards of fifteen in Jamaica, most being in Westmoreland and St Elizabeth, varies from a few hundred pounds to

6 tons of tanned leather per annum.

There are ice factories in Kingston, Port Antonio and Montego Bay, and the first named town has also the advantage of possessing a complete cold storage and refrigerating plant. Aerated waters, which are a necessity in tropical climates, are made at nine factories, four of which are in Kingston, and ale and porter are also manufactured locally, one factory producing 1,700 gallons of beer last year.

Near Spanish Town in St. Catherine's, there is a factory owned by the West India Chemical Works Company, where Logwood extracts are made by a process, the secret of which is zealously guarded, and there are also factories in which banana flour, essential oil, coffee, commeal, cassava starch, etc., are prepared for market.

Since 1878 matches have been manufactured in Kingston by the Jamaica Manufacturing Company, Ltd., which employs from 200 to 400 persons, and can produce

100,000 gross of boxes of matches in a year.

Leaving out of consideration the sugar factories, rice mills, and saw mills, the purely local manufactories in British Guiana consist of a biscuit factory, four cacao manufactories, two cigar manufactories, two tanneries, eleven dairies, five oil, and one oil and fibre mills, and one match factory. Now, Bryant & May have also entered the field.

In Trinidad, there are a good many factories connected with more or less local requirements. Among them are factories for the manufacture of ice, matches, carriages, chocolate, fruit syrup, coco-nut oil. There is also a brewery, while Angostura bitters are manufactured on an

extensive scale for local consumption and export in Port of Spain. The manufacture of these world-famed bitters was originally conducted at Ciudad Bolivar in Venezuela, but the unsettled state of that country prompted Dr. Siegert to transfer his plant to Trinidad.

The local manufactories in Barbados include two manure and chemical works, gas and electric light works, and ice, biscuit, tobacco and cigar factories, besides a

brewery.

Belize, British Honduras, can boast of an ice factory, an electric light factory, and a steam saw-mill. Cigars and mocassins are also manufactured in fair quantities.

Beyond the above there are no manufactories to speak of in the West Indies. The question is often asked, Why are not sugar refineries erected in those colonies? The answer is that in most localities there is barely sufficient labour already for the sugar factories. Besides, the cost of coal, and in most places of charcoal, would render competition with refineries elsewhere extremely difficult. Generally speaking, the West Indies are, as has been shown, agricultural, and no increase in manufactories—except in those devoted to handling agricultural products—is likely. When the great Kaieteur Fall in British Guiana is harnessed and use is made of its immense water-power things may be different in that country.

CHAPTER X

OPENINGS FOR SETTLERS AND INVESTORS

THE West Indies offer many favourable opportunities for the profitable investment of capital, and that there are fortunes to be made in the development of the agricultural resources of those colonies, and by the construction of railways and hotels and—notably in British Guiana—the utilisation of their water power, is certain.

So far as large undertakings are concerned, a greater degree of success has in recent years attended American and Canadian, rather than English, enterprise in the West Indies. The great banana industry, for instance, has been built up by American capital, the electric tramways are financed by Canadians and Americans, who were also the first to ship petroleum on a commercial basis from Trinidad.

Sir Sydney Olivier, Governor of Jamaica, in his report on the Blue-book of Jamaica for last year, touched on this subject. Referring to the extension of the banana industry with American capital, and also with local capital by syndicates and individuals, he said: "These developments are, however, I regret to say, not very frequently due to capital or personal ability introduced direct from Great Britain, although several opportunities have recently been offered to British investors to take shares in large undertakings for planting in this island." He complained further that the directors of certain British companies and syndicates in the island did not show that

grasp of sound business methods, and that appreciation of the conditions to be coped with, which enabled companies with American capital continually to extend their private interests in he island.

Though the West Indies are unsuitable for English immigration in the general sense, white men being unable to perform manual labour in the tropics as they can in, for example, Canada or Australia, they form a very favourable field for young and energetic men with a moderate

amount of capital.

Except in the civil service, the stores or shops, or as overseers on sugar estates, there are no opportunities for men without capital, and it would be in the highest degree impolitic for anyone to go out to the West Indies on the chance of finding employment unless he had sufficient money to enable him to live there for a few months and to cover the cost of a return passage. There is nothing more distressing than to see a white man stranded in the tropics. He drifts to the rum shops and soon goes under.

The position of overseer on a sugar estate is much sought after, for though the pay is small at the start—it varies from £30 to £50 per annum "all found"—an overseer may, if he shows ability, rise to be manager or attorney of a group of estates, with a salary running

into four figures.

The life is a hard and rough one, and the overseer is necessarily exposed to all sorts of weathers. At five in the morning he is awakened by the night watchman, and after his morning "coffee" as the first meal is called, he has to turn out the labourers and superintend their work, with a brief interval for breakfast, until 5.30 p.m., when he comes home and probably works at his pay lists until dinner. On one or two afternoons in the week, when crop is not in progress, he can indulge in lawn-tennis, and on several estates a billiard and reading-room is

COST OF A CACAO ESTATE

provided, which adds to the amenities of the overseer's existence.

For settlers the principal essentials for success are, as has been indicated above, youth, energy and capital. To this must be added a "mens sana in corpore sano," for a new-comer to the tropics is faced with temptations. The minimum capital required is £1,000, though in exceptional cases, some settlers start with less. Much depends on the individual. The usual custom is for the young men to learn the rudiments of the cultivation of fruit, cacao, coffee, etc., and to gain experience, on the estate of a practical planter. For this a premium of £40 is usually asked, making with the cost of board and residence a total expenditure for the year of £100.

Those to whom the epithet "young" can no longer be applied, would be best advised to purchase an estate as a "going concern," as many of riper years do not care to wait until a new property comes into bearing, though it must not be overlooked that a new estate, even in its early stages, increases in value year after year, even though it is not producing crops, and soon acquires what one might call a "surrender value."

The minimum capital required for establishing a cacao estate of 100 acres in Tobago is £2,000; but even with that sum the settler must exercise the most rigid economy for the first eight years, and only in the tenth year will he make any profit, and that a small one. It will, however, then rapidly increase, till in the fifteenth and subsequent years he will be clearing £600 a year.

Mr. Douglas Young, the Administrator of Dominica, estimates that a practical man with a capital of £3,000 should be able to take up 200 acres of Crown lands there in a selected area, and to clear, plant and cultivate fifty acres of it for a period of seven years, at the end of which he would be possessed of a valuable estate yielding

a steadily increasing income. As his clearing began to give some return before the seventh year, he should utilise the profit in the further development of the 200 acres.

A general idea of how a settler with a capital of about £3,000 might establish himself in Dominica may be

gathered from the following statement:

	Cacao.	Limes.						
	£	£						
Purchase of 200 acres of Crown land and								
fees	130	130						
Clearing, planting, and cultivating fifty								
acres	1,400	1,250						
Cacao house and drier	150							
Mill, two-tayche battery, and buildings		300						
Small dwelling-house and out-offices	250	250						
Labourers' houses	100	100						
Living expenses for seven years, including								
groom and house servant, at £100 per								
annum	700	700						
Incidentals at £30 a year for seven years	210	210						
	£2,940	£2,940						

At the end of the tenth year the settler would be getting a fair return from his investment, and after fifteen years

he should be clearing £1,000 a year.

There are still many thousands of acres of Crown lands in the West Indies not yet alienated, which can be purchased on very reasonable terms, while in such islands as Barbados, Grenada, Antigua, St. Kitts, Nevis and Montserrat, where the land has long since been all taken up, estates occasionally come into the market.

In Jamaica, Crown land in small quantities from five to fifty acres can be purchased for £1 per acre, the payment being spread over ten years, A refund, or remission of one-fifth of the purchase money is made to any purchaser who within ten years brings one-fifth of his acreage into good bearing in kola, coffee, oranges, or other permanent crop-producing plants. Land is now only sold in

CROWN LANDS OBTAINABLE

places where roads exist, and freeholds and leases of lands of larger area are put up to public auction from time to time.

Out of a total area of about 1,120,000 acres in Trinidad, there are still 546,800 acres of uncultivated Crown lands unalienated, of which at least 187,000 are cultivable and include some of the best land in the colony. Under the Crown lands regulations, the upset price of rural lands is 50s. per acre, including the cost of survey and fees. Town and village lands, and specially proclaimed rural lands, are periodically put up to auction. In Tobago, which is a ward of Trinidad, the Warden is empowered to make special terms with anyone requiring over 100 acres of Crown lands; and these terms naturally depend upon the extent of the purchase and the rapidity with which the land is cultivated with cacao, coffee, rubber, etc.

Coming now to the Windward Islands, Crown lands in St. Lucia, which constitute almost half the island, may be acquired from the Government at a cost of 20s. per acre, the payment of which may be extended over ten years. Survey fees and the first instalment of purchase money (one-fifth or one-tenth) must accompany applications for purchase. The survey fees may be estimated at £5 5s. for thirty acres, £7 for fifty acres, and £11 for 100 acres. The most fertile Crown lands near towns and villages have naturally already been occupied, but in the interior, large tracts of unappropriated lands are still available.

The Crown lands in St. Vincent, which can be purchased for from £1 to £3 per acre, are situated in the centre of the island and are estimated to comprise rather more than one-third of the whole area, being entirely surrounded by the estates and other alienated lands which form a belt of varying depth round the island from the sea-coast inwards. The Crown lands have, consequently, a considerable range of altitude, which may be put down at from 200 or 300 feet to 4,000 feet. Whilst the mountain

peaks and ridges themselves are not fit for cultivation, some of the intervening mountain slopes and valleys, at present clothed with rich virgin forest, offer opportunities, when combined with a suitable climate and rainfall, for the cultivation of certain products. About seventeen years ago the Government started a scheme for selling lands in small blocks of from five to twenty acres to the peasantry on an instalment system, and a good deal of the land has been alienated in this way.

In the Leeward Islands, it is only in Dominica and the Virgin Islands that Crown lands are available. Almost the whole of the land along the sea-board in Dominica is private property, and is laid out in a succession of valuable cacao and lime estates. Until about ten or twelve years ago, the whole of the interior of the island, though known to comprise very fertile land suitable for all kinds of tropical products, remained practically unexplored and covered with primeval forests. This neglect was entirely due to the fact that the interior, owing to the absence of roads, was inaccessible. Thanks to an Imperial grant, a large area of these lands has now been made available, and a road has been constructed right into the heart of the island. Though the Imperial Road, as it is called leaves much to be desired in the matter of gradients. bridging, etc., being in fact—in spite of its high sounding name—little more than a mule track it has served to open up a fertile district known as the Layou flats, where many new estates have been established. Districts having an altitude varying between 1,500 and 3,000 feet are well adapted for the cultivation of oranges, grape-fruit, rubber, nutmegs, cardamoms, and other spices, while the lands which lie below 1.500 feet are considered to be more suitable for cacao, limes, oranges and pine-apples.

It is estimated that the Crown lands comprise about 120,000 acres. They are now being sold at 10s. per acre, the payment of the purchase money for blocks exceeding

CROWN LANDS IN GUIANA

100 acres being spread over three or four years. The survey fees are extra, and average 2s. 6d. an acre for small blocks. The Crown lands for the most part consist of ridges and valleys; the slopes are suited to tropical agriculture and in the centre of each valley a stream of excellent water is always found.

As regards Virgin Islands, there are hundreds of acres of land, suitable for Sea Island cotton growing, in Virgin Gorda, which can be leased or purchased from the Government. The island suffers, however, from a lack of native labour. The unallotted area of Crown land is estimated at 88,900 square miles, a great portion of which is covered with forest. Land can be purchased at almost nominal rates, varying from 4s. 2d. to 2s. 6d. per acre, for areas over 260 acres in extent.

British Guiana is essentially the country for the larger capitalist. Of the 52,777,000 acres of land in the colony, 36,401,000 acres are forest-covered, hilly and rolling lands. Of the balance it is estimated that 10,880,000 acres are easily accessible, and fully 9,000,000 of these are unalienated from the Crown. Much of this land is suitable for rubber cultivation and for the growth of other tropical products.

The terms and conditions under which Crown lands can be obtained for the cultivation of rubber are liberal, and the Government offers every encouragement to persons or companies, of proved financial standing, desirous of cultivating this crop.

They are summarised as follows by Professor J. B. Harrison and Mr. F. A. Stockdale in *Rubber and Balata in British Guiana*, which also contains the full terms and conditions. Leases can be obtained for areas of any size for the purpose of cultivating rubber thereon for a term of ninety-nine years. No rent is payable during the

¹ Rubber and Balata in British Guiana, By J. B. Harrison, C.M.G., etc., and F. A. Stockdale. Georgetown, Demerara.

first ten years, an annual rental of 20 cents (10d.) an acre is charged from the eleventh to the fifteenth years and an annual rental of 50 cents (2s. 1d.) an acre during the remainder of the lease.

The lessee is required to plant one twenty-fifth part of the land with rubber trees with an average of not less than sixty trees to the acre each year, and is required to pay a royalty of 2 cents (1d.) per lb. on all rubber and balata collected during the first ten years, whether from indigenous or cultivated trees. After the expiration of ten years, if the conditions of the lease have been complied with, the lessee has the right to purchase the land at \$4 (16s. 8d.) per acre, if he so desires.

The fees payable for obtaining a lease are as follows:

Application fee		\$5.00	= 1	(1 0s.	10d.		
Survey fees—							
Areas up to 500 acre		.30	=	1s.	3d.	per	acre.
Each acre above 500	0 and						
up to 1,000 acres	s	.20	===				acre.
Each acre above 1,	,000	.10					acre.
Registration fees	, · · ·	16.20	1000	£3 7s.	. 6d.		

The fees must be deposited with the application for the land.

Crown land for agricultural purposes can be purchased freehold in areas of from twenty-five to 100 acres at \$1 (4s. 2d.) per acre or obtained under Licence of Occupancy for any term not exceeding twenty-one years, on the condition that one-fourth of the land is cultivated or beneficially occupied within two years from the date of the issue of the licence. The cost of a licence is \$5.00 (20s. 10d.) filing fee on application, survey fee of 30 cents (1s. 3d.) per acre, and an annual rental of 5 cents (2½d.) per acre. Leases of large areas not exceeding 2,000 acres, can be obtained for any term up to ninety-nine years at a cost of \$5.00 (20s. 10d.) for application fee and survey fees of 30 cents (1s. 3d.) per acre up to 500 acres, at 20 cents

WOOD-CUTTING LICENCES

per acre above 500 acres and up to 1,000 acres, and at

10 cents (5d.) per acre above 1.000 acres.

Wood-cutting licences for areas up to 2,000 acres can be obtained at the following cost: (1) Filing application which must be addressed to the Commissioner of Lands and Mines \$5.00 (20s. 10d.).

(2) Inspection in lieu of survey, which is expensive and not necessary if the tract is bounded by creeks or other well-defined limits, or when the applicant marks out the boundaries himself by a cleared path, according to area from £4 to £8 (\$19.20 to \$38.40).

(3) Rental \$5.00 (20s. 10d.) per annum for areas up to 500 acres and \$10 (£2 1s. 8d.) per annum for any area

greater than 500 acres.

The restrictions are not onerous, but no Greenheart tree is allowed to be cut which will square less than 10 inches, and no Balata tree must be cut without permission from the Commissioner of Lands and Mines. A royalty of 1 cent (1d.) per cubic foot is payable on timber the specific gravity of which is not more than 0.7, and 1 cent (1d.) per cubic foot on timber of greater specific gravity than 0.7.

For those settlers who must have quick returns, the cultivation of bananas in Jamaica or of cotton in St. Vincent, affords perhaps the best openings, but the establishment of a cacao, rubber or lime estate in one of the islands particularly adopted to those forms of cultivation, will probably be found the soundest form of investment in the long run. Patience is, however, required for plantations of the more permanent crops, which take many years before they come into bearing. Thus cacao requires five years before it reaches the productive stage, rubber six years, coffee five years, limes four years, oranges six years, and so on, but when the bearing or, in the case of rubber, the tapable, stage is reached, the profits are large, and more than compensate for the weary years of waiting.

In British Honduras there are at present about 1,900,000

acres of unalienated land which can be acquired on favourable terms.

The Government owns large quantities of land in the Toledo, Stann Creek, and Cavo districts, and smaller quantities in the other districts. Sales are made on condition that a certain area is put under cultivation. and an indefeasible title for the whole area purchased is not given until the conditions have been carried out. Failure to comply with the conditions does not involve a forfeiture of the whole area, but a forfeiture in proportion to the failure. Thus, if the purchaser of 100 acres undertakes to put fifty acres into cultivation within seven years, and at expiry of that time has only put in thirty acres, he will receive an indefeasible grant of the thirty acres actually cultivated, and of another thirty acres selected by the Government from the same block. from this, the Government will, from time to time, give a purchaser indefeasible grants in proportion to the amount of cultivation, so that the cultivator will always. when he requires financial assistance, be able to offer a security equal to the amount of his operations.

The price of land, and the condition under which it is to be sold, varies according to locality and circumstances.

If the land is within a mile or so of a railway, or near a town, it will probably be stipulated that at least one-third must be cultivated within three years, or one-half within seven years, before an indefeasible grant is given. Elsewhere so large a proportion will not be required. If land is wanted for grazing, conditions can be made for the keeping of so many head of cattle on the land during a fixed time. If land is wanted for extracting the natural products of the ground, stipulations will be required that at least a certain quantity shall be extracted. In every sale the Government must be satisfied that the purchaser means to use the land, and does not merely

HURRICANE INSURANCE

purchase with a view to being able to hold out at some future time for a large price from someone else.

The Land Law also permits the Governor to make free grants of twenty acres of land to immigrants who agree to cultivate it.

Licences to cut mahogany cost \$5 (20s. 10d.) a tree, cedar \$4 (16s. 8d.) per tree, logwood \$2 (8s. 4d.) a ton, pine 25 cents (1s. 0½d.) a tree, other trees 10 cents (5d.) and upwards, firewood free if for personal use, to collect india-rubber 10 cents a pound, sarsaparilla 2 cents (1d.), and sapodilla gum 2 cents.

"But what about hurricanes and earthquakes?" a nervous investor in the West Indies might ask. Such visitations are fortunately comparatively rare even in the tropics in any particular spot. Besides, it is now possible to insure against loss arising from them and they are now, in consequence, far less dreaded than they used to be by the agriculturist, who from July to October used to be constantly watching the tell-tale barometer.

A scheme for the protection of planters from the effects of cyclones was first put forward by Sir (then Mr.) Hesketh Bell, Administrator of Dominica from 1899 to 1906, and it was generally "licked into shape" and put into practice by Messrs. Henry Head & Company, of Lloyd's, one of whose partners paid a visit to the West Indies in this connection.

This firm made special arrangements with the underwriters for the insurance of buildings and their contents and estates, against damage or loss from gales, cyclones, floods, earthquakes and similar convulsions of nature.

The rates for buildings vary very much according to their construction and value; but lime and cacao trees can be covered at a premium of 40s. per cent., the underwriters returning 5s. per cent. on the expiration of the policy, when no claim has been made. Claims are paid in full in the event of damage, provided it amounts to

5 per cent. of the total value. The underwriters accept any reasonable value which the planters choose to put upon their trees, but require to be informed approximately as to the number of trees planted to the acre. It is not necessary to insure the whole of an estate, provided that a clear distinction can be made between what is insured and what is not. Where cultivation is insured, buildings on the estate must also be covered, but, for the purposes of premiums and claims, the buildings and cultivation are treated as separate insurances.

Coco-nut trees and crops can be covered, in conjunction with the buildings, at the scheduled rates for the latter, and a premium of 1 per cent. for the trees and 1½ per cent. for the crop. In the case of the trees, underwriters would be liable, in the event of damage, for the excess of 5 per cent. of the total value, each plantation being treated as a separate insurance, and in the case of the crop, they would be liable for the excess of 10 per cent. of the value. Sugar-canes are insurable at about 30s. per cent., and in the case of cotton, special terms are quoted during the hurricane months, the value for the purposes of insurance being taken at £10 per acre.

This scheme has, unfortunately, not yet been extended to banana trees; but as these yield a crop within twelve or fourteen months after planting, the loss is not so serious when they are blown down as it would be in the case of, say, cacao trees, which take many years to reach maturity.

The rates for earthquake risks vary very considerably, from as much as about 15 per cent. for buildings in Jamaica, to 2s. 6d. per cent. for those in Barbados, where the risk is small. Special terms are given for new buildings such as have lately been erected in Kingston, on the reinforced concrete system.

Planters who are determined to be absolutely on the safe side can take out a comprehensive insurance policy for all the above-mentioned risks which can be covered under

THE "CONTRACT SYSTEM"

a single policy if desired. In cases where a combination of risks such as gales and hurricanes, and earthquakes is covered, the underwriters make a special reduction

of about 10 per cent. in the premium.

In the West Indies an interesting system of establishing cacao plantations prevails. It is known as the "contract system." The land is given out to contractors in parcels of from two to five acres for a term of five years. During that period, the contractor has entire possession of the land, cultivates ground provisions on it, reaping them for himself, and plants cacao on it. At the expiration of the contract, the trees are counted, and a fixed price, usually 1s., is paid for each full-bearing tree, 6d. for each tree not full bearing, but over three years of age, and 3d. for each tree between one year and three years. The system is regulated by Agricultural Contracts Ordinances, and there is generally a statutory form of contract of which the following, established under Ordinance 67 of Trinidad and Tobago 1889, is a typical example:

In the Matter of "The Agricultural Contracts Ordinance, 1889."

Statutory Contract made this day of 1
between A. B., of (hereinafter called the Owner) and C. D., of (hereinafter called the Contractor), for extending the cultivation of the Estate, in the Ward of in the Colony of Trinidad.

IT IS AGREED AS FOLLOWS !

1. On the signing of this contract the owner shall deliver to the contractor possession of acres of land or thereabout, bounded on the North by lands of and on the South by lands of and on the East by lands of and on the West by lands of being part of the said Estate for the space of years,

Estate for the space of years, computed from this date (which shall hereafter be called the commencement of this contract).

- The contractor shall commence to cultivate within one month from the date hereof, or in default, the owner may proceed to recover possession of the land under contract.
- The land shall be cultivated with cacao, nutmeg, orange or lime trees, tobacco or other product (as the case may be).
- Within days from such delivery, the contractor shall clear, burn and prepare the said acres of land for planting.
- 5. Within days from the land being so prepared the contractor shall plant the whole of such land (in cacao or whatever else required) in a regular and husbandlike manner, such trees to be planted at feet by

feet and immortels at feet by feet (add here the different things to be done by the contractor, each clause being separately numbered).

- The contractor shall not plant any rice (or whatever else may be objected to) nor more than one crop of corn on the land, without the consent in writing of the owner being first obtained.
- 7. At the termination of this contract (or whatever the terms or manner of payment may be) the owner shall pay to the contractor the sum of cents for each healthy bearing tree on the said land, and (add whatever price may be agreed upon for supplies and for trees not bearing) the contractor shall deliver possession of the said land to the
- owner.

 8. The contractor shall have the full benefit of all provisions growing on the said land until the determination or cancellation of this contract.
- 9. (Add whatever other benefit the contractor is to derive.)
- N.B.—The foregoing can be varied as circumstances may require.

 IN WITNESS whereof the said owner and contractor have hereunto set their hands in the presence of

A. B., Owner.

E. F.

Stipendiary Justice of the Peace or Warden or Officer appointed in that behalf.)

C. D., Contractor.

As the case may be.

CHAPTER XI

LABOUR AND IMMIGRATION

When the West Indies were first discovered, the Greater Antilles were peopled by Arawaks, a mild and timid race of Indians, which soon succumbed to the oppressive treatment meted out to them by the Spaniards, who forced them to work on the plantations and in the mines

of Cuba and Hispaniola.

· Bryan Edwards estimated the number of the aborigines to have been about three millions, differing from Las Casas, who placed it at six millions. Dr. Robertson. the author of the American History, admitted that in the short space of fifteen years, subsequent to the discovery of the West Indies, the Spaniards reduced the natives of Hispaniola from one million to sixty thousand. The Spaniards distributed the unfortunate people in lots. compelling them to dig in the mines and treating them with the greatest cruelty until death put an end to their sufferings. Those who resisted or tried to escape were hunted by dogs. Peter Martyr relates that it was a frequent practice of the Spaniards to murder the Indians for sport, or to "keep their hands in use." Wagers would be made as to who could most dexterously decapitate a man at a blow, and Bryan Edwards records in his history 1 how some more zealous than the rest would force their miserable captives into the water, and after administering to them the rite of baptism, would then cut their throats to prevent their apostasy, and commit still worse excesses of a blasphemous kind.

¹ The History, Civil and Commercial, of the British Colonies in the West Indies. By Bryan Edwards, Esq., of Jamaica. London, 1793.

The warlike Caribs who inhabited the islands of the Lesser Antilles were not so easily stamped out. For years they prevented the progress of colonisation, and down to the end of the eighteenth century they gave trouble by repeated risings which were only suppressed

at a cost of many lives and much money.

To meet their requirements for labour, the Spaniards at first despatched the inhabitants of the Canary Islands, besides Jews from Majorca and Southern Spain, to Hispaniola, Cuba and Porto Rico, and this was followed by the introduction into those islands of negroes from Spain and Portugal who had been imported into those countries by Portuguese merchants. The first contingent arrived in 1503, and soon after 1510, negroes were imported by the Portuguese direct from Guinea into the West Indies.

In 1517 Las Casas, Bishop of Chiapa in Hispaniola, visited Spain to protest to Charles V against the manner in which the native Indians were being treated, their numbers having been reduced in twenty years from a million to sixty thousand, and he himself proposed the introduction of the hardier West Africans, but Charles V had already given licences to Flemish Courtiers to draw upon that source of supply for the West Indies.

The slave traffic was made a monopoly in Spanish America, the "Assiento," or Assent, being necessary before anyone could engage in it. Eventually the Assiento was given to contractors, who found the slave trade an exceedingly profitable business. They appointed sub-contractors, and it was in the capacity of one of these that Sir John Hawkins embarked upon the business in 1662, to be followed by Sir Francis Drake six years later.

Towards the end of the sixteenth century the Assiento passed to the Dutch. The French held it in 1701, and by the Treaty of Utrecht it was awarded to the English, who held it until 1739. The South Sea Company to whom

A YOUNG JAMAICAN



THE "MIDDLE PASSAGE"

it was given, was pledged to pay a royalty on every slave imported by them into the Spanish West Indies, and it was agreed that the King of Spain should receive one quarter of the net profit. The monopoly did not now pay, however, and a claim for £68,000 being preferred against the English Company and not being met, war was provoked.

By the treaty of Aix-la-Chapelle in 1748, the Assiento was renewed for four years, but it was finally annulled in 1750, on the payment by Spain of £100,000 as

compensation.

In the eighteenth century the slave trade was conducted mainly by the merchants of Liverpool and Bristol, but

also to a lesser extent by those of London.

The source of supply was still the west coast of Africa, and the masters of the slavers would resort to any expedient to fill their vessels with their living cargo. Most of the slaves were simply kidnapped; others were purchased from the princes who had already made them prisoners of war, for hostilities were frequent on the coast, being, it is alleged, provoked by white emissaries.

The horrors of the "middle passage," as the voyage from the West Coast to the Caribbean was called, have frequently been described. The slaves were "accommodated" 'tween decks, a space of 6 feet by 16 inches being allotted to each male adult, while women and children had to be content with a still smaller

space.

Directly the slaves were on board they were chained together in couples, the right hand and leg of one to the left hand and leg of the other, as a measure of precaution against any possible disturbance. At 8 o'clock every morning they were ordered on deck, and as each couple emerged from the hatches, a chain was passed through their irons, and made fast by ring bolts to the deck, the women and children only being unshackled. The slaves remained

on deck for eight or ten hours, during which time the decks below were cleaned "from such filth which is alone sufficient in one day to breed contagion."

John Luffman in one of his letters dated from St. John's, Antigua, July 6th, 1787, describes what took place on the arrival of a slave ship at her destination. As soon as the anchor was over the vessel's side, and the captain had gone on shore to give in his account of the cargo, the slaves, who had been shaved some days before they made land, were cleansed from the stench and vermin contracted in the passage, and their skins were rubbed with oil or grease to give them a sleek appearance.

This having been done, the slaves were sent ashore under the care of some petty officers and seamen to the merchant to whom the cargo was consigned, who deposited them in an empty store or warehouse near the wharves. The slaves were then advertised for sale. and in due course paraded through the town, preceded by a drum and a flag flying in order to attract the

attention of possible purchasers.

Eventually the opening of the sale was announced by a trumpet being sounded, and the hoisting of a flag over the spot where it was taking place. "So eager are the whites to see these ill-fated people," wrote Luffman, "that the doors of such receptacles are crowded almost as much as those of the theatre, when the immortal Garrick, or the inimitable Siddons, were to represent the finest passages from our greatest and most favoured poets." He added that the purchasers were as particular in examining the slaves before striking a bargain, as a butcher at Smithfield market, when dealing for sheep. soon as the purchase was completed, the slaves were walked to the respective plantations of their owners, upon whose disposition and temperament their future

A Brief Account of the Island of Antigua. By John Luffman, London. Printed for T. Cadell, in the Strand, 1789.

SLAVE TRADE ABOLISHED

welfare depended. The average price of the slaves at this period was from thirty-seven to forty pounds sterling

per head.

House slaves were paid three "bits"—a bit was about 5d.—per week, and field negroes received weekly from three to five quarts of horse beans, rice, or Indian corn, with three or four salt herrings or a piece of salted beef or pork of about two pounds weight; but when yams, eddoes, guinea corn, sweet potatoes, plantains or bananas were available, they were served in lieu of the former ration. Every slave over fifteen years of age was also given a piece of ground from 25 to 30 feet square, which he was allowed to cultivate, selling the produce at the "Sunday market." They also raised pigs, goats and fowls.

For clothing the field slaves were given a blanket, "also a piece of woollen cloth, called a babbaw, which goes round the waist," a blue woollen jacket, and a particoloured cap of the same material. Medical attendance was free, and the greatest care was taken of the slaves by the proprietors to whom they were so valuable.

Work began at daybreak, the negroes being marshalled in gangs of from twenty to sixty under overseers and drivers, who were furnished with whips; at twelve o'clock work was suspended until half-past one, when it was

resumed until sunset.

The first motion in Parliament for the suppression of the slave trade was made in 1776, and eleven years later the Society for the Suppression of the Slave Trade was founded. In the succeeding decade an active campaign was conducted by Wilberforce, Clarkson and others, and on June 10th, 1806, an act was passed prohibiting the trade in African slaves to foreign settlements by a majority of ninety-nine to fifteen, "by which Parliament declared the slave trade to be founded on principles contrary to those of justice, humanity, and sound policy, and engaged

to institute measures for the total abolition of the same." The measure was carried in the Lords by a majority of forty-one to twenty, and on the same day, an Address to the King was moved and carried, praying His Majesty to negotiate with foreign powers, for their co-operation in a total abolition of the trade to Africa for slaves.

In 1802, a few years before the abolition of the slave trade, 155 English vessels were engaged in it, of which 122 went to the British West Indies, and it was computed by Sir William Young, M.P., that each ship carried 260 slaves. London, Bristol and Liverpool, were, as already stated, the chief cities concerned in the trade, but in Bristol it declined towards the end, and though London's share in the trade increased after the capture of Demerara, Liverpool actually possessed six-sevenths of the whole trade as carried on by English merchants just before it was finally abolished.

Though the slave trade was abolished, slavery still continued for many years after, and immense sums were spent by the West Indian planters and merchants in their efforts to secure its continuance, and perhaps even a greater amount of money by the abolitionists.

After years of agitation, the famous Act was passed in 1833 which declared that all slaves in British colonies should become free on August 1st, 1834, though they were to be apprenticed to their former owners until 1838, and in the case of agricultural labourers until 1840. £20,000,000 were voted as compensation to the slave-owners at the Cape, in Mauritius and in the West Indies; but that amount fell short of the value of the slaves, as appraised by Commissioners appointed for the purpose, by no less than £26,460,000. It was indeed estimated that the capital invested in land, cultivation, buildings and machinery upon the estates on which slaves were located, could not have been less than £80,000,000. Antigua and Bermuda decided to dispense entirely with

THE ABOLITION OF SLAVERY

the apprenticeship system, which was in no case continued after 1838.

The system of slavery was indefensible in principle. It was open to many abuses, but all slave-owners were not cruel, and many of the slaves were so happy and contented that they viewed with apprehension the day which was to set them free, lest it should cause a severance of their connection with families which they devotedly served for so many years. Monk Lewis in his *Journal* draws a charming picture of the brighter side of slavery, and it must not be counted to the discredit of the West Indian proprietors that they vigorously contested the abolition of a system which had been fostered and financed by England herself for generations. To be a slave-owner was no disgrace, and even the Society for the Propagation of the Gospel in Foreign Parts was in that position.

With the abolition of slavery the question of the labour supply in British Guiana and several of the West Indian islands became a very serious one. In British Guiana the freed slaves left the estates and formed themselves into village communities, and the labouring population dwindled to such an extent that the industries of the colony were threatened with ruin. The period of apprenticeship which preceded the total abolition of slavery, although established with the idea of letting the planters down lightly, proved a failure. Nothing would induce the negroes in their newly acquired freedom to work in anything but a desultory manner.

Attempts were made to fill the deficiency of labourers by the introduction of free immigrants from Madeira, St. Helena, Sierra Leone and other places, but they did not meet with much success. In 1835 only 157 persons were attracted to British Guiana from the neighbouring islands, and 429 from Madeira, and the prospect of an improvement in the figures was not encouraging.

Meanwhile, Mauritius had for some years been importing

labourers from the East Indies, on contracts for a period of five years, and wages at the rate of five rupees a month, in addition to liberal rations and clothing. This seems to have been the beginning of emigration from India, and in 1837 the experiment was made of sending a shipload of East Indians to British Guiana. Unfortunately, an outcry arose that this was a continuation of slavery under a new guise, discussions took place in Parliament, and, as a result, any contracts which might be entered into beyond the boundaries of a colony for labour in that colony, were declared null and void.

This, for a while, put a complete stop to emigration from the East to the West Indies; but an Act being passed in India, providing for the appointment of a Protector of Emigrants, negotiations were opened up, and in 1844, after a long correspondence, emigration from India to British Guiana, Jamaica and Trinidad was sanctioned, on the understanding that the immigrants should be

entitled to a free return passage to India.

Between 1838 and 1841, through the efforts of a "Voluntary Subscription Immigration Society," about 300 immigrants were imported into British Guiana, including a small number from Malta, Germany, and the United States, but they soon found their way back to their own

countries, and the want of labour was acute.

The withdrawal of the prohibition against immigration from India was consequently hailed with delight. In British Guiana 5,000 immigrants were immediately applied for, and a consignment arrived in 1845. The system of recruiting had not then been perfected, and unfortunately instead of agricultural labourers, men from the streets and bazaars were sent over, who were quite unaccustomed to field work, and the first year of immigration was in consequence marked by a good deal of distress, and the mortality was considerable, the men wandering into the woods when they failed to find work. These difficulties

CHINESE IMMIGRATION

were, however, soon overcome, an Ordinance being passed in 1847 defining the mutual obligations of employer and employed in regard to medical attendance and regulating the management of the rural hospitals, and by another in 1848, which fixed an indenture period at three years, and provided that no portion of an immigrant's stay in the colony should be reckoned as part of the five years' industrial residence required of the immigrant to entitle him to a free return passage to India, unless during that time he had worked under a written contract with some planter or paid a monthly tax instead.

East Indian immigration into Jamaica and Trinidad, was also started in 1845, and except in the years 1849-50 and in 1851, it has continued ever since into the latter island. Immigration into Jamaica has been of an intermittent nature, though the island is at present importing immigrants every year. Grenada and St. Lucia have also availed themselves of East Indian immigrants, the former having received its first shipload in

1856 and the latter in 1859.

In 1853, Chinese labourers to the number of 647 were first imported into British Guiana from China, and they were followed by 12,000 more between 1859 and 1866, but in the following year Chinese immigration ceased owing to its great expense, the Chinese Government insisting on a return passage to China being conceded to the labourers. The Chinese, although mostly recruited in the cities, proved very satisfactory agricultural labourers, and most of them were indentured for a second and even a third term. Indeed, there is still quite a considerable Chinese population in British Guiana, the Chinamen being mostly concerned in the retail trade and in the laundry business.

The East Indian immigration system has been the subject of several enquiries, but they have tended rather to strengthen its position than otherwise. In 1870,

as the result of charges made against the planters by Sir William Des Voeux, a former magistrate of British Guiana, who was then acting Administrator of St. Lucia, a Commission of enquiry was appointed, the members of which visited British Guiana and took evidence there. After an exhaustive enquiry, they found that the most serious allegations were not substantiated, though the effect of later legislation had been to discourage free immigrants from settling down in the colony. As the outcome, legislation was adopted limiting the term of indenture to one year, and providing for judicial estimate of wages in the case of dispute, and for an improvement in the status of the Protector of Immigrants, who was given a seat in the Legislature.

In 1891 Surgeon-Major Comins, at the instance of the Indian Government, visited the West Indies with the object of enquiring more directly into the condition of the immigrants, and his report was in every way favourable. "The system (of immigration) has," he said, "passed through successive stages of improvement until it now stands, a pattern to the whole world of successful and liberal management. . . . Raw and ignorant coolies become skilled workmen, drawing wages at a rate unknown in their own country, and after their five years' indenture has expired, every chance is given them of starting with the knowledge and experience calculated to make them successful and independent settlers." Again, of Trinidad he said: "In this colony Indian coolies have already very exceptional advantages, and a still brighter future before them."

East Indian immigration has also received commendation from many successive Ministers, and notably the late Lord Carnarvon, the late Lord Salisbury, and the Right Hon. J. Chamberlain, who is happily still with us.

In British Guiana, prior to 1873, the cost of the introduction of the immigrants was divided between the

THE COST OF IMMIGRATION

planters and the colony, the former paying two-thirds. Under this arrangement the planters supplied medical supervision, neighbouring estates clubbing together for the purpose. This system continued until 1873, when, as the result of the Des Voeux Commission, it was considered expedient that the medical service should be under the control of the Government. By this arrangement the whole of the actual cost of immigration, including that of the agency in India and of back passages, was paid by the planters, the Government contributing the cost of the medical department and immigration establishment in the colony, together with a per caput allowance of \$10, out of the general revenue. Some years laterin 1878—the system was again altered, one-third of the entire cost being now paid by the colony and two-thirds by the planters, the cost of the medical department being still paid by the Government. In 1886, the latter expense was divided equally between the planters and the colony. In 1903 a further change was made whereby the colony sustained "the whole cost of the medical department and the immigration department, provided the whole cost of the importation and repatriation of immigrant labourers was furnished by the employers of immigrants." Immigration taxes, fees, etc., are paid into an immigration fund.

At the outset the cost of the repatriation was borne entirely by the local Immigration Fund. The whole system, however, proved so favourable to the immigrant that it was felt by the authorities that he should pay half of the cost of the return passage, to which he is entitled after his ten years' sojourn in the colony. In Trinidad it was some years before the system was got into working order, but once in order there has not been the same variation in the manner of distribution of the cost of immigration as in British Guiana. The planters were at first saddled with the entire cost, but as the

advantages to the colony became recognised, arising from the free coolies becoming settlers, one-third of the cost. as now, was defrayed out of the general revenue. Cacao as well as sugar planters now contribute their share. As in British Guiana, the immigrant is, at the end of ten years' residence in the colony, entitled to a return passage to India, but in like manner he now has to contribute onehalf of the cost. In Jamaica, under the Immigration laws, any person employing immigrants who have completed their five years' indenture but have not resided for ten years in the colony, must pay to the Immigration Fund 12 10s. per annum for each immigrant employed. St. Lucia has ceased to take immigrants for some years. but the island is again crying out for labour.

The immigrants are recruited mainly from the agricultural districts of India, although representatives of the hill tribes are frequently to be met among them. The vovage does wonders for the immigrant, and on his arrival at his destination he is sleek and fat, though at first a somewhat irresponsible and useless individual. After his five vears of indenture he is a different man. He has learnt discipline and acquired a knowledge of systematic agriculture. His muscles have hardened by continuous work, and his views expanded by the varied life of a sugar estate and its complex machinery; he has acquired the habit of work and a self-dependent spirit. He has, in fact, become a valuable member of the community. His term of indenture having expired, he either settles down on the estate as a free labourer or acquires sufficient land to carry on his favourite industry. With his neat wattle homestead, his cows-the East Indian is an expert where cattle are concerned—and with his family all engaged in some useful occupation, he presents an admirable specimen of the well-to-do, contented colonist, an ever-present example of the benefit which has accrued to him, as well as to the colony, from the system of

THE CONTENTED IMMIGRANT

immigration under which he exchanged the East for the West. At the end of ten years he can claim his return passage or commute with payment of money, and a portion avail themselves of this. The rest, however, remain, and some idea can be formed of the important part East Indian coolies play in the economy of these colonies when it is remembered that they form in British Guiana 37 per cent. of the entire population, and in Trinidad 30 per cent., the predominance in these two colonies being due to the greater importance of the sugar industry in them, to the enterprise of the proprietors of which the presence of the East Indians in the West Indies is due. In British Guiana 50 per cent. of the entire East Indian population reside outside the sugar estates, and in Trinidad 75 per cent., which clearly shows their value to these colonies, irrespective of the sugar industry. One of the arguments which opponents of the system bring forward is that coolie labour interferes with the negro labour, and that the negroes are deprived of their right to work by subsidised competition. This is not the case. There is room for all in the West Indies, except the small island of Barbados, which is densely populated and has never received or required East Indian immigrants. In British Guiana many thousands of square miles await development, and the same position of affairs obtains to a lesser degree in British Honduras. As a matter of fact, East Indian labour works in conjunction with negro labour and provides material for it. The agriculture of the East Indian provides congenial work for cane-cutters, shovelmen, mechanics, and others in connection with the sugar industry, for which the negro is especially fitted, and in every way it may be said that the one class is complementary with the other. There is plenty of room for East Indians in the West Indies, where they can find congenial and profitable occupation, and are free from the traditions which keep them back in their mother country.

The organisation and supervision of the emigration work in India is entrusted to officers of the Colonial Civil Service, who hold their appointments as emigration agents direct from the Secretary of State for the Colonies, the salaries attaching to them being contributed by the colonies for which the respective agents act. There are at present two principal British agencies in India, both located in Calcutta, the chief port of embarkation, viz.: the agency for British Guiana and Natal, of which Mr. R. P. Gibbes is agent, and the agency for Trinidad, Fiji, Mauritius and Jamaica, with Mr. A. Marsden as agent, and Mr. W. F. Bolton, assistant-agent.

The premises of each agency include a spacious compound and the emigrants' reception, feeding and sleeping sheds, depôt hospital, dispensary, segregation sheds, kitchens, bathing-place, etc. There is space in each depôt for upwards of 1,000 emigrants, exclusive of hospital accommodation, and, in addition, the subordinate outdoor staff, which is necessarily a numerous one. The system of recruiting, registration and despatch of the intending emigrants is identical in each agency, and the following account, from information contributed by a correspondent, of the procedure followed may be of interest.

The area of recruiting operations extends over Bengal, the United Provinces of Agra and Oudh, the Central Provinces, the Southern Punjab, and Ajmere. Subdepôts are established in some thirty different districts, each in charge of a sub-agent, Each sub-agent selects his own staff of recruiters, who are mostly natives of and well acquainted with the district in which they work. No person is allowed to recruit emigrants unless and until he has received a good character certificate from the magistrate of his own district; this is forwarded by the sub-agent to the emigration agent in Calcutta, and, on the latter's application, a licence is then issued in the name of the intending recruiter by the Protector of Emigrants.

RECRUITING IMMIGRANTS

These licences must be renewed annually, and the total number of licensed recruiters employed by the various agencies is over 600. The principal recruiting centres are in the districts of Faizabad, Basti, Agra, Bahraich, Cawnpur and Gorakhpur, in the United Provinces, Delhi in the Punjab, and Jabalpur in the Central Provinces. The finest physical type of coolie is obtained in the more northerly districts, such as Agra, Delhi, and Bareli.

The intending emigrant is taken by the recruiter in the first instance to the local sub-depôt, where he remains for several days pending the arrival of the travelling medical inspector of the agency concerned. He and his fellow-recruits are then subjected to a rigorous examination, internal and external, with a special view to ascertaining their individual fitness or otherwise for the work which

will be required of them in the colony.

The coolies who are passed are then presented at the local magistrate's court for registration. The terms of their agreement are here carefully explained to them by the registering officer: they are asked whether they agree to them and are willing to emigrate, and the agreement is then duly executed. As soon as possible after registration the emigrants are despatched to Calcutta; they are met at the terminus by employés of the agency, put into "dinghis" and brought direct by river to the main depôt. Here their troubles may be said to have ended. From the moment of their arrival they are taken in hand by a kindly but firmly paternal authority, they are bathed, oiled, shaved and provided with clean clothing and blankets; their sleeping and living quarters are healthy and comfortable; food of excellent quality and cooked with due regard to caste prejudices is served to them in ample quantity twice daily; an unlimited supply of filtered water is available at all times; ample bathing accommodation is provided in the depôt, and in addition a hot water bath, which, though a novelty to

them, is highly appreciated, is given twice a week. Two "medical" parades daily ensure prompt attention to any ailments; the sanitary and cleanly condition of the latrines is rigidly attended to; and although for obvious reasons the emigrants must be confined to the precincts of the depôt, every endeavour is made to render their stay there cheerful and pleasant. Games are encouraged, tobacco is issued free, and they are provided with tomtoms, playing cards, etc. When dealing with so many varied castes, creeds and characters a certain strictness of discipline is imperative, and this is secured by dividing the emigrants up into gangs, each under their own headmen, who take their instructions from the Depôt Superintendent, the Jemadar and Assistant Jemadar. Every morning and evening the emigrants are mustered by sound of gong, and the various gangs are drafted off for a couple of hour's work at weeding, road-repairing, digging in the agent's garden, etc., during which time the depôt staff of sweepers, etc., are busy cleaning, disinfecting, and, at least once monthly, white-washing the sleeping sheds.

Within a few hours of their arrival in depôt, each batch of emigrants, oiled, washed, and clean-clad, is minutely and individually examined by the depôt doctor—a locally qualified but very able native official—who notes in a special register any and every ailment or defect which he detects among them, and the following morning the new-comers are paraded for inspection by the emigration agent. The latter inspects and interrogates each coolie separately, satisfying himself that they are, both by caste and habitually, genuine agriculturists, that their general physique is satisfactory, and their eyesight good, and that they are active and free from any external deformity or disease. Finally, he explains to them in detail the nature of the work which they will have to do in the colony, the hours of labour, the term of service, rates of pay,

A RIGOROUS INSPECTION

deductions for absence and sickness, conditions as to return passages, the length of voyage, etc. The next inspection is that held by the depôt surgeon, a senior officer of the Indian Medical Service, to whom are referred for decision all cases entered, as stated above, in the register of the depôt doctor; they are minutely investigated, and the verdict of the depôt surgeon—who is retained and paid by the emigration agent as his professional adviser—is final. Emigrants passed by him as fit are drafted into the general fold to await shipment; others are placed under observation and treatment for further examination later on, while rejected coolies are despatched to their homes the following day at the agency's expense and with a solatium of Rs. 4 each.

Twice weekly the depôts are visited by the Protector of Emigrants and the Medical Inspector of Emigrants, officials appointed by the Government of India to see that the provisions of the Colonial Emigration Act are properly complied with. Their visits are necessarily of a perfunctory nature, the Protector merely satisfying himself that the coolies are emigrating of their own free will, while the Medical Inspector formally confirms the decisions of the Agent and his depôt surgeon as to the

fitness or otherwise of the emigrants.

Some fourteen days before the date fixed for the embarkation, the ship's Surgeon-superintendent arrives in Calcutta and for a week or so attends daily at the depôt, and, assisted by his two compounders, puts the much enduring coolie through his last and perhaps strictest examination. The Surgeon-superintendent is paid by results, i.e., a gratuity on every emigrant landed alive in the colony; and as he is, moreover, personally responsible to the colonial Government for the quality of the people he passes, he has a double incentive for rejecting any whom he considers to be in any way undesirable. His scrutiny is, in consequence, very severe and searching.

and coolies passed by him may be accepted as guaranteed "sound in wind and limb." There is, however, yet one final precaution, and about five days before the embarkation the entire complement of the depôt is mustered and lined up, and a general inspection is held by the Depôt Surgeon, the Surgeon-superintendent and the Emigration Agent jointly, when the "pick" of the passed coolies are selected for embarkation. The agent always provides for a margin of about 10 per cent. in excess of the number who will actually embark in any ship, so as to allow for "casualties" arising from sickness, accidents, or, perhaps, unwillingness at the eleventh hour.

The day prior to that of embarkation the new clothing which will be issued to the emigrants for the vovage is disinfected by the port Health Officer in the government disinfector, and the emigrants themselves are given a hotwater bath with soap, the water being mixed with permanganate of potash. On embarkation day the emigrants are stripped; their old clothes, shoes, puggeries, and neck and hair strings, every acticle, in fact, which might harbour infection, are taken from them, and they are supplied with complete new outfits of both light and thick clothing, new English-made blankets, a set of tin eating and drinking vessels, etc. The emigrants are then mustered, marched down to the river-side, and lined up for a final inspection by the Surgeon-superintendent and Medical Inspector, when any coolies exhibiting an unduly high temperature are taken out and replaced by substitutes; and finally, when all preliminaries on shore and on board are completed, the emigrants file across the gangway on to the ship which for the next six weeks at least will be their home. A certain number of surplus coolies are always left over after the despatch of the last vessel to any colony. These are at once sent back to their homes by the agency and receive each a small sum as compensation for their disappointment.

HYGIENIC PRECAUTIONS

The sub-agents are paid by commission, not on the number of coolies they send down, but on the number passed as fit in Calcutta and actually embarked. The agency, as already explained, does what it can to eliminate undesirables from their recruits before the coolies are despatched by having them twice medically examined in their own districts: but the sub-agent takes all risks. and his coolies are sent down strictly "on approval." Those rejected at the Calcutta agency are sent back to their homes, and the sub-agent, in addition to forfeiting the commission, is debited with the double railway fare and the compensation paid. If a coolie turns "unwilling" after admission to the main depôt no commission is paid to the sub-agent, and the coolie is discharged without rail-fare or compensation; similarly, if he deserts, or dies in the depôt hospital, no commission is paid to the sub-agents. Unwilling women, however, are always sent back to their homes, but without compensation. The average rates of commission ruling at present are Rs. 25 for a male and Rs. 35 for a female adult: but the rates fluctuate in response to the stringency or otherwise of the labour market, and have been as high as Rs. 41 for men and Rs. 55 for women in times of labour scarcity. The supply of coolies depends almost entirely on the success or failure of the crops in the recruiting districts; when harvests are good great difficulty is experienced by the recruiters in obtaining emigrants, whereas in "lean" years they are available in almost unlimited numbers: but, as a rule, the Indian coolie is deeply attached to his home and will not quit it save under the stress of dire necessity.

For many years the emigrants were conveyed to the West Indies in sailing ships, the voyage occupying from seventy to a hundred and twenty-five days. Since 1908, however, steamers have been used by the contractors, James Nourse, Ltd., who conduct a regular monthly

service between Canada and the West Indies, and the

voyage now takes only thirty-eight days.

On arrival at their destination, the emigrants-or immigrants, as they now become—are received at the immigration depôt, where they are housed and fed, pending their allotment to the various estates, whose proprietors have sent in their requisition for labourers, about twelve months before. At the depôt and throughout their stay in the colony the welfare of the East Indians is safeguarded by an official known in British Guiana as the Immigration Agent General and in Jamaica and Trinidad as the Protector of Immigrants, with subordinates stationed in the various districts. The male immigrants are indentured to the estates for a period of five years and the females for three, the latter remaining on the estates for two years longer as free labourers. A further five year's residence in the colony is required of them, and at the end of ten years the East Indians are entitled to a back passage to India on payment of half the fare in the case of males and one-third in that of females.

The East Indians are, however, so happy and contented in their new Western homes that the numbers availing themselves of this privilege are comparatively small, and some of those who do elect to return to Calcutta find their way back to the West Indies again before long. By granting them free land and other privileges every effort is made to induce these land-working colonists to settle permanently on the estates in British Guiana.

In 1909, a committee was appointed by Lord Crewe, the then Secretary of State for the Colonies, to consider and report on the general question of emigration from India to the Crown Colonies, the particular colonies in which Indian immigration might be most usefully encouraged, and the general advantages to be reaped in each case by India itself, and by each particular colony. Lord Sanderson was appointed Chairman, and the other

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members were Lord Sandhurst, Sir George Scott Robertson, Sir James Digges La Touche, Mr. Hugh Bertram Cox, Mr. Wilfrid Ashley, M.P., Mr. Selwyn H. Fremantile, and Mr. Walter D. Ellis, with Mr. R. H. Griffin as Secretary. The members of this committee did not visit the West Indies, but they took a mass of evidence in London, giving facilities for representatives of the labouring classes in the West Indian colonies affected, to come over to England and appear before them.

The report which was issued in June, 1910, proved a further vindication of the advantages of the system of immigration, as practised for over sixty years, not only to the colonies receiving the immigrants, but also to the immigrants themselves. "It will have been seen," they said, "that the importation of Indian emigrants into certain of the Crown colonies was resorted to more than sixty years ago, in order to meet a dearth of agricultural labour, resulting from the abolition of slavery, which threatened to destroy the sugar industry, and thus produce financial and commercial ruin. The object was achieved, and the importation has been continued up to the present day with undeniable advantage to the colonies concerned."

The Committee added, "It can safely be said that, notwithstanding some unfortunate occurrences at times now remote, the system has in the past worked to the great benefit, not only of the colonies, but equally of the main body of emigrants, and does so still more in the present."

In view of this very favourable report, it is much to be hoped that emigration from India to the West Indies will be encouraged in official quarters and facilitated.

CHAPTER XII

RELIGION AND EDUCATION

FROM the earliest days of English colonisation in that part of the world, the Church of England was established in the West Indies. Three years after St. Kitts was settled, the Rev. John Featley, of All Souls College, Oxford, arrived in the island, and it is recorded that this divine was in England in 1629, giving evidence in favour of the Earl of Carlisle in his dispute with the Earl of Pembroke as to the ownership of Barbados. There is in the library of the Society for the Propagation of the Gospel, a sermon delivered by Featley, at St. Botolph's Aldersgate, on December 6th, 1629, to "the notably deserving gentleman Sir Thomas Warner and the rest of his companie bound for the West Indies; for their Farewell."

In the following year Featley seems to have been back again in St. Kitts, for his name appears as one of the Governor's Council. His connection with St. Kitts appears to have continued until 1643, when he accepted the chair of divinity at the University of Leyden, this necessitating his departure "from St. Christophers in the Western Indies, where I had the honour to be the first preacher of the Gospel in the infancy of that mother colony in the year 1626."

Some of the clergy who followed Featley appear to have received rather rough treatment at the hands of the authorities. Parson French, for example, for speaking against the bishops, was, it is recorded, several times cruelly whipped and pilloried, besides suffering the indignity of having "paper put in his hat" and being imprisoned. He was eventually sent to England in irons, but was liberated there.

COMPULSORY RELIGION

The first minister in Barbados was the Rev. Nicolas Leverton, B.A., of Exeter College, Oxford, who was, however, so disgusted with the profligate conduct of the inhabitants that he decamped to Tobago with a party of settlers. In 1629, during the administration of Sir William Tufton, Barbados was divided into six parishes. Between 1634 and 1637, six churches, besides chapels, had been built in the island. The care of the parishes was committed to some of the more influential men who formed the Vestry, and each parish taxed itself to pay for its minister, the clergy paying their parish clerks out

of their own pockets.

Colonists were compelled under penalty to conform with the government and discipline of the Church of England "as the same hath been established by several Acts of Parliament and especially by those Acts which were at large expressed in the fronts of most English Bibles." The clergy were required to read these Acts "publicly and distinctly." Heads of families, moreover, had to read or say prayers morning and evening, and regular attendance at Church was enforced. Constables, churchwardens and sidesmen were enjoined "in some time of divine service every Sunday to walk and search taverns, ale-houses, victualling houses, or other houses where they do suspect lewd and debauched company to frequent"; offenders found there were to be apprehended forthwith and taken to the stocks, which were to be placed as near the church or chapel as they conveniently might be, and they were there imprisoned for the space of four hours, unless they paid 5s, to the churchwarden for the use of the poor. Even during the Commonwealth, the Governor of Barbados attended the church in some state, preceded by his Marshal, bare-headed. In a despatch written in Barbados on July 9th, 1668, William, Lord Willoughby, the Governor, expressed his conviction to the Lords of the Council that "one of the chiefest wants of all the islands

is pious, learned and orthodox divines"; and Sir Jonathan Atkins, who succeeded him, reported in 1676 that the ministers "were not all ordained, there being no means for it." The only Dissenters in the island at this time were Anabaptists, Jews and Quakers, and in 1680 a law was passed forbidding the attendance of slaves at meetings held by Quakers, who had been endeavouring to convert the negroes.

Seven chaplains accompanied the expedition to San Domingo which captured Jamaica, and it may be assumed that some of them remained with the ill-disciplined troops who were left to garrison the island. The need for ministers in the island, was, however, referred by the Council of State at Whitehall on September 29th, 1657, to the committee for America to consider how they might be supplied and to offer proposals thereon. In October, 1664, there were only five ministers in the colony, of whom two were Germans and another, a Mr. Johns, "an old army preacher not yet in Orders," and the only church in the whole island was St. Catherine's at Spanish Town, "a fair Spanish church ruined by the old soldiers, but lately in some measure repaired by Sir Charles Lyttelton." The colonists were, however, then levying contributions for the erection of churches in some of the richest parishes. The stipend of the four ministers and a schoolmaster had been provided for by a Royal bounty of £500 annually, payable half-yearly from the Exchequer. beginning at the Feast of the Annunciation in 1662. 1684 an Act for the maintenance of ministers and the poor, and the erecting and repairing of churches, was confirmed by the King in Council.

The Church of England was formally established in Jamaica in 1662, but in 1870 a law was passed for its gradual disendowment, and it is now practically self-supporting and has substantial funds. Baptists and Wesleyans are the next sects in order of importance

MARRIAGES CONDUCTED BY J.P.'s

according to the relative size of their congregations, and the Presbyterian and Moravian religions have a considerable following. The Jewish congregation in the island is an influential one, and there are also a good number of Roman Catholics in the island. Jamaica is the head-quarters in the West Indies of the Salvation Army, which does an active work among the negroes.

In the islands originally settled by the English, that of the Church of England is the prevailing religion, while the majority of the inhabitants in the colonies which passed to us from France and Spain (with the exception of Jamaica) are Roman Catholics. In Barbados the Church is still endowed from general revenue, but elsewhere the church has been gradually disendowed.

In the Leeward Islands, the Church of England did not make much progress during the second half of the seventeenth century. In 1672 there was only one church in Antigua, and marriages were conducted by a justice of the peace after three weeks' notice had been given. churches in St. Kitts were destroyed by the French when they took the islands, and in 1672 Sir Charles Wheeler, the Governor, represented to the King that there were 10,000 Christians in the Leeward Islands, for whose care there were only two ministers in holy orders, "both scandalous livers and one a notable schismatic." In 1678 the Bishop of London sent six ministers to the Leeward Islands. each of whom was to be paid £100 a year or 16,000 lbs. of sugar, besides the perquisites of marriages and funeral The money to pay the clergy was raised by a tax of 10 lbs. of sugar per poll.

After the Restoration, more chaplains were sent to the West Indies, and the establishment of the Society for the Promotion of Christian Knowledge in 1669, and of the Society for the Propagation of the Gospel in Foreign Parts in 1701, served to strengthen the position of the Church of England in those colonies, as elsewhere; but

the church was still a church for the whites and not for the slaves, few of whom were baptised, and it was left to the missionaries of the Moravian, Wesleyan and Baptist denominations to begin systematically Christianise the coloured people in the West Indies. In 1824 new life was given to the Anglican Church by the formation of the Sees of Jamaica and Barbados and the arrival of Dr. Lipscomb and Dr. Coleridge as Bishops. In 1842 the See of Barbados was subdivided by the formation of the bishoprics of Guiana and Antigua, in 1872 the bishopric of Trinidad was constituted, and in 1878 that of the Windward Islands, which is administered by the Bishop of Barbados. From the See of Jamaica the bishorics of Nassau for the Bahamas was formed in 1861 and that of British Honduras in 1883. A provisional Synod of the Anglican Church in the West Indies, consisting of the bishops only, first met at Jamaica in 1883, and other Synods have since been held at Barbados, Guiana and Trinidad. Bishop Austin, who for fifty years continuously administered the See of Guiana, was the first Primate of the Province, and he was succeeded by Bishop Nuttall in 1893, who assumed the title of Archbishop of the West Indies.

The Leeward Islands are embraced by the Diocese of Antigua, and the principal followers of the Church of England in the colony are in that island. Anglican, Wesleyan and Moravian churches are the most numerous in the island, and there is one Roman Catholic church in St. John's, the cathedral city of the Anglican diocese

and the place of residence of the bishop.

In Montserrat the inhabitants are mainly Protestant, but there is one Roman Catholic church, and in Dominica the Roman Catholics prevail in numbers, the Roman Catholic bishop residing at Roseau in that island. There are many Anglican, Wesleyan and Moravian churches in St. Kitts-Nevis, and one Roman Catholic church in



THE OLD PARISH CHURCH, MONTEGO BAY, JAMAICA



THE WEST INDIAN DIOCESES

Basseterre. The inhabitants of the Virgin Islands are chiefly Wesleyan Methodists, and the Anglican congregation is a small one.

In St. Lucia Roman Catholics predominate, and their church is supported out of general revenue. In St. Vincent, where the Church of England was disendowed in 1889, half the population belongs to the Church of England, and one-third is of the Wesleyan persuasion, while in Grenada one-half are Roman Catholics and one-third are members of the now disestablished Church of

England.

By far the best account of religion in the West Indies is that furnished by Dr. A. Caldecott, Principal of Codrington College from 1884-6, in his volume The Church in the West Indies. 1 Succeeding Governors of the various colonies he says, received explicit instructions that "an orthodox, ministry was to be encouraged," and so on; parishes were marked out, although in some the ecclesiastical side was unworked, but in general, the parish was at once a civil and ecclesiastical area. "Vestries were constituted with the double range of duties; churches were built in which the vestries then met, and order was taken for the maintenance of the clergy. In very early times church attendance was enforced in some colonies; we even find Governor Bell of Barbados going so far as to order family prayers and public catechising of children. But the need for encouraging settlers soon caused practical men to see that toleration was a necessity, and must be applied more freely than the strife of parties allowed at home. It was deemed sufficient respect for the law at home to require that the Governor and his Couueil should take both the oaths, that of political allegiance and that of ecclesaistical supremacy; while the oath of allegiance alone was to be required for all the officers.

¹ The Church in the West Indies. By A. Caldecott, B.D. London: The S.P.C.K., 1898.

At the same time the Governor was enjoined to order his household after the manner of the Church of En gland A little later, when opposition to the Romanists became more acute, the Oath of Supremacy was insisted upon in order to keep them out of offices in the colonies. The Toleration Acts of William and Mary were adopted by the local legislatures, and Dissenting preachers might take out licences, but they were not permitted to instruct slaves or to open schools. The exclusion of Romanists from public office was shared by the Jews, who were, however, allowed to reside unmolested as traders, and

were permitted to have a synagogue."

Dr. Caldecott pays a tribute to the work done by the Nonconformist Missions. Of these, the Moravians were the first to start work in the West Indies, missionary enterprise being begun in the Danish island of St. Thomas in 1732, and in Jamaica in 1754, at the instance of some absentee proprietors in the parish of St. Elizabeth. The arrival of the Methodists in the West Indies was due to a meeting between Mr. Gilbert, the Speaker of the Assembly of Antigua, with John Wesley himself. Mr. Gilbert became a member of the Society, and on his return began to preach to his own slaves, reading Wesley's sermons to them and teaching that preacher's hymns. In 1789, Dr. Coke, General Superintendent of Wesley's missionary work, happened to be driven to the island while on his way to visit the Societies in America, and his visit resulted in the establishment of the religion in the island. The Baptists began their West Indian mission from America, a coloured Baptist Deacon, George Lisle by name, leaving the United States for Jamaica with a party of Loyalists at the time of the American Revolution.

Until after the abolition of slavery there was little education among the upper and middle classes, and practically none among the masses in the West Indies,

RELIGION AND EDUCATION

and what there was, was entirely the result of private and missionary enterprise. But in considering this state of affairs it must be remembered that even in England at this period, the masses were to a great extent uneducated. It must, however, be admitted that it was not in the interests of the owners that their slaves should be taught at all. In too many cases the slaves merely ranked with the live stock on the estates, though there were notable exceptions, and many proprietors, like Monk Lewis, of Jamaica, endeared themselves to their slaves by their generous action towards them.

Children of the upper classes were sent home to be educated, and those who remained were entrusted to the clergy. Of the children sent home to England Long wrote in 1774, "They went like a bale of goods consigned to some factor, who placed them in some school of his own choice; and they came too often from the feet of Gamaliel, a disgrace to their friends and a nuisance to

their country."

Foremost of the missionaries in Jamaica were the Baptists, while elsewhere the Moravian Church, which still has such a large following in the West Indies, laboured effectively for the good of the negro. Wesleyans and Methodists also set themselves to the task of uplifting their coloured brethren, besides the various missionary societies of the Church of England, including the Society for the Propagation of the Gospel in Foreign Parts, and the Society for the Promotion of Christian Knowledge, the former of which, as described below, controls the destinies of Codrington College in Barbados as trustees under the will of Christopher Codrington.

Education formed a prominent part of the work of the Church of England in the West Indies, and Sunday Schools and Night Schools were frequented, not only by

children, but also by adult negroes.

Subsequent to the abolition of slavery, what is known

as the Mico Charity began its educational operations in the West Indies. There is quite an air of romance about the history of this charity, which was originally intended to benefit another part of the world altogether.

Lady Mico, the widow of Sir Samuel Mico, Knight, member of the Mercer's Company, had a relation who was engaged to be married to his cousin, her favourite niece. This young lady, however, proved fickle, and throwing over her fiancé, eloped with an Ensign in the army. Lady Mico, who had intended to give her a dot of £2,000, now decided to cut her off altogether, and bestow her gift elsewhere.

About this time many charitable bequests were being made for the redemption of Christians who had been detained in Algiers by the Moors, and Lady Mico bequeathed half of the £2,000 for this same purpose. The clause of her will, which was dated July 1st, 1670, referring

to this intention runs as follows:

"Whare as I gave Samuel Mico aforesaid two thousand poundes when he had married one of my neeces, hee not performeing it I give one of the said thousand poundes to redeeme poore slaves, which I would have put out as my executrix thinke the best for a yearly revenew to redeeme some yearly."

Lady Mico died in 1666, and in 1680, by direction of the Court of Chancery, certain freehold premises in London were purchased with the legacy and conveyed to Lady Mico's executors.

Then a difficulty cropped up. The suppression of Algerian piracy and the release of Christian slaves obviated the need for English benevolence in that direction, and many years later the question arose, What was to be done with Lady Mico's legacy which had now accumulated to £120,000?

It was left to Mr. (afterwards Sir) Thomas Fowell Buxton, the prominent abolitionist, to find the answer. He suggested that the interest might be applied to the Christian instruction of children in the West Indies,

LADY MICO'S BEQUEST

and this suggestion was adopted. A Charter was obtained, and the British Government added to the legacy a grant of £17,000, which they continued to renew annually until 1841. Training institutions were established in Jamaica and Antigua, and schools in Trinidad, Demerara, the Bahamas, and St. Lucia, besides Mauritius and the Seychelles.

Now, however, only the training institution in Jamaica remains. Premises were acquired for it in Hanover Street, Kingston, and were opened in 1835. In 1894 Quebec Lodge, on the Liguanea Plain beyond Kingston, was purchased. On this site the "Mico," the oldest training college in the Western Hemisphere, now stands.

The Jubilee of the college was celebrated in 1887 and the institution still flourishes. The benefits of the "Mico" are not confined to the people of any creed, class, or colour, and to this must be attributed to no small

extent the success which has been attained.

Dealing now with the several units which make up the British West Indies, it may be mentioned that in Barbados a Government system of elementary education was established in 1878 by an Act which authorised an expenditure not exceeding £15,000 for this purpose annually. In 1907 this amount was reduced to £11,000, at which figure it still stands. The central administration is vested in a Board appointed by the Governor, and the local control rests with the clergy of the several districts, assisted by the School Committee. Last year there were 167 elementary schools in the island, with an average attendance of 16,829 children, out of 27,658 on the roll.

Barbados has also two first grade schools in Harrison College on the outskirts of Bridgetown and The Lodge in the Parish of St. John, which was re-opened in 1882, after having been closed for several years. Four Barbados scholarships have been founded by the Education Board and endowed by the colony, each of the annual value of £175, and tenable at an English University

or an agricultural or technical college in Europe or America for four years.

In 1883, the Queen's College, a first grade school for girls was opened, and it now has about eighty-seven pupils. There are in all four second grade schools for boys and two for girls.

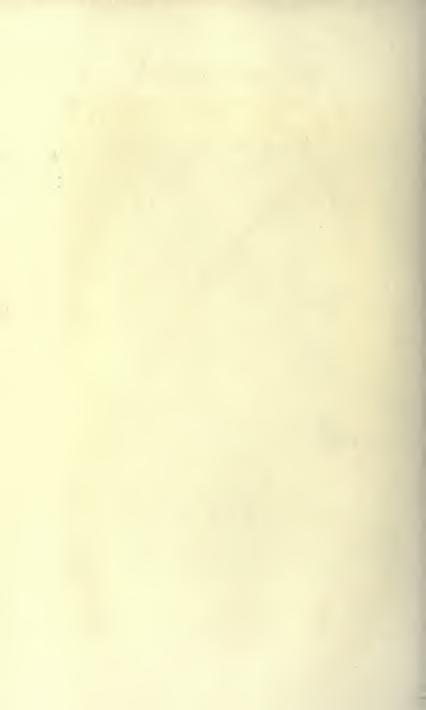
The advantages of a University education can be enjoyed by men irrespective of race or colour at Codrington College, which is the only actual University in the West Indies. This institution was founded by Christopher Codrington, the Captain-General of the Leeward Caribee Islands, a worthy man who was also a benefactor of All Souls, Oxford, where he had a brilliant career. He bequeathed to that college a fine collection of books valued at £6,000 and a sum of £10,000, which sufficed to erect, furnish and endow the library which now bears his name on the north side of the quadrangle.

Codrington died on Good Friday, April 7th, 1710, and his will, which was dated February 22nd, 1702-3, contained the following provisions relating to the endowment of the college in Barbados:

"In the name of God, Amen. The twenty second day of February in the first yeare of the reign of our Sovereign Lady Anne, by the grace of God of England Scotland France and Ireland Queen Defender of the Faith etc. Anno Domini 1702. I Christopher Codrington of Dodington in the County of Glocester Esquire and cheife Governor of her Majesty's Leeward Islands in America doe make and declare this to be my last will and Testament. I commend my Soul to the good God who gave it, hoping for salvation through his mercy, and the merits of his Son: my worldly Estate I thus dispose of . . . Item I give and bequeath to my Cozen Lieutenant Collonell William Codrington . . . half my Island of Bermuda . . . Item I give and bequeath my two plantations in the Island of Barbadoes to the Society for the Propagation of the Christian Religion in Forraigne Parts, erected and established by my late good master William the Third; and my desire is to have the plantations continued intire and 300 negroes at least always kept thereon, and a convenient number of Professors and scholars maintained there all of them to be under



CODRINGTON COLLEGE, BARBADOS



CODRINGTON COLLEGE

vows of poverty and chastity and obedience who shall be obliged to study and practice Physic and Chirurgery as well as Divinity, that by the apparent usefullness of the former to all mankind they may both endear themselves to the people and have the better opportunities of doing good to men's souls whilst they are taking care of their bodys, but the particulars of the constitution I leave to the Society composed of wise and good men. Item I give and bequeath to my friends Collonell Michael Lambert and William Harman one eighth parte of my Island of Barbooda the remaining part of my estate in the said Island I give to the aforementioned Society for the Propagation of the Christian Religion. . . Item I desire that my owne body may be enterred in All Souls Chappell in Oxford, and a plaine black marble of twenty pounds price laid thereon. Dated at Bettyshope in the Island of Antigua in the day and year above written.

"CHRISTOPHER CODRINGTON."

It was estimated that the estates, which used to be known as "Consett's" and "Codrington's" but are now called "College" and "Society," would yield a net annual profit of £2,000, and they were valued at £30,000. They were 763 acres in extent, and had on them three windmills with the requisite buildings for the manufacture of sugar,

315 negroes, and 100 head of cattle.

Some legal difficulties arose at first, but these were finally overcome, and the Society entered into possession on February 22nd, 1711-12, the anomalous situation resulting of a missionary society becoming the owner of slaves. To the credit of the Society it must, however, be said, that they at once took steps to ensure the slaves being treated generously, and that they also sent out a catechist to impart to them religious instruction. The College buildings were designed by Colonel Lilly of the Royal Engineers on the model of an Oxford quadrangle, but to meet the exigencies of a tropical climate the plans were modified, and only one side was built. This now resembles very closely the old "New Buildings" at Magdalen College, Oxford. The work of construction was begun in 1716, but owing to a debt due to the

Society from the estate, which was not liquidated until 1738, many years elapsed before the college was completed.

The noble foundation did not lack Royal support. Her Majesty Queen Anne interested herself in it, having been approached by the Archbishop of York and the Bishop of London; and, though she did not live to see the work begun, after her death instructions were given at the instance of the Earl of Oxford and the Admiralty Board to the Governor of Barbados and to the captains of the men-of-war on the station, that when His Majesty's ships were not particularly engaged in the service of the island, they should be employed in transporting timber for the building of the College from Tobago, St. Vincent, and other adjacent islands.

On September 9th, 1745, the College was first opened as a grammar school, with Mr. William Cattell of St. Thomas's Hospital, "a young gentleman of good skill in surgery and pharmacy," as surgeon and apothecary. Mr. Bryant followed two years later as Professor of

Theology and Mathematics.

The College Buildings were at last completed in 1830, and on September 9th in that year they were formally opened by the Bishop of the Diocese in the presence of the Governor, Sir James Lyon, exactly eighty-five years after the opening of the Grammar School. John Hothersal Pinder was the first Principal, and the college was put upon a proper Academic footing by William Hart Coleridge, the first Bishop of Barbados, who evinced the greatest interest in the work.

Up to 1875 the College had granted its own Testamurs of "S.C.C." and "Th.S.C.C.," which were regarded as equivalent to degrees in Art (classics and mathematics) and Divinity respectively. In that year, however, through the exertions of Bishop Mitchinson, then Bishop of Barbados and visitor of the College, Codrington was affiliated to Durham University. By this important

CODRINGTON'S DARK DAYS

move Codrington became an integral part of Durham University. This, as Archdeacon Bindley has pointed out, in his admirable history of the college1 has proved a great boon to West Indian students, and a stimulus has thereby been given to higher education in the West Indian colonies. "The affiliation," he writes, "ensures a distinctive and settled course of studies and impartial adjudication in England on the work done, and admits to an English degree any student who, without setting foot on English soil, after due residence in College, can pass the Durham examinations, for residence in the College counts as residence at Durham. The examination papers are sent out from Durham, the examinations publicly conducted at the College, and the answers returned unread to the English examiners. By this delightful connection Codrington may be said to touch hands with St. Cuthbert across the centuries, and a West Indian College to claim an academic kinship with the schools of Melrose and of Lindisfarne, of Jarrow and of Wear."

In common with others in the West Indies, the two bequeathed estates suffered from that succession of misfortunes, the abolition of slavery, the equalisation of the sugar duties, and the competition of cane sugar with subsidised beet, and by 1898, the revenue of Codrington was so reduced that a serious crisis arose. Indeed the closing of the college was actually threatened, so impoverished did it become. The then Governor of Barbados, Sir James Shaw Hay, wrote to the Hon. A. C. Ponsonby, who at once took the matter up and invoked the assistance of the West India Committee, who issued an appeal signed by the Archbishop of Canterbury, the Bishops of Durham and Barbados, the Earl of Stamford, the Earl of Bessborough, the Dean of Durham, Bishop Mitchinson, Sir Gerald Codrington and others,

¹ Annals of Codrington College, Barbados. By T. Herbert Bindley, D.D. London: The West India Committee, 1911.

which resulted in the collection of upwards of £1,886. which, supplemented by a generous grant from the S.P.G. Bicentenary Fund, happily prevented what would have been a calamity for Barbados and indeed the West Indies generally.

The bicentenary of the death of Christopher Codrington was celebrated on April 7th, 1910, when a number of the old members of the College and the leading officials of Barbados attended a special service at St. Michael's Cathedral, and the then Governor, Sir Gilbert Carter, presided at a public luncheon in honour of the occasion.

That Codrington College has done and is doing good work, is admitted on all sides, but there is a feeling that more might be done in the direction of the teaching of "Physic and Chirurgery" in accordance with the terms of the founder's will. In 1910 the West India Committee submitted certain proposals to the trustees for the teaching of tropical hygiene and preventive medicine at the college, which were favourably received by the Society for the Propagation of the Gospel. Unfortunately, however, the trustees were advised that they could not hold under the trust a laboratory in Bridgetown, which was felt in Barbados to be an essential part of the scheme, and consequently the proposals, in which the late Sir Rupert Boyce took a keen interest, fell through.

In Jamaica there are, besides the training colleges, a secondary school, and about 700 elementary schools. The Cambridge Local Examinations and the examination of the University of London are held in the island. Once a year a Government scholarship is awarded of a total value of £600, spread over three, four or five years, at the option of the winner subject to the discretion of the Governor, and once a year the Rhodes scholarship of £300, to which reference is made below, is awarded. It is tenable for three years at Oxford

University.

JAMAICA RHODES SCHOLARS

Elementary education in the island is left to private enterprise, but it has, since 1867, been assisted by grants-in-aid from the local revenue. The schools—at which the average attendance last year was 57,849—are inspected by the Government, which also provides a training college for female teachers supported entirely by local funds.

In 1892 a Board of Education was constituted and provision was made for opening Government Secondary Schools where required. Two such schools are now assisted from public funds. There are several endowed schools, and three scholarships tenable at English and other Universities.

Jamaica has the great advantage of being the West Indian colony selected by the trustees of the late Right Hon. Cecil Rhodes to benefit from the munificent scholarship scheme of that staunch Imperialist. It is hardly necessary to remind readers how Mr. Rhodes left a sufficient sum of money to provide for the endowment of scholarships at his old University, Oxford, to be awarded annually to 175 selected scholars from our Colonies. "I consider," runs the will, "that the education of young colonists at one of the universities in the United Kingdom is of great advantage to them for giving breadth to their views, for their instruction in life and manners, and for instilling into their minds the advantage to the colonies as well as to the United Kingdom of the retention of the unity of the Empire." The Jamaica Rhodes scholars are selected by a committee consisting of the Governor, or officer administering the Government as chairman. the Chief Justice, the Inspector of Schools and the chairman of the Jamaica Schools Commission ex officio. and a fifth member elected by co-optation subject to the approval of the trustees.

For a time the scholarship was, unfortunately, the subject of heated controversy in Jamaica, a controversy

which arose out of the question of domicile of the competitors. Some contended that the scholarship should only be awarded to boys educated in Jamaica, while others held that Jamaica boys, whose parents satisfied the requirements of domicile, namely, seven years' residence in Jamaica, should be allowed to compete, even if they were educated wholly or partially outside the island.

In the absence of any specific instructions in Mr. Rhodes' will, the responsibility of framing the regulations rested with the trustees, and they decided that in two years out of three, competition for the scholarship should be open, and that in the third year, only boys educated in Jamaica should be eligible. This compromise was accepted as a satisfactory solution of a question which had given rise to a good deal of heart-burning, though many would have liked to see the scholarships thrown open for competition by Jamaica boys wherever educated. It must certainly be stimulating for colonial schools that their pupils should have to compete with boys trained elsewhere. Any limitation of the scholarships to youths taught in the colonies must tend towards boys being kept at home for their education. It is obviously an advantage to boys resident in the colonies, and especially tropical colonies, to return to England for their education. Their minds are thus broadened and when they return, as many do, to the colonies to take up positions of responsibility, they have a knowledge of men and of affairs which proves of immense value. Not a few of the most distinguished men in colonial life owe much to an English education, and it would be a strange result for Mr. Rhodes' bequest if it diminished the interchange between the mother country and the colonies, which it was his declared object to increase and improve.

Government-assisted education in Trinidad dates from 1851, and the island now has 256 elementary schools.

THE MICO IN ST. LUCIA

Of these, fifty-two are secular and are supported entirely by the Government, 204 are denominational and assisted. There are two Government and three denominational schools for teachers.

For higher education there are Queen's Royal College, the Roman Catholic Institution, St. Mary's College and Naparima College, a Presbyterian Institution affiliated to the first-mentioned institution.

Three Exhibitions and Scholarships of the value of £150 each, tenable for four years, or £200 tenable for three years at some University or other scientific, educational institution in the British Empire are awarded in the island every year. There are several Convent Schools, and a High School for girls was established in 1906.

Grenada has forty-six elementary schools, of which nine are maintained by the Government, and thirty-seven are state-aided. The educational authority is a Board nominated by the Governor of which half of the members are Roman Catholics. There is a grammar school at St. George's and a high school for girls.

Until 1891, the trustees of the Mico charity, to which reference has been made above, superintended education in St. Lucia. On June 30th in that year, however, their eleven schools were closed, and the trustees severed their connection with the island. Three of the schools were taken over by the Government, and others were assisted under the terms of an Education Ordinance passed in 1898, when all Roman Catholic Schools were transferred to the Roman Catholic Body and their assistance was provided for. The Government also assists a second grade school for boys, while the Sisters of St. Joseph maintain a similar institution for girls.

Primary education in St. Vincent is paid for by the Government, which provides £1,350 per annum for the purpose. About half of the school buildings are Government property, the other half being the property of

different denominations. Fees at the rate of ½d. per week for each child are supposed to be paid; compulsory education has not yet been introduced. There is no provision existing for secondary education at present, but this matter is receiving attention at the time of writing, and satisfactory arrangements for the opening of a small grammar school will, it is hoped, soon be made. There is also an Agricultural School, where free instruction is given to a limited number of boys.

In May, 1911, a High School for Girls was opened, to which the Government contributes a subsidy of £50 a year.

In the Leeward Islands elementary education is denominational, except in Dominica, the schools being controlled by Anglicans, Moravians, Wesleyans and Roman Catholics. With four exceptions, all the schools in Dominica are supported from public funds. In Antigua there are two Government Schools, and grants are made to Grammar and High Schools throughout the colony.

Elementary education in the Bahamas is conducted by the government at the public expense, and is compulsory and unsectarian. Denominational schools are not interfered with, and there are also higher grade schools

giving a fairly good education.

The present state-aided system of elementary education in British Guiana dates from 1876. The schools, with the exception of those on estates, are denominational, and the central administration is vested in an Inspector of Schools, the local control being entrusted to managers who are usually clergymen. Last year the number of schools was 223, and the average attendance 20,255.

Higher education is provided for by a Government College in Georgetown, conducted on the lines of an English Public School. A scholarship of the value of £200 tenable at a University in England for three years is awarded annually.

THE NEED FOR UNIFORMITY

In British Honduras, education generally is in the hands of the religious denominations. There are both primary and secondary schools, the latter being found only in the town of Belize. The Government contributes towards the expenses of primary education by an annual vote, which in 1909-10 amounted to \$18,052.81.

The control of the vote and the general administration of the assisted or grant-aided schools are vested in a Board of Education at which the several denominations are represented. Education is neither free nor compulsory; but the fees paid in the primary schools are not more than 5 cents per week for each pupil. The salaries of teachers of the primary schools range from \$15 permonth, in the small country schools, to \$40 in the large towns, such as Belize.

From the above it will be appreciated that in educational matters, as in so many others, there is a great lack of uniformity in the West Indies. It would certainly appear to the layman—and the author cannot claim to be an authority on education—that this state of affairs might be obviated with advantage to the colonies concerned. The more "systems" the West Indies have in common, the better will surely be the understanding between the inhabitants of the several islands.

CHAPTER XIII

CONSTITUTIONS

THE West Indian Colonies are frequently spoken of as Crown Colonies, but this classification is not strictly correct, for Crown Colonies are those colonies in which the Crown has entire control of legislation, and in which the administration is carried on by public officers under the control of the Home Government. The Bahamas. Barbados and British Guiana certainly do not come under this category, for though the two first-named colonies are without responsible government, they have representative institutions—in other words, though they have nominated Legislative Councils, they possess elected Assemblies—and British Guiana has a partly elected legislative council called the Court of Policy, the constitution of which does not provide for an official majority. In the case of these three colonies, the control of the Crown is limited to its veto on legislation and to the right reserved to the Home Government of making certain official appointments.

In Jamaica and the Leeward Islands the Legislative Councils are partly elected; but the constitutions of these two colonies provide for an official majority, while in British Honduras, Grenada, St. Lucia, St. Vincent, and Trinidad, the Councils are nominated by the Crown and, except in British Honduras, there is a permanent official

majority in them.

From May 11th, 1655, the date of its conquest, until the Restoration, Jamaica was under military jurisdiction. In February, 1661, Governor Doyley was, however, instructed "to take unto him a Council of twelve persons, to be elected by the people, to advise and assist him in the execution of his trust." His successor, Lord Windsor, was in the same year directed "with the advice of the

JAMAICA AND THE CROWN

Council, to call Assemblies to make laws, and upon imminent necessity to levy money; such laws to be in force for two years, and no longer unless approved by the Crown."

The next Governor of Jamaica, Sir Thomas Modyford, was empowered either to constitute, by his own authority, a Privy Council of twelve persons, or to continue the old one, and to alter, change or augment it, as he thought fit. He was further authorised with the advice of a majority of the Council, to frame a method for establishing General Assemblies, and from time to time to call such Assemblies together, and with their consent to pass all manner of laws, reserving to himself "a negative voice"; also "upon imminent occasions to levy money."

In 1664 an Assembly was elected and laws were passed, which were not, however, confirmed, and would have expired at the end of two years had they not been continued until the end of Sir Thomas Modyford's administration by Order in Council. In December, 1674, Lord Vaughan was appointed Governor with authority "with the Council and Assembly, to pass laws for the good government of the island." An Assembly which was then convened passed laws, but they again lacked confirmation, being referred to the Committee for Trade and Plantations which recommended that no Legislative Assembly be called without the King's special directions.

The object for this restriction was attributed to the desire of the Ministers of Charles II to secure a perpetual annuity to the Crown which the House of Assembly had declined to vote. The recommendation of the Committee was approved and a body of laws was drawn up by it. Then the Earl of Carlisle—head of the Howard family and not to be confused with the Earl of Carlisle who was head of the Hay family and was identified with Barbados—was appointed Governor with instructions to "offer them to

the Assembly for their consent." This he did, but the laws were all rejected, the Assembly urging that the distance of Jamaica from England made such a system of Legislation inconvenient and that "the nature of all colonies being changeable, the laws consequently must be adapted to the interest of the place, and must alter with it." They further claimed that the new form of Government rendered the Governor absolute; and that by the former mode of enacting the laws the Royal Prerogative was better secured.

The matter was referred to the Privy Council in England and the King was advised to adhere to his decision and to empower the Governor—in the event of the Assembly again rejecting the laws—to "govern according to the laws of England." The suggested laws having been reintroduced and again rejected, the Law Officers were consulted as to whether Jamaica could be governed by the laws of England; and they decided "that the people of Jamaica had no right to be governed by the laws of England, but by such laws as are made there and established by His Majesty's authority."

Soon after, Colonel Long, Chief Justice of the island, was sent home to England as a State prisoner for having struck out the King's name from a Revenue Bill sent to the Council from the Assembly, and for having drafted an Address for the Assembly protesting against the

change of Government.

The attempt to establish Poyning's Law in Jamaica failed. Colonel Long argued his case before the King in Council with such force and vigour that the Ministry eventually yielded, and on November 3rd, 1680, a new commission was issued to the Earl of Carlisle, which declared: "The Assembly, or the major part of them, shall have power, with the advice and consent of the Governor in Council, to make laws for the good of the island and its inhabitants, not repugnant to the laws of England,

POYNING'S LAW IN JAMAICA

provided that all laws, so to be made, shall be transmitted to the King for approval or rejection, and any so disapproved to be void." This form of Government was confirmed in the commissions of successive Governors; but few of the laws which were passed received the assent of the Crown.

In 1728 the Assembly agreed to settle on the Crown "an irrevocable revenue" of £8,000 Jamaica Currency per annum, on the condition that the body of their laws should receive the Royal Assent, and that all such laws and statutes of England, as had been at any time esteemed, introduced, used, accepted or received as laws in the island, should "be and continue laws of this His Majesty's Island of Jamaica for ever."

This arrangement was loyally adhered to by both parties to it, and no further political crisis occurred until 1839, when the West India Prisons Act of the Imperial Government was deeply resented by the House of Assembly, which on three occasions declined to transact any business until they were "left to the free exercise"

of their inherent rights as British subjects."

Lord Melbourne's Government then, on the recommendation of the Governor, took the drastic step of introducing a Bill into the Imperial Parliament for the suspension of the political constitution of the colony. It may easily be imagined what a storm of protests this measure raised. The opposition was led by Sir Robert Peel, and the Government were defeated, the bill being thrown out on second reading. Then Lord Melbourne resigned, but returned again to office, Sir Robert Peel being unable to form a ministry. The bill was now carried through the House of Commons, but it was amended by the Lords, the end of the dispute being the passing of an Act which provided that two months after the convening of the Assembly, the Governor in Council should have power to revive and continue in

force, or to re-enact, any of the expired laws "which should not have been before then revived or continued in force or re-enacted by the Governor, Council and Assembly of the Island."

This was agreed to by the Assembly, and the relations between the two legislative bodies remained friendly until 1853, when, during the Governorship of Sir Charles Grey, the representatives of the people declined "to do any business with the honourable Board of Council" in consequence of the Council having rejected their Revenue Bills and of "the recklessness and utter disregard of the interests of the colony thereby displayed." The House adjourned, and a deadlock ensued, the Imperial Government supporting the action of the Council.

Meanwhile, Sir Henry Barkly was appointed to succeed Sir Charles Grey, whose term of office had expired, as Governor, and he announced to the Assembly the willingness of the Imperial Government to grant a loan for the purpose of compensating such office holders as might, in a general retrenchment scheme, lose their appointments or suffer a diminution of income, and he invited them to introduce such political reforms as the experience of the mother country had "demonstrated to be the most conducive to efficient and economical government, and best calculated to avert the recurrence of ruinous struggles between the various powers of the State." A law was then passed authorising the Governor to appoint an Executive Committee of the Legislature, prohibiting the raising or expending of money except on the recommendation of the Executive, and reconstituting the Legislative Council which was now to consist of seventeen members, of whom five only were to be holders of office, and investing it with powers similar to those of the House of Lords. The House of Assembly remained on the same basis as before, with forty-seven elected members.

The present system of legislation generally prevailing

EYRE AND MORANT BAY

in the West Indies may be said to date from 1865, prior to which year each of the West Indian colonies had more or less representative institutions. In 1865 the legislative body in Dominica was re-organised, and in the following year the constitution which, as has been shown in the preceding pages, had been the subject of such bitter dissensions in Jamaica was voluntarily surrendered.

After the suppression of the serious rebellion which started at Morant Bay in 1865, Governor Eyre urged upon the Legislature the unsuitability of the then existing form of constitution and the necessity for sweeping changes whereby a strong Government might The Legislature now willingly responded, established. and abrogating all the existing machinery of legislation, and the rights for which they had so stubbornly fought for two centuries, called upon Her Majesty's Government to substitute any other form of government which might be suited to the altered conditions of the colony. A Legislative Council was accordingly established by Order in Council consisting of such number of official and unofficial members as Her Majesty might think fit to appoint.

In 1881, when the condition of Jamaica was again peaceable, a Commission was sent out to the island to enquire into the question of granting a new constitution, and a petition from the colony advocated a Council of twenty-two members, of whom eight were to be nominated

and fourteen elected.

The then Governor, General Sir Henry Norman, protested, however, against the elected members being given a majority and by an Order in Council, dated May 19th, 1884, and amended in October, 1895, a Legislative Council was constituted, consisting of the Governor and five ex-officio members, and of such other persons not exceeding ten in number, as the Crown might from time to time appoint, or as the Governor from time to time might

provisionally appoint, and fourteen persons to be elected. A Privy Council with the usual powers and functions of an Executive Council was also provided for. The Order in Council laid it down, however, that the votes of the nominated members were not to be recorded against the unanimous votes of all the fourteen elected members on any question unless the Governor declared that, in his opinion, the decision of such question in a sense contrary to the votes of the elected members was "of paramount importance to the public interest."

The full number of nominated members was not at first appointed and the elected members were for some time in a majority, though the sword of Damocles was suspended over their heads, for there was the danger of this majority being wiped out in the event of their giving an adverse decision in matters which the Governor

might consider of "paramount importance."

In 1899 the inevitable happened. The elected members declined to pass a Tariff Bill and Sir Augustus Hemming, the then Governor, acting on the instructions of Mr. Chamberlain, completed the full number of nominated members by the addition of four. The four additional members were subsequently withdrawn; but in the following year they were re-appointed to the great indignation of the elected members, who left the Council Chamber, and on the following day declined to sit for the remainder of the session. Since then the official members have been in a majority in the Council, and the functions of the elected members have been reduced to those described in the Duke of Buckingham's despatch of August 17th, 1868: "Elective members exercise a vigilant supervision over the measures introduced by the Government, lest in any case local official interests, which are no doubt strongly represented in the Legislature, should prevail to the prejudice of public interests; and if in any such case, or in any case which should appear to them to be of



THE WEST WING OF THE PUBLIC BUILDINGS, KINGSTON, JAMAICA



THE LEEWARD ISLANDS ACT

this nature, the Elective Members should be outvoted, it would be their duty to enter a protest setting forth the grounds of their objection, and to require of the Governor that he should transmit it to the Secretary of State."

The Constitution of the Leeward Islands is very similar to that of Jamaica, though there are in the Legislative Council of the former colony only eight official and eight elective members who are chosen not directly by the people as is the case in Jamaica, but by the members of the Legislative Councils of the several Presidencies. Antigua returning three, Dominica two, and St. Kitts-Nevis three. The official members are the Governor, the Colonial Secretary, the Attorney-General, the Auditor-General, the Administrators of St. Kitts-Nevis, and Dominica, and the Commissioners of Montserrat and the Virgin Islands. This Federal Council was constituted by the Leeward Islands Act of 1871. The Legislative Council has concurrent legislative powers with the local legislatures on certain subjects, such as matters concerning property, mercantile and criminal law, the law relating to status, the maintenance of a general police force and a common convict establishment, quarantine, postal and telegraph affairs, currency, audit, weights and measures, education and the care of lunatics, immigration, copyright, patents, and its own constitution and procedure. The expenses of the federal establishments are voted by the Council, and apportioned among the Presidencies.

The Council is entitled to alter its constitution by an ordinary Act, to be reserved for the King's pleasure, and the King has power, by Order in Council, at any time to include any other West Indian island in the federation, upon joint Addresses from the Legislative Bodies of such island, on such terms and conditions in each case as are in the Addresses expressed.

Each of the Presidencies has its separate Legislative

Council, but none of the members are elected, being now nominated by the Governors under Royal Letters Patent. Until 1898 the Legislative Councils of Antigua and Dominica were partly elected, but in March and July respectively of that year they passed acts abrogating themselves and substituting the Crown Colony system which had been already adopted in St. Kitts and Nevis in 1877. Legislative Councils succeeded the old Assemblies in Montserrat and the Virgin Islands in 1867, and since 1902, they too have been purely nominated.

The constitutional position of the Windward Islands differs in several respects from that of the Leeward Islands, inasmuch as the former have no federal Legislative Council (each island retaining its own institutions), no common laws, revenue or tariff. All that they do have in common is a Governor, a Court of Appeal—consisting of the Chief Justices of the several islands and of Barbados,—an audit system and a lunatic asylum.

As far back as 1764 there was one Governor over "the Southern Caribee Islands" which then comprised Grenada, Dominica, St. Vincent and Tobago. In 1833 St. Vincent was included with Barbados, Grenada and Tobago in one general Government under a Governor-in-chief at Barbados, and in 1838 St. Lucia was also included. On March 17th, 1885, Letters Patent were passed reconstituting the Government of the Windward Islands. Barbados was now omitted, and Tobago ceased to be attached to the colony in 1889, when it passed under the Government of Trinidad, of which it was made a ward on January 1st, 1899, by proclamation of the Governor in accordance with an Order in Council of the preceding year.

From 1766, Grenada had a Legislative Council and a House of Assembly of twenty-one members. In 1875 a single Legislative Assembly was substituted consisting of eight elected and nine nominated members. This Assembly at its very first meeting passed an Address

DISAGREEMENT IN ST. LUCIA

to the Queen informing Her Majesty that it had carried a Bill providing for its own extinction and leaving it entirely to Her Majesty's wisdom and discretion to erect such form of Government as she might deem most desirable for the welfare of the colony. An Act of the Imperial Parliament empowered Her Majesty to comply with this Address, and a Legislative Council was established in December, 1877, consisting of the Governor, six official members and seven unofficial members nominated by the Crown.

In St. Lucia, the Legislature consists of the Administrator and a Legislative Council, all the members of which are nominated by the Crown. There is at present only one unofficial on the Council, the unofficials having withdrawn in a body subsequent to a disagreement in 1909, regarding the introduction of a property tax ordinance. Until 1800, the island was—with a brief exception during the French Revolution—governed according to the law and ordinances of the French Monarchy, the Conseil Supérieur or Court of Appeal performing certain executive and administrative functions.

Like Grenada, St. Vincent once had its Legislative Council and House of Assembly, the latter consisting of nineteen members. In 1867 these bodies abrogated themselves, and a single Legislative Assembly was created consisting of twelve members, three of whom sat ex officio, while three were nominated by the Crown and six were elected by the people. This Constitution was, however, also abrogated in 1876, and the modelling of a Constitution was left to the Crown. The Legislative Council now consists of eight members who are all nominated by the Crown.

As has been already stated above, Barbados has representative institutions but not responsible government. The people of the island are justly proud of the fact that their House of Assembly is the oldest representative

one in the Empire with the exception of our House of Commons and the Assembly of the Bermudas. Barbadians were included in the Royal Charter of 1627 by King Charles I. By this and by the Charter of the Commonwealth (1652) they possess a representative constitution, and they would resent any suggestion for its modification. The feeling on this matter was shown in 1876, when an attempt was made during the Governorship of Mr. Pope-Hennessy to bring about federation with the Windward Islands.

The Barbados Legislature now consists of a Governor, a Legislative Council comprising nine members all appointed by the King, and a House of Assembly of twenty-four members elected annually on the basis of a moderate franchise. The Executive functions are performed by a body called the Executive Committee, which consists of the Governor, the Colonial Secretary, and the Attorney-General ex officio, the Inspector-General of Police, and such other persons as may be nominated by the King, one member of the Legislative Council and four members of the House of Assembly nominated by the Governor. This body introduces all money votes, prepares the estimates and initiates all government measures. There is also an Executive Council, the members of which are appointed by the Crown.

In the Bahamas there is a Legislative Council nominated by the Crown, and a Representative Assembly of twenty-nine members elected in fifteen districts. The franchise extends to persons owning land of the value of £5 and occupying houses of the rental value of £2 8s. in New Providence, or £1 4s. elsewhere for six months. The qualification for members is possession of real or personal property of the value of £200. The Executive functions of the Government are conducted by the Governor assisted by an Executive Council of not more than nine

members.

THE BAHAMAS AND CANADA

The people of the Bahamas do not, however, value their representative institutions as their distant neighbours in Barbados do, and that this is the case was shown early in the present year, when the members of the Assembly unanimously passed a resolution in favour of an enquiry being made by the Governor as to the terms on which Canada would admit the islands into the confederation. The abrogation of the constitution would be an essential precursor of the adoption of any such step, but that does not appear to have caused any heart-burnings in the Bahamas, though any suggestion for "annexation" by the Dominion would give rise to the strongest protests in the other West Indian colonies, whose interests are widely different to those of the Bahamas.

At the date of its cession in 1797, Trinidad was a dependency of the "Capitania-General de Caraças" and was administered by a Governor, assisted by the "Illustrious Board of Cabildo," a corporation which had extensive powers. It consisted of the Governorwho was president-and twelve members. This body, which was self-elected, levied taxes and exercised general jurisdiction over the colony. Colonel Thomas Picton, the first English Governor, acting under the orders of Sir R. Abercromby, maintained the Cabildo, but appointed in addition a "Council of Advice" selected from the most influential inhabitants and including Don Christoval de Robles, a Spanish creole, a French creole, and three Irishmen; and from this body the Legislative Council was gradually evolved. The Cabildo ceased to exist in 1840, and its municipal functions were taken over by a Town Council, to which reference is made on a succeeding page. Trinidad then became a Crown Colony, pure and simple, and though several attempts were made down to the year 1853 to obtain a representative government, it is still controlled entirely by Downing Street. The Legislative Council, which was reconstituted in 1898.

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when Tobago became a ward of Trinidad, now consists of the Governor, the Colonial Secretary, the Attorney-General, the Solicitor-General, the Auditor-General, the Inspector General of Constabulary, the Director of Public Works, the Surgeon-General, the Protector of Immigrants, the Receiver-General, the Collector of Customs, and of such other members (unofficial) as the Governor may appoint. The unofficials, who hold their seats for five

years, are at present eleven in number.

Tobago, which was amalgamated with Trinidad in 1888, was formerly one of the Windward Islands and was administered by a resident Administrator subordinate to the Governor-in-chief of that colony. By Order in Council a Legislative Council was appointed in 1877 consisting of not less than three persons nominated by the Crown. After its amalgamation with Trinidad the island was administered by a Commissioner appointed by the Governor of the united colony who was ex officio a member of the Legislative Council, and one official member of Council is still resident in Tobago. The Commissioner was assisted by a financial Board of five members, two nominated by the Governor and three elected. The revenue, expenditure and debt of the islands remained distinct, but the laws of Trinidad were—with one or two exceptions—the laws of both.

By an Order in Council of October 20th, 1898, this arrangement was revoked, and it was provided that Tobago should become a ward of the united colony of Trinidad and Tobago; that the revenue, expenditure and debt of the two colonies should be merged; that the debt due from Tobago to Trinidad should be cancelled; that the laws of Trinidad should, with a few exceptions, operate in Tobago; and that all future ordinances of the colony should extend to Tobago. This Order in Council was brought into effect on January 1st, 1899, by a proclamation of the Governor—Sir Hubert Jerningham

THE BERBICE ASSOCIATION

—issued on December 8th in the preceding year. The post of Commissioner then ceased to exist and that of

Warden and Magistrate was created.

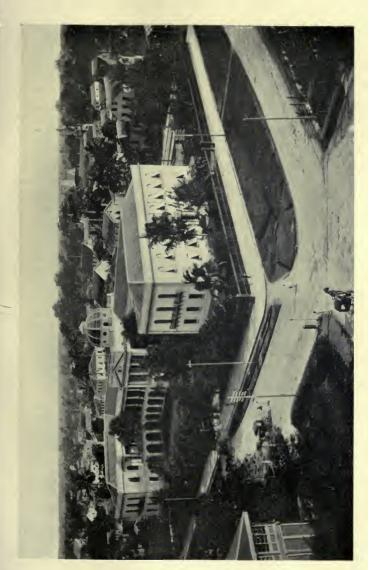
When Demerara, Essequibo and Berbice were ceded to us, it was agreed that the civil laws of those colonies "as far as regards the property and civil jurisdiction and the Council and civil magistrate" should remain as they then were until the further pleasure of the King was known. Under the Dutch, Demerara and Essequibo constituted one Government and Berbice another, and this arrangement continued in force under the British until 1831. The constitution of Berbice dated from 1732. Under it, the Governor was nominated by the directors of a mercantile body called the Berbice Association, and was assisted by a Council of six. This council was dissolved by an Order in Council in 1826, and another was formed, the right of appointing members to fill vacancies being thenceforward vested in the Governor.

In Essequibo the chief legislative body was the Court of Policy, which in 1773 was merged into a similar body which had existed in Demerara for thirty years, and the seat of Government was established at Stabroek, which now forms a part of Georgetown. Disputes having arisen between the colonists the local Government and the Dutch West India Company, as to who should appoint the members of the Court of Policy, a "Plan of Redress" which was really a new draft constitution, was framed by the States-General who had been petitioned by the colonists. This was approved of, and in 1789 a Commission appointed by the States-General arrived in the colony, and after dissolving the then existing Government, they established a new one which continued in operation when the British captured Essequibo in 1796, and in 1802, and after the cession of 1803.

The Council, or Court of Policy, now consisted of the Director-General, the Commander of Essequibo, the

Fiscals of Essequibo and Demerara, and two colonists from Essequibo and two from Demerara. The unofficial portion of the Council was at first chosen from a nomination by two Colleges of Kiezers or Electors, one for each county, and each consisting of seven members elected by a majority of the votes of the inhabitants possessing not fewer than twenty-five slaves. The office of Kiezer was subsequently made tenable for life, unless the holder resigned or ceased to be an inhabitant, by a proclamation of Governor Sir Benjamin d'Urban in 1831. In 1795 four members were appointed by the Colleges of Electors, to have jointly with the Court of Policy the administration of public funds. This arrangement was, however, abandoned in the following year, when it was provided that there should be six inhabitants, three from each colony. appointed to the Court of Policy, with powers strictly limited to raising taxes and assisting in the audit of public funds, and these members were known as Financial Representatives. The last surviving Kiezer, Mr. D. C. A. McKinnon, died this year.

In 1812 the arrangement was modified by a proclamation of Acting-Governor Carmichael, who consolidated the two Colleges of Kiezers with the Financial Representatives, but this proclamation was annulled in 1831, when the three provinces were united, and the earlier arrangement was restored. It was claimed that the Financial Representatives had no authority except by express permission of the Crown, to discuss any item upon the estimates so as to alter its amount, although they might refuse to include any sum to which they objected in their calculations of the funds necessary to be raised by taxation. This interpretation has, however, never been accepted by the colonists, and there were frequent disagreements between the executive and elective sections of the Court. In 1855, under the administration of Sir Philip Wodehouse, an Ordinance was



THE PUBLIC BUILDINGS, GEORGETOWN, BRITISH GUIANA



THE COLLEGES OF KIEZERS

passed to amend the political institutions of the colony, but it did not receive the approval of Her Majesty, and until 1891 the constitution consisted of a Governor, Court of Policy, and a Combined Court. The functions of an Executive and Legislative Council and House of Assembly were performed by the Governor and Court of Policy, except as regards taxation and finance, which were, as they still are, dealt with by the Combined Court, composed of the Governor and members of the Court of Policy, combined with the six Financial Representatives. The Court of Policy now passes all laws and ordinances, except the annual Tax Ordinance, which is passed by the Combined Court.

In 1891 an Act was passed, which came into force in the following year, transferring the administrative functions of the Court of Policy to an Executive Council, the duties of the Court becoming purely legislative. The Combined Court now has the power of (1) imposing the colonial taxes and auditing the public accounts, and (2) discussing freely and without reserve the items on the annual estimates prepared by the Governor in Executive Council. The first of these powers is the birthright of the Combined Court, having been bestowed in 1796, when Governor Beaujon called the Financial Representatives into being, "with a right of voting only for the raising of colonial taxes and not further"; while the second is conferred periodically by His Majesty's Order in Council after each renewal of the Civil List, with which it is co-existent. The Civil List has recently been renewed for five years from the 1st January, 1908.

The Court of Policy under the new constitution consists of the Governor, seven official members, and eight elected members. It may be prorogued or dissolved at any time by the Governor, and in any case it is dissolved at the end of five years, and a General Election must be held within two months of the date of dissolution.

The number of Financial Representatives, who with the Court of Policy form the Combined Court, remains unchanged.

The first settlers in British Honduras managed their own affairs, magistrates being appointed to exercise executive and judicial functions for the small community. Resolutions passed at public meetings formed the laws, and these primitive customs were recognised by Admiral Sir William Burnaby, who visited the settlement with Captain Cook in 1756 to confirm the colonists in their rights. The laws and customs were now codified and were known as "Burnaby's laws."

In 1786 Colonel Despard was sent to the country as Superintendent, but his interference was resented and his successor re-established the customs recognised by Burnaby's code which he had upset, and from 1790 to 1797, magistrates again transacted the affairs of the settlement. They were, however, once more succeeded by a Superintendent in the latter year, and until May 12th, 1862, when the settlement was made a British colony, Superintendents were duly nominated from time to time.

In 1839 an Executive Council was appointed to assist the Superintendent, and in 1853 a Legislative Assembly was formally constituted, consisting of eighteen elected and three nominated members. British Honduras was declared a British colony in 1862 with a Lieutenant-Governor subject to the Governor of Jamaica. The Assembly was abolished as the outcome of its own petition in 1870, and a Legislative Council was substituted for it consisting of five official and not less than four unofficial members, with the Lieutenant-Governor as President, British Honduras thus becoming a Crown Colony. The Council now consists of three official and five unofficial members. The Executive Council comprises the Governor and six members, three of whom sit ex officio. On October 31st, 1884, letters patent were proclaimed,

POLITICAL DIFFERENCES

constituting the office of Governor and Commander-in-Chief, and the colony was thus rendered independent of Jamaica.

To attempt to summarise the West Indian franchise qualifications usefully would be an almost impossible task. The usual basis is one of ownership, occupancy, income, and the payment of direct taxes, but in no two colonies are the actual qualifications alike. Some idea can, however, be gained of the limited extent to which the franchise is enjoyed when it is stated that in Barbados there are 2,049 registered voters out of a population of 177,000, in Jamaica 27,257 out of 831,383, and in British Guiana 3,630 out of 305,000.

On the whole, the existing constitutions in the West Indies work well, and there has been no agitation in recent years among the masses for a greater degree of self-government. Disagreements between the official and elective sections of the legislatures are, happily, comparatively rare, and when they do arise they can generally be traced to some tactless act on the part of a Governor or, perhaps, of Downing Street. From the political rancour and spite which unfortunately seem to characterise "politics" in the old country more and more, the West Indies are, fortunately, free.

CHAPTER XIV

LOCAL ADMINISTRATION

For administrative purposes, Barbados is divided into eleven parishes: St. Michael (in which Bridgetown, the capital, is situated), Christ Church, St. Philip, St. John. St. Joseph, St. Andrew, St. Lucy, St. Peter, St. James, St. Thomas and St. George. Local affairs in the towns and villages are controlled by Vestries elected under the Vestries Act of 1891. The rectors of the various parishes are chairmen of the vestries, and the numbers of vestrymen are not less than ten nor more than sixteen for each of the parishes of St. Michael, Christ Church, and St. Philip. and not less than six nor more than ten for each of the other parishes. Membership of the vestries is limited to qualified males who have attained the age of twenty-one years, the qualification being based on property ownership, and the franchise is extended to all entitled to a vote at any election of members to the House of Assembly in the case of the parish of St. Michael, and in the case of the rural parishes to those possessing certain specified qualifications.

The several vestries appoint collectors of rates and parochial treasurers for each parish, who are paid by a commission of 6% on the rates collected by them. The

chief sources of revenue are property taxes.

In Jamaica, local affairs are dealt with by elective Parochial Boards in each parish, except Port Royal, which consist of the person representing the electoral district in the Legislative Council, the Custos of the parish, and from nine to fifteen members elected by the tax-payers who are qualified to vote at elections for members of the Legislative Council. Port Royal was constituted a separate parish for all purposes of administration in 1900,

THE ILLUSTRIOUS CABILDO

and a Board was formed for it consisting of the Commodore as chairman, a naval officer, a military officer, and two elected members. When the naval station was reduced to the position of a "cadre" in 1905, the senior military officer became chairman of the Board. The parochial boards have since 1885 managed all the local affairs, which until that year had been in the hands of the municipal and road boards. Each parish has its own parochial institutions, such as poorhouses, etc., and each administers poor relief under the control of a Board of Supervision. The several direct taxes received on property, horses, carriages, etc., are devoted mainly to the parish in which they are collected, with the exception of a few minor items and a tax of 8d. in every \$10 of the gross value of the property. which goes to the credit of the general revenue of the colony. Kingston has a Mayor and Council, consisting of twelve elected members in all, the Custos and the member of the Legislative Council for the parish being ex-officio members.

There is also a body known as the Kingston General Commissioners which consist of eleven members, six of whom sit *ex officio*, while five are appointed by the Governor. They attend to water and gas supply, the management of the slaughter-house, markets, etc.

At the time of the cession of the island, municipal affairs in Trinidad were managed by a body with the high-sounding title of "The Illustrious Board of the Cabildo." This body used to meet at St. Joseph, while that town was capital of the island, but removed its head-quarters to Port of Spain in 1783.

The Cabildo, which was also called the Ayuntamento, had, in the early years of the eighteenth century, very wide powers. Besides attending to the affairs of the capital, it practically controlled the actions of the Governor, whom it sometimes ruled with a very high

hand. E. L. Joseph, in his *History of Trinidad*, tells how it partook of the mixed nature of an ecclesiastical council, a parish vestry, a municipal corporation, a council of Government and a legislative and executive council. But that was under the Spanish regime, and the author adds, "times have altered with this 'illustrious body'; it is now reduced to a bankrupt corporation."

Even in the old Spanish days, however, the fortunes of the Cabildo had their ups and downs, and in 1733, resources of the illustrious body were so reduced that the members were compelled to call a special meeting to form a committee to tax the inhabitants "in proportion to their means" in order to provide the necessary funds for thatching their Hall with palm leaves. In 1740 the members were again reduced to such straits of poverty that, according to an old newspaper, "the Cabildo had but one pair of small clothes between the whole of the members." And this was the body which consisted of two Alcades, three Regidors, a Procurator-General, an Alcade of the Santa Hermandad, a Gaoler, and a Quadrillion who bore the Canopy in the church.

Still, in spite of hard times, the Cabildo maintained its independent attitude, and in 1743, when the Governor, Don E. S. de Liñan, left the island for Cumana without formally announcing to them his intention of doing so,

they asserted their right to govern the colony.

A stormy meeting took place, at which it was decided that in the absence of the Governor the Alcades ought to represent him. Major Espinoza, the military Commandant, dissented from this decision and ordered all the inhabitants to assemble at Port of Spain with their arms on the firing of a gun. On their part, the Cabildo ordered the Major to revoke these instructions and to appear before the Illustrious Board within four hours. The Cabildo came off victorious; "in fact," says Joseph, "the Cabildo seem to have carried all things with a high

THE ILLUSTRIOUS CABILDO

hand over the military. The soldiers appear to have done nothing but smoke their cigars"—a habit not unknown

where there are Spanish troops to this day.

Having gained a bloodless victory over Major Espinoza, the Cabildo became more ambitious. They arrested the Governor on his return, put him in irons, and kept him in confinement for more than six months, until the Viceroy of the new cantonment of Granada sent a force to the island, and suppressing the insurrection, released the unfortunate Don de Liñan.

Until 1813 the minutes of the Cabildo were kept in Spanish and it was not until after that date that English was used. In 1840 the picturesque name of Cabildo was altered to the less romantic title of Town Council, which in 1853 was in turn changed to Borough Council. Until 1903 there was a mayor of Port of Spain with a town clerk, and all the usual concomitants of a municipality; but after riots which took place in that year, as the outcome of the endeavour to force through the Legislature a waterworks ordinance, the municipality was suspended, and a nominated board of Commissioners was formed instead. To this Board all municipal matters are now entrusted, besides such matters as the control of the city sewerage, and water supply.

San Fernando, the second town of Trinidad, still has an elective municipal council and mayor; and a Charter of Incorporation was given to Arima in 1853. The chief source of revenue in Port of Spain and the two Boroughs

is a property rate.

In Grenada local affairs are managed by District Boards for St. George's, St. John's, St. Mark's, St. Patrick's, St. Andrew's and St. David's, which levy rates and generally manage the affairs of the towns. There are also Town Wardens for Hillsborough in the island of Carriacou.

Local affairs in St. Vincent are managed by Wardens

of Georgetown, Calliaqua, Layou, Barrouallie, Chateaubelair and the island of Bequia, while in Kingstown there is a Town Board. The duties of the Wardens and the Board include the assessment and collection of all taxes, and the general superintendence and management of the towns.

Castries, the capital of St. Lucia, has a Town Board consisting of eight elective members, while the management of the other towns, namely, Soufrière, Vieux Fort, Dennery, Anse la Raye, Canaries, Choiseul, Laborie, Micoud and Gros-Islet is vested in Town Wardens, assisted in several cases by an Improvement Committee. The roads are maintained by Road Boards.

Coming to the Leeward Islands, the government of St. John's, Antigua, is vested in five Commissioners under the control of the Governor in Executive Council, two of whom must be persons not having any office or emolument under the Crown. The sanitation of the villages is under the control of a country Board of Health and of District Boards in each parish. Town Boards also exist in Roseau, Dominica, and in Basseterre, St. Kitts.

As regards the Bahamas, there is a Board of Public Works in New Providence the seven members of which are appointed annually by the Governor. In the out-islands Commissioners—also appointed by the Governor—superintend local affairs.

Prior to 1837 municipal affairs in Georgetown, the capital of British Guiana, were dealt with partly by the Government and partly by a Board called the Board of Police, but that year the first Town Council was incorporated, with a Mayor and fourteen Councillors, elected to represent fourteen different wards. The qualification of membership of the Council is the possession, either in his own or his wife's name, of premises of the appraised value of \$1,500. No person is, however, eligible for election

A TYPICAL LOCAL COUNCIL

who is not himself entitled to a vote for the election of a Councillor, who is a minister of religion, who holds any place of profit in the gift of the Council, or is directly or indirectly interested in any employment with the Council or with any contract with the council under which the sum payable or receivable exceeds \$500 for twelve consecutive months. The franchise is enjoyed by all males who, being British subjects by birth or naturalisation, have attained the age of twenty-one years, or by persons who have resided in the colony for not less than three years, and possess, within the ward, premises of the appraised value of \$250 and upwards held individually, or as father or natural guardian of his children or by his wife; or who is the occupier of premises of the rental value of \$15 and upwards for six months immediately preceding registration as a voter.

The Council has the usual powers and privileges, and forms a Mayor's court for the trial of petty offences. The revenue of the Council is derived mainly from a tax of 2% on the appraised valuation of lands and houses within the municipal boundaries, market fees, water

rates, etc.

New Amsterdam, the second city of the colony and the capital of the county of Berbice, used to be controlled by a Board of Superintendence, but this was succeeded by a Municipality in 1868, and in 1891 the existing Town Council consisting of seven members was constituted. The qualifications for membership of this body are full age, the absence of legal disability and the ownership of household property to the value of \$1,000 and upwards. The franchise is enjoyed by every man of full age who is not subject to legal disability and owns a house or tenement in the town to the value of \$400 or more.

The chief source of revenue of the Council is a tax (generally 2%) on the appraised value of lands and houses within the municipal area, market fees and water rates.

For extraordinary works loans are raised from time to time with the approval of the Governor in Council.

Besides these principal towns, there are numerous villages scattered along the coast-lands and up the principal rivers where the negro slaves settled after emancipation. With the money which they had acquired during the apprenticeship period they purchased land, which proprietors, ruined by the abolition of slavery, were only too glad to sell, and formed themselves into communities. Their attempts to legislate for their own affairs proved unsuccessful, and numerous enactments were passed by the Government from time to time for the regulation of the local affairs of the village communities. These Acts were amended and consolidated by the Local Government Ordinance of 1907, which placed the villages under the control of elected local councils, called Authorities. subject to a Board first created in 1878 and called the Central Board of Health, but now known as the Local Government Board, at the head of which is the principal medical officer of the colony. These councils have the power of voting funds and taxes, of appointing village officers, constructing village works, etc. In 1892 a large measure of self-government was extended to the communities, with satisfactory results. At the close of the year ended March 31st, 1911, there were over ninety villages and country districts under the control of the Board.

For administrative purposes British Honduras is divided into six districts, namely, Belize, which includes the capital at the mouth of the river of the same name, the Corosal district, the Orange Walk district, the Cayo district, the Stann Creek district and the Toledo district, the main station of which is Punta Gorda at the extreme south of the colony. The local authorities are known as District Boards, and there is one to each district.

CHAPTER XV

TARIFFS-TAXATION-LAWS

To examine critically the tariffs of the British West Indies as a whole would be no simple matter, for each of the separate units which form those colonies has at present its own fiscal arrangements and there is, moreover, a great diversity in the method of classification employed in the statistics. Efforts are, however, now being made by the Colonial Office to secure a greater uniformity of definition under the tariffs, and a report on the subject has been made by Mr. R. H. McCarthy, C.M.G., who was expert adviser to the Royal Commission on Trade between Canada and the West Indies.

The principal source of revenue is import duties. Thus in Barbados, British Guiana and Jamaica, excluding municipal and parochial revenues, receipts from Government railways, land sales, royalties, and immigration taxes, approximately 60 % of the total revenue is derived from the Customs duties while in Trinidad the proportion is 42 %. The chief contributing classes are liquors, narcotics, provisions, petroleum, and clothing, the proportions in British Guiana, for example, being as follows: liquors, 11.6 %; narcotics, 23.8 %; flour, 12.4 %; meat and fish, 5 %; petroleum, 5.8 %; and textiles, 7.2 %. The other important sources of revenue are excise duties (which are levied chiefly on rum), licences, stamps and land taxes. Trinidad also receives considerable sums from land sales, royalties, and the export duty on asphalt.

The dutiable list invariably comprises a large proportion of the imports; specific duties according to weight or measure are, as a rule, levied, where it can be

conveniently done, commodities which do not lend themselves to such treatment being subjected to a general ad valorem rate.

All articles are dutiable unless specifically exempted. Nearly all the colonies admit agricultural machinery free, and some also the materials for railways and tramways. Implements and tools are variously dealt with. Manures are usually free, though they are subject to a small tax in Barbados. Jamaica and Trinidad admit coal and patent fuel free. Other colonies admit them free if they are for application to industrial purposes, and in Barbados and British Guiana they are dutiable at the rate of 2s. 6d. and 2s. 1d. per ton respectively.

Live stock is duty-free when imported for breeding purposes in some cases, and if for use in agriculture in others. In other cases again, all animals except horses are free. Living cattle for meat is often exempted

from duty.

The food duties are, as a rule, heavy, Jamaica, for example, charging 40 % on flour, or 8s. per barrel of 196 lbs., which is approximately worth 20s., 23 % on the coarser kinds of meat, and $17\frac{1}{2}$ % on salt fish. Fresh meat is often exempted. Fresh fruit and vegetables are, as a general rule, free of duty.

Though some of the principal towns have electric light, petroleum is the chief illuminant in the rural districts and among the humbler classes, and the import duty on it per gallon in Jamaica is $7\frac{1}{2}d$.; Barbados, $4\frac{4}{5}d$.; Trinidad, 9d., and British Guiana, $6\frac{1}{4}d$.; while in the smaller colonies

the rate varies from 23d. to 4d. per gallon.

Upon clothing, including textiles, boots and shoes and hats, the rates are ad valorem, being in Barbados 10%, in British Guiana 15%, in Jamaica 163% and in Trinidad 10%. In the smaller West Indian colonies the general ad valorem rate of duty ranges between 7½% and 20%. Generally speaking, the tariffs of the British

THE AD VALOREM DUTIES

West Indian colonies were framed for revenue purposes, but in several instances they operate in such a manner as to afford protection to certain industries. A case in point used to be the local sugar industry, which, by the incidence of taxation, was substantially protected up to the time when the Brussels Convention came into force. accordance with the provisions of that agreement the difference between the excise and customs duties has, however, been reduced, and the protection is now only about 2s. per ton. Other industries, such as those of maize, rice, coco-nut-oil and tobacco, which are of less importance or more recent growth, appear to have been protected accidentally, and many minor manufacturing industries, such as the manufacture of aerated waters, soap, matches, manures, biscuits and beer, have sprung into existence through the protection afforded by the import duties, giving employment and benefiting the colony.

Export duties are levied upon local products in several of the colonies, but in some cases they are imposed for special purposes, such as for immigration in Trinidad, where the following export taxes are charged: sugar, 3s. 11d. per 1,000 lbs.; rum and bitters, 9s. 1d. per 100 gallons; cacao and coffee, 4½d. per 100 lbs.; molasses, 1s. 6d. per 100 gallons; coco-nuts, 1s. per 1,000 nuts; and copra, 3s. 6d. per 1,000 lbs.

Some idea of the general rates may be gauged from the ad valorem duties which are: Barbados, 10%; Jamaica, $16\frac{2}{3}\%$; Trinidad 10%; Grenada, $7\frac{1}{2}\%$; St. Lucia, 15%; St. Vincent, $10\%^1$; Antigua, $13\frac{1}{3}\%$; St. Kitts-Nevis, 11%; Montserrat, $13\frac{1}{3}\%$, Dominica, $12\frac{1}{2}\%$; Bahamas, 25%; British Guiana, $15\%^1$; and British Honduras, $12\frac{1}{2}\%$.

In those of our West Indian colonies which were acquired by settlement, the Common Law of England

¹ With an additional 10% on the duty leviable.

prevailed automatically from the date of such settlement, and the settlers enjoyed all the constitutional rights and liberties of the people of England. Where, however, colonies were acquired by conquest or cession, the continuance of the existing laws became subject to the pleasure of the Crown, limited, however, by any special terms which might be contained in the articles of capitulation or surrender, or of the treaty of cession. In such articles and treaties the continuance of existing laws was generally provided for, and as so many of our West Indian colonies were obtained from Spain, France and the Netherlands, the laws of those countries remained in operation in many instances.

In course of time, however, these foreign laws were modified by colonial enactments and a body of law more

English than foreign has resulted.

An example of a settled West Indian colony is Barbados, which has enjoyed since its first settlement the Common Law of England, while British Guiana is an instance of a colony acquired by conquest. The law in force in the latter colony is the Roman-Dutch law, which prevailed before the capture of the colonies which it now comprises. The Roman-Dutch law has, however, been modified from time to time by Orders in Council and local enactments adopted by the Legislature. The criminal law is based on that of Great Britain, and is administered in the same manner, except that in place of a Grand Jury, trials take place on the information of the Attorney-General.

Throughout the West Indies, laws as to Contract, Agency, Partnership, Bills of Exchange, Bankruptcy, etc., similar to those in force in England are found on the Statute Book.

¹ For the information which follows, the author has availed himself of the writings of Mr. Wallwyn P. B. Shepheard, M.A., of Lincoln's Inn.

A LEGAL ANOMALY

There are Chief Justices in Barbados, Jamaica, Trinidad, Grenada, St. Lucia, St. Vincent, the Leeward Islands, the Bahamas, British Guiana and British Honduras, and it is only in the Leeward Islands that the circuit system prevails. Each of the above-named colonies, with the exception of St. Vincent, also has an Attorney-General. With a view to effecting economy the Attorney-General of Grenada was nominated to act in a similar capacity for St. Vincent in 1903.

Generally speaking, English, Scotch and Irish barristers, solicitors and writers to the Signet may be admitted to plead in the courts in the West Indies With regard to legal practice, there is, however, at present a hopeless lack of uniformity. In some parts solicitors may practise both as solicitors and barristers. In others, barristers can practise as solicitors but not solicitors as barristers. Here is an absurdly anomalous state of affairs which should surely be capable of adjustment in the interests of a

unified West Indies.

CHAPTER XVI

RAILWAY ENTERPRISE

RAILWAY enterprise in the British West Indies has hitherto been confined to Barbados, British Guiana. Jamaica, Trinidad, and British Honduras. In the two first-named colonies, the railways are privately owned: but in Trinidad, Jamaica, and British Honduras, they are government lines. The railway in Jamaica, was, however, in the first instance a private undertaking owned by the Jamaica Railway Company, which was incorporated in 1843, the prospectus being issued in the following yearthe first of the actual "railway mania" in this country. The promoters were Mr. William Smith of Manchester and Mr. David Smith of Jamaica, who employed Mr. James Anderson to make the survey; and the capital, which amounted to £150,000 in 30,000 £5 shares, was readily subscribed. The construction of three lines was contemplated in the first instance, and it was estimated that they would cost £150.927; but the estimates were far exceeded, and the construction of a single line to the Angels beyond Spanish Town, which was opened in 1845, cost no less than £222.250.

From this period until 1867 railway enterprise was at a standstill in the island, but in that year the Jamaica Railway Company applied for powers to extend their line from Spanish Town to Old Harbour, a distance of 11 miles. These were granted and the extension was completed at a cost of £60,000, and opened for traffic on July 1st. 1869.

During the administration of Sir John Peter Grant, efforts were made to induce the Government to guarantee the capital to be expended on the construction of a railway to Porus; but it was not until 1877 that the next forward move took place. In that year, when Sir Anthony

THE JAMAICA RAILWAY

Musgrave was Governor, the Government purchased the complete undertaking of the Jamaica Railway Company for 493,932, and the railway was duly transferred to them on April 1st. 1879. Improvements were at once effected in the permanent way, stations, bridges, etc., the old line being purchased, reconstructed and equipped at a cost of £201.260. The railway now earned for a time a profit after paying working expenses and interest. Indeed, so hopeful was the outlook that surveys for extensions were undertaken by Mr. Valentine Bell, C.E., the then Director of Public Works, and in December, 1881, contracts were entered into for extensions to Porus in Manchester, a distance of 241 miles, and from the Angels through St. Thomas-in-the-Vale to Ewarton (141 miles). Loans to the extent of £635,000 were raised to defray the cost, and work proceeded rapidly, the extensions being opened by the then Governor, Sir Henry Norman, in 1885, on February 26th and August 13th respectively.

Meanwhile, surveys had been made for further extensions to Port Antonio and Montego Bay at the estimated cost of £723,072 and £832,399. The sanction of the Legislature to the scheme was being awaited, when Mr. Frederick Wesson and some other American capitalists submitted a proposal for the purchase of the railway from the Government. Negotiations were entered into, and the Legislature eventually agreed to dispose of the railway for £800,000, of which amount £100,000 was to be paid in cash and the balance in second mortgage 4% bonds secured by the railway. The purchasers were bound under contract to extend the lines at the rate of 121 miles within eighteen months of the incorporation of the company, and at the rate of 12½ miles per annum thereafter, until through communication was afforded between Kingston and Montego Bay and Kingston and Annotto Bay. The promoters were empowered to issue bonds to the extent of £320,000

immediately, and further amounts of £200,000 on the completion of each section of 25 miles of the extensions, until the full amount of £1,500,000 was raised. They were also entitled to one square mile of Government land for each mile of railway constructed, and 74,443 acres or $116\frac{1}{2}$ square miles were in this way conveyed to them.

The railway was transferred to the company on January 1st, 1890, and work on the extensions proceeded. On January 22nd, 1891, a section of 121 miles from Porus. which had been constructed by the West India Improvement Company having been approved by the Director of Public Works, was incorporated with the Jamaica railway. The line to Montego Bay was completed in 1894, and the Port Antonio extension was opened in 1896. Default for a period exceeding one year having been made in payment of the interest on the first mortgage bonds, the Trustees on behalf of the bondholders assumed possession of the line and plant towards the end of 1898, and in 1900 the Supreme Court signed the order again vesting the Jamaica railway in the Government of the island. Since then it has been administered as a Government Department with the usual officials and an advisory board.

The lands allotted to the American syndicate were at first held by the West Indian Improvement Company of New York, but they passed into the hands of the Administrator-General on behalf of the receivers of the company, when it went into liquidation. The Government of Jamaica were given an option to purchase these lands and this was duly exercised in 1911, the cost being 5s. per acre, the purchase price and cost of transfer amounting to £18,500.

The changes of ownership of the Jamaica railway have been explained in some detail, as they have an important bearing on the route of the Montego Bay line, which is now generally admitted to be by no means the best

RAILWAY EXTENSION

which could have been selected. Many contend that a shorter and more advantageous route might have been chosen.

The total length of the railway, of which the gauge is 4 feet $8\frac{1}{2}$ inches, is about 194 miles. From Kingston the line goes to Spanish Town ($11\frac{3}{4}$ miles), which is the junction for branches to Port Antonio (75 miles) and Ewarton (29 miles), the main line proceeding in a north-westerly direction across the island to Montego Bay ($112\frac{3}{4}$ miles). Up to March 31st, 1911, the total cost of construction had amounted to £2,539,930, and owing, perhaps, to the bitter lesson which they learnt from the mistakes in the past, the Jamaica Government for twenty years showed no disposition to enter upon any further schemes for railway development.

At the local General Election in 1911, however, railway extension was made a prominent issue, and in March the Colonial Secretary introduced into the Legislature a resolution authorising the expenditure of £90,000 on the construction of a branch line from May Pen to Danks, beyond Chapelton in Upper Clarendon, and a further sum of £10,000 for the construction of roads to the northern terminus. After an animated discussion the resolution was carried by nineteen votes to five.

The new line will open up the fertile valley of the Rio Minho and render accessible about 17,000 acres of land well suited for banana cultivation, as well as an enormous acreage suitable for the production of cacao, coffee, ginger, and other exportable products. It is hoped that ultimately the line will be driven forward to the still more fertile district of Ulster Spring in Upper Trelawny and then on to Falmouth, the seaport on the north side of the island, whose former prosperity would thereby be restored.

In the development of the banana industry the railway has played a useful part, and all along the line banana

trees are in evidence wherever the soil is suited to their cultivation. At each of the railway stations there are the buying sheds of the United Fruit Company and other fruit purchasing concerns, whose agents save the planter the anxiety of shipping and marketing his crop, and, what is equally important, of waiting for payment. The railway passes through scenery of an extremely picturesque description, varying from the level irrigated plains to wild rocky country which is reminiscent of the volcanic Eifel and is known as the Cock-pit country.

The railways in British Guiana have been privately owned from the outset. Those of the Demerara Railway Company consist of two lines. One, with a 3 feet 6 inch gauge, runs from Vreed-en-Hoop on the west bank of the Demerara River to Greenwich Park on the West Coast, a distance of 15 miles, and the other with a gauge of 4 feet 81 inches from Georgetown to Rossignol at the mouth of the Berbice River, a distance of 60½ miles. The prospectus of this company, of which Mr. Charles Cave was chairman, was issued on September 3rd, 1845, when subscriptions were invited for 10,000 shares of £25 each, the object being to construct a line of 20 miles along the East Coast from Georgetown to Mahaica. company was incorporated on October 30th, 1846. proprietors gave their land for the project free, and the first sod of the railway was turned by Sir Henry Light, the then Governor, on August 19th, 1847. Meanwhile the inevitable collapse of the railway fever had occurred at home, and the directors were faced by an unexpected difficulty. Many of the shareholders refused, and others were unable to pay their calls. The directors were unwilling immediately to forfeit the shares of the defaulters, They realised that to do so would be to destroy their chance of obtaining sufficient capital with which to build the line, and a period of some anxiety ensued. With the assistance of the Government, the railway was opened



A TYPICAL COUNTRY RESIDENCE IN JAMAICA



THE DEMERARA RAILWAY

as far as Plaisance, a distance of 5 miles only, in 1848. Two years later it had reached Peter's Hope, and in the following year Victoria; and it was not until August 31st, 1864, that the first railway train entered Mahaica, nearly nineteen years after the prospectus was first issued.

With the help of the Combined Court an extension along the coast to the village of Mahaicony was opened on October 12th, 1899. Meanwhile, work had been progressing on the shorter and less ambitious railway on the West Coast, and this was formally opened for

traffic on October 3rd in the same year.

The only railway in the interior of the colony is one constructed and worked by Sprostons, Ltd., between Wismar on the left bank, and 65 miles from the mouth. of the Demerara River, and Rockstone on the right bank of the Essequibo River, a distance of 183 miles. This line, of which the gauge is one metre, was laid in 1895-7, with the object of providing expeditious and safe means of access to the Potaro goldfields on the upper Essequibo, that river being much obstructed by a series of falls below the present railway terminus. For the purpose of constructing the line, Sprostons, Ltd., obtained a loan of £41,616 from the local Government, repayable without interest over a period of twenty years. The line runs through the virgin forest, and has proved a useful means of developing the local timber resources.

In Trinidad, the entire railway system is owned and operated by the Government. The total length of the lines, which have a 4 feet $8\frac{1}{2}$ inch gauge, is $81\frac{1}{2}$ miles; but the extensions to which reference is made below will raise the total to over 111 miles. The first line to be constructed was one from Port of Spain across the island in an easterly direction to Arima, a distance of 16 miles, and this was opened as far as Arouca for goods traffic on February 11th, and for passengers on June 1st, 1876. In

1880 a line from St. Joseph on the Arima line to Couva, 18 miles to the south of it, was opened. On January 1st in the following year 4½ more miles were completed, and the railway reached Claxton's Bay, while on April 17th, 1882, the line was opened to San Fernando, the second town of Trinidad, a distance of 35 miles from Port of Spain. An extension for another eight miles to Princes' Town in an easterly and then south-easterly direction was thrown open to traffic in 1884.

The next extensions to be undertaken were from Arima to Sangre Grande (12 miles), a point within a few miles of the east coast, and from Cunupia (Jerningham Junction) on the San Fernando line to Tabaquite, 15 miles to the south-east, which were opened for traffic on August 29th,

1897, and August 13th, 1898, respectively.

In 1906 a special committee of the Legislature recommended the extension of the line from Tabaquite to Poole, a distance of 16 miles, opening up an area of upwards of 10,500 acres of very fertile land, and serving a population of 65,000, at a cost of £77,280. On March 2nd, 1908, the Legislative Council passed a resolution approving of this proposal, and authorising also the extension of the railway from San Fernando to Siparia, a distance of 13\frac{3}{4} miles. This extension will pass through cultivated lands for almost its entire distance, and will serve a population of 14,000, with an area already cultivated of 14,100 acres, and it is estimated that it will cost £122,719.

There are also seven miles of tramways or light railways between San Fernando and Savanna Grande. They are privately owned: but negotiations for their acquisition

by the Government are nearing completion.

In 1881 the number of passengers carried was 705,726. The revenue was £10,482 and the expenditure £25,050; but the line now earns a sum which is more than sufficient to meet the expenditure and annual charges for interest. Up to March 31st, 1911, the total cost of construction

THE BARBADOS RAILWAY

was £930,309. The total receipts for the year ended on the same date were £108,578, the expenditure £64,268, and the interest charges £21,607. The total number of train miles run were 349,161.

Barbados also has a railway. It runs from Bridgetown across the island from west to east and up the windward coast to St. Andrew's Parish, the total length being 24 miles. It is easy to be wise after the event, but it is obvious to anyone who has travelled on the line that the route which it traverses was not very happily chosen. For half the distance it passes through some of the best sugar estates in the island, but the remaining half is along the sea-coast, which yields little or no traffic, and the distances by road to Bridgetown from the various points on this section are shorter than they are by rail.

The undertaking belonged in the first instance to the Barbados Railway Company, which was incorporated by an Act of the local Legislature in 1873. Work was not, however, begun for several years, the provisions with regard to guarantee, etc., being extended by Ordinances in the succeeding years. Meanwhile the Barbados Railway Company was registered under the Companies Act in the United Kingdom, the Barbados Government agreeing to give a guarantee of 6% upon the moneys expended on and during the period of the construction of the line. and an annual subsidy of £6,000 per annum thereafter for twenty years. The line was to be divided into three sections, one from Bridgetown to Carrington, a second from Carrington to Bath, and a third from Bath to the terminus, and for the purpose of the subsidy it was agreed that each should be considered to represent an expenditure of £50,000 and entitle the company to a proportion of the subsidy.

In 1882 the first section of the line was opened, and the second section was almost ready for opening when unforeseen difficulties arose owing to the necessity of

bridging the College River and to a landslip in the same locality. The company, finding that it would be impossible to open the second section before the third was completed, petitioned the Legislature, which then agreed to divide the line into two sections instead of three, and to incorporate the completed part of the new section with the first, giving on the completed section the guarantee of £3,000.

The subsidy was not free from conditions, for the company had to undertake to repay it whenever the receipts exceeded a sum which would, after deducting the ordinary working and current expenses, yield a net income of £6,000. These conditions hampered the company, and a further appeal was made to the Legislature, which resulted in the grant of an annual subsidy of £6,000 for ten years, the only condition being that they should spend in each of the ten years 40% of the gross traffic earnings on the general upkeep and maintenance of the rolling-stock and line.

In spite of this assistance, the company found it difficult to pay its way, and in 1896 powers were sought to raise new capital by mortgaging the undertaking. The Legislature granted the necessary permission, subject to an inspector certifying that the line and rolling-stock were in proper order, and to any repairs, etc., recommended by him being carried out within a reasonable time. These conditions were not complied with, and the subsidy therefore lapsed. On July 15th, 1898, the railway, which had cost £195,284 to construct, was sold for £50,000 by the Foreign and Colonial Investment Trust Company and the Foreign, American and General Investments Trust Company. The line was then reconstructed at an additional cost of £39,011, and worked as the Bridgetown and St. Andrew Railway, Ltd. In 1903 the new owners applied to the Legislature for arrears of subsidy, but they were unsuccessful, and the working of the

RAILWAY VICISSITUDES

railway resulted in an annual loss. Hearing of this, Mr. G. F. Burn, the engineer who had reconstructed the line in 1899-1900, and was satisfied that if properly managed and suitably extended the line could be made to pay, opened negotiations for the purchase of the railway, and at the same time petitioned the Legislature for a subsidy.

A subsidy of £2,000 a year for ten years was conceded, and in 1905 the purchase of the line at a greatly reduced figure was arranged, a company entitled "The Barbados Light Railway, Ltd," being duly registered to operate it. Considerable improvements were effected, and the line is now reported by the Government Inspector to be in excellent working order. Meanwhile the methods of working had been closely studied, and as the result of stringent economies, the suspension of unnecessary services and the reduction of the coal duty and water charges, the railway seems at last to have become a paying proposition.

The company now contemplates the construction of a line which will run up the west coast for about 8 miles, and then turning inland and passing by Speightstown will eventually reach a terminus in St. Lucy's parish. The whole area to be traversed is occupied by a succession of sugar estates, and as there is also a large population in the neighbourhood, the scheme is viewed with favour. The route is an easy one, and does not present the severe gradients which the existing line does in several places. The estimated cost is £35,000. The Legislature has, in view of this proposed extension, consented to an increase of the subsidy to £2,520 per annum from the date of opening.

In 1902 a short branch line from Carrington to the Crane on the south coast was opened. It was only worked, however, to Foursquare and Stirling, but the reconstruction of this branch is also now under consideration by the directors.

The need of railways for British Honduras was first

ventilated in the early 'seventies, when Mr. Warren and Mr. Mechlin proceeded to Guatemala from Belize at the expense of the merchants of the latter city to investigate the possibilities of the construction of a line to the frontier. Since then the railway question has been a constant topic for discussion. Proposals for the construction of lines were put forward by Mr. Merrilees, Mr. Walter Regan, Messrs. Fowler, Perks & Co., Mr. Waddington and Mr. C. T. Hunter; they failed, however, to receive the approval of the Colonial Office.

Among the various proposals submitted, was one for the building of a railway 72 miles long, from Belize to the Guatemalan frontier, and the local Legislature sanctioned a bonus of £60,000 and 350,000 acres of land. The surveyors sent out by the Colonial Office estimated, however, that the line would cost £734,000 to construct, and that Department attached such stringent conditions to their consent, demanding that six-sevenths of the cost of the railway should be deposited before work was commenced and so on, that the scheme fell through. Then the Legislature modified their offer, increasing the bonus to £75,000, and reducing the land grant to 200,000. On these terms a well-known firm of railway contractors were willing to undertake the work, but this scheme was vetoed by Downing Street. A third scheme involving an annual subsidy of £3,500 for ten years met with a similar fate, and eventually the colonists had to be content with a far more modest scheme emanating from the Colonial Office itself-namely the construction of a Light Railway to open up the Stann Creek Valley, some 80 miles south of Belize, for a distance of 25 miles. It was first contemplated that the gauge of the line should be 20 inches only, but it was subsequently decided to make it 3 feet, as the result of the protests of the Legislature.

Work was begun on the line in 1907, and on October 17th in the following year the first section was opened

THE STANN CREEK RAILWAY

by the Hon Wilfrid Collet, the Acting Governor. Owing to the decision of the Colonial Government to keep the control of the work on the line entirely in its own hands, the construction has taken far longer than was expected, and the same reason is perhaps responsible for the great cost of the work, which has already exceeded £125,000.

The sea terminus is not at Stann Creek itself. Although there is a protecting reef some 10 miles to the west, the anchorage is exposed to the prevailing north and north-east winds, which frequently make the discharging of vessels a matter of difficulty. The line, therefore, runs south for about 3 miles to Commerce Bight, where a pier has been constructed, thanks to which steamers can be loaded and emptied alongside the train. At the very highest tides there is a depth of 24 feet at the pier-head. At the extreme lowest, the depth is not less than 21 feet. The bottom is soft, and if a vessel were to come a little too close in, it would receive no damage. Buovs and dolphins have been placed to prevent vessels bumping against the pier in the event of there being any sea; but they will, it is believed, seldom be necessary, as the land protects the pier from the points from which heavy weather is generally experienced.

The railway runs to the foot of the mountains on the west. To the north and south of it there is land, through which it would be comparatively easy to construct branch lines for a distance of about 8 miles in each direction.

The traffic consists mostly of bananas, but it has not

yet reached any considerable proportions.

In addition to the railways which minister to the needs of the public, there are many miles of track connected with the sugar factories in the West Indies. The Usine St. Madeleine, in Trinidad, for example, has 60 miles of light railway which keep it supplied with sugar-canes. There are similar lines in Antigua, St. Kitts and St. Lucia; Dominica, too, will soon have a light railway.

CHAPTER XVII

STEAMER COMMUNICATION

In the matter of steamship communication, the West Indies are, generally speaking, well served at the present The principal steamship companies which include West Indian ports in their itineraries are the Royal Mail Steam Packet Company, the Direct Line (Messrs. Scrutton, Sons & Co., London, and Messrs, Prentice, Service and Henderson, Glasgow), the Harrison Line, the Leyland Line, Elders and Fyffes, Ltd., the Booker Line, the East Asiatic Co., the Demerara and Berbice Steamship Co., the Compagnie Générale Transatlantique, "La Veloce," Navigazione Generale Italiana, the Hamburg-American Line, and the Royal Dutch West India Mail, which afford means of communication between the West Indies and Europe. The Pickford and Black Steamship Company gives the West Indies steamer connection with Canada, and the Trinidad Line, the Ouebec Steamship Company, and the United Fruit Company, with America. Booth Steamship Company, Lamport and Holt, and the Lloyd Brazileiro keep the West Indies in touch with Brazil and America. The steamers of the Royal Mail Steam Packet Company, the Hamburg-American Line and the Royal Dutch West India Mail Service, also ply between America and the West Indies.

Without going back to the anxious, though prosperous, days when the merchant-men joined the convoys in the Downs and waited for a favourable wind to take them to the West Indies, or to the days when the wealthy proprietors exchanged correspondence, exquisitely written in the best copper-plate handwriting, with their almost equally well-to-do managers and attorneys by Government sailing packets, it may be of interest to give briefly the history of mail communication with the West Indies

THE PETREL, WAVE, AND FOAM

from the advent of steam. The application of steam propulsion to vessels had barely emerged from the experimental stage when the possibility of establishing steamer communication with the West Indies was canvassed.

For a time a mail service by steamers was conducted by the Government, but it gave little satisfaction, and Mr. James McQueen, who propounded a general plan for a mail communication by steam between Great Britain and the Eastern and Western parts of the world, has given a graphic description of the state of the mail service in 1838. Then it was performed by the small steamers Flamer, Carron, Echo and Albyn, which earned as bad a reputation as did the famous Petrel, Wave, and Foam, so dreaded by cross channel passagers in later years.

"Without actual experience," wrote Mr. McQueen, 1 "it is impossible to place before the public, in a correct point of view, the whole appearance and state of steamers employed in the West Indian mail service, as seen last vear-when the whole extent of their voyages was travelled over in more than one of them: imagine a small ill-contrived boat, an old 10-gun brig, as the Carron is, for example, of 100 horse-power, and thirty to forty tons of coals on her deck: with a cabin about thirteen feet by ten, and an after-cabin still smaller, both without any means of ventilation, except what two ill-planned, narrow and miserable hatches, when open, afford. Imagine a vessel like this starting from Jamaica, with ten or fifteen passengers, and a crew of thirty-seven people, still more miserably provided with room and quarters, to stem the currents, the trade winds-(not to speak of storms)which blow, and the heavy seas which roll, between that island and St. Thomas, especially in the channel between the former and St. Domingo, and indeed in all the West

¹ A General Plan for a Mail Communication by Steam between Great Britain and the Eastern and Western Parts of the World. By James McQueen, Esq. London: B. Fellowes, 1838.

Indies: having the boiler immediately adjoining the cabin and sleeping berths, and without any place to stow the luggage belonging to the passengers—and with the numerous mail bags crammed into the small sleeping berths, or under the table,—and the public will have a faint idea of a Government steam-boat; wherein, under a tropical sun and a tropical rain, the passengers and crews are, with the hatches closed, reduced to the choice, while choked with coal-dust, of being broiled or suffocated. No human constitution can long stand this. Without meaning any offence, truth must declare, that such a state

of things is a disgrace to England."

At a meeting of the Committee of West India Merchants, held at the West India Dock House on December 12th. 1837. Mr. Andrew Colvile, who presided, "stated to the meeting the imperfect manner in which the Packet service was at present performed, and necessity of some amendment in the arrangements, and stated that he had drawn up a memorial to the Lords of the Treasury, which he thought might produce the desired effect by calling the attention of the Government to the subject, and to the consideration of a plan suggested by Mr. James McQueen, an abstract of which was attached." The memorial. which complained of the irregularity and uncertainty of West Indian correspondence, the great risk and occasional loss incurred by the planters from the uncertainty of the advices of shipments and orders for insurance reaching this country in due time, and the defective state of intercolonial communication, contained various suggestions for the improvement of the service, and advocated the adoption of Mr. McQueen's proposals. On the same day it was duly forwarded to Mr. Francis T. Baring, Secretary to the Treasury.

A deputation subsequently waited upon the Chancellor of the Exchequer, who stated that the Government were considering a plan to improve the Packet service. He

THE GREAT WESTERN

complained, however, of the want of money for the purpose at that time, and added that he was awaiting the result of the experiment of the *Great Western*, which it is interesting to recall, successfully crossed the Atlantic from Bristol to New York in 15 days, between April 8th and 23rd, 1838.

What the then Secretary described in the Minutes as a "numerous meeting" of the Committee was held under the chairmanship of Mr. George Hibbert on August 9th, 1838, for the further consideration of the mail question. Correspondence with the Post Office and the Admiralty was reported, and a plan for improving the mail service was submitted and approved. On September 26th in the following year, the Royal Mail Steam Packet Company was, as the outcome, incorporated by Royal Charter.

The petitioners to the Queen for a Charter included the more prominent members of the West India Committee, namely, John Irving, Andrew Colvile, James Cavan, George Hibbert, John Irving the younger, and Patrick Maxwell Stewart, besides Thomas Baring, George Brown, Robert Cotesworth, Henry Davidson, Russell Ellice, Skinner Marshall, Thomas Masterman and Abraham J. Robarts. It is worthy of note that many of these gentlemen were among those who had signed the petition, a few years before, for a grant of a Charter of incorporation for the Colonial Bank. The West India Committee can thus take to itself some share of the credit for the origination of both these important companies connected with the West Indies.

It may not, perhaps, be generally known that that influential concern, the Royal Mail Steam Packet Company, whose flag is now familiar in almost every part of the world, was originally incorporated for the express purpose of the conveyance of the West Indian mails to and from Great Britain.

"It is expedient" runs the Royal Charter, granted

to the subscribers by Queen Victoria, on September 26th. 1839, "that the transmission of the mails for the convevance of letters from Great Britain to the West Indies and elsewhere should be conducted through the medium of a regular succession of steam or other vessels to be specially employed for that purpose. It is considered that it will be for the advantage and convenience of the public service that such steam and other vessels should be furnished through the medium of merchants and other persons of capital. We do declare that the said Corporation shall be established for the purpose of providing vessels, to be impelled by steam or any other power, together with all engines, machinery, articles, matters and things, necessary for the same, and of employing the same upon such stations as may, from time to time, be contracted for by the proper authorities on that behalf for the transmission of the mails to and from Great Britain, the West Indies, North and South America, and such other foreign parts as the public service may require."

On March 20th, 1840, the first contract was entered into with "the Commissioners for executing the office of Lord High Admiral of the United Kingdom of Great Britain and Ireland, for and on behalf of Her Majesty," and the Royal Mail Steam Packet Company for a bimonthly West Indian mail service. The itinerary seems in these days to have been rather a roundabout one. The main steamer went direct to Barbados "with all possible speed," and thence to Grenada, Santa Cruz, St. Thomas, Mole St. Nicholas in Haiti, Santiago de Cuba, Port Royal and Savanna-la-Mar in Jamaica, Havana in Cuba, and then back to Savanna-la-Mar, Port Royal, Santiago, Mole St. Nicholas and Samana in Haiti, and thence direct to a port in the British Channel. From Barbados a vessel proceeded to Tobago, Demerara, Berbice, Paramaribo and back, calling at the same ports

A COMPLICATED SERVICE

in the reverse order and also Grenada on her way to Barbados. At Grenada two steamers met the ocean boat, one of them proceeding to St. Vincent, St. Lucia, Martinique, Dominica, Guadeloupe, Antigua, Montserrat, Nevis, St. Kitts, Santa Cruz, Tortola, St. Thomas, San Juan (Porto Rico), Samana (Haiti), Curaçoa, Puerto Cabello, La Guayra, and Trinidad, and from Trinidad back to Grenada; while the other vessel proceeded to the same ports in the reverse order.

But this was not all. There were also branch services to various ports by sailing packets and steam vessels from Curaçao, Mole St. Nicholas, Port Royal, Savannala-Mar and Havana, and communication was also effected with New York. In return for this very comprehensive service an annual subsidy of £240,000 was granted to the Company, with the promise of further payment in the event of the increase of insurance or the freight on coals. The total steaming and sailing under this contract amounted to no less than 684,816 miles per annum, but it was reduced in October, 1842, to 392,976 miles, and in the following year a further reduction of 40,000 miles was agreed to.

Owing to the necessity for further modifications in the original contract, a new one was drawn up for six years from January 1st, 1846, and it was agreed that mileage in excess of 389,448 miles should be paid for in addition.

From 1840 to the present time—with only one break, namely, from 1905 to 1911—the Royal Mail Steam Packet Company has held the contract for the conveyance of the West Indian mails; during that period, however, the service has been repeatedly modified, both as to the itinerary and speed.

For some years St. Thomas was the port of transhipment for the intercolonial mails, etc., and for a still longer period Barbados enjoyed that privilege. Since the new contract was signed in 1911 Trinidad has been the

head-quarters of the Royal Mail Steam Packet Company in the West Indies, and it is in the spacious Gulf of Paria that the intercolonial steamers now meet the transatlantic steamers, though Barbados is still the first and last port of call.

The present itinerary is as follows: The ocean steamer leaves Southampton every alternate Wednesday and proceeds to Cherbourg, the Azores, Barbados, Trinidad, Puerto Colombia (Savanilla), Cartagena, Colon, Jamaica, Antilla (Cuba), and New York, returning by the same route, but calling also at Puerto Cabello (Venezuela).

At Trinidad the ocean steamer is met by two intercolonial steamers, one of which proceeds to Demerara and the other to Grenada, St. Vincent, St. Lucia, Dominica, Montserrat, Antigua, Nevis and St. Kitts, and back.

The question of the mail contract has, unfortunately, been rather a frequent subject of disagreement between the colonies and the Imperial Government, which has appeared sometimes to attach less importance to frequent and regular means of mail communication than business houses naturally do.

To refer to two comparatively recent cases only. In 1905, on the expiration of the mail contract, tenders were invited for its renewal. Only the Royal Mail Steam Packet Company submitted a tender, but as they asked for more than they had been receiving, this was refused by the Government. Shortly afterwards, however, the Colonial Office received a private offer from a competing line which had been made acquainted with the nature of the tender, to carry out the service for less. Fresh tenders having been invited, a contract was awarded to the competing line, subject to the approval of the colonies. The West Indies resolutely declined to give their consent to the arrangement, in spite of their being told that if they did not do so there would be no contract at all. On the expiration of

THE MAIL DIFFICULTY OF 1905

the contract there was accordingly no renewal and much inconvenience and dislocation of trade resulted. It was obvious at the outset to those acquainted with the requirements of West Indian trade that the absence of a regular mail service would be most prejudicial, and so it proved to be. The West Indian colonies, one and all, protested loudly, and eventually in 1907 a contract was entered into for a fortnightly intercolonial mail service for a period of ten years for an annual subsidy of £25,000 a year, half provided by the Imperial Government and half by the colonies concerned.

Meanwhile, the transatlantic mails were carried on a poundage basis by the Royal Mail Steam Packet Company, and in 1910 a fresh crisis arose through the Company intimating that the payment which they were receiving was inadequate, and giving notice to terminate the arrangement. In November the direct service between Barbados and Southampton ceased, the transatlantic steamers being sent to the Danish island of St. Thomas.

Much disturbance of business naturally resulted throughout the West Indies, and the West India Committee urged that negotiations might be entered into for the settlement of a new mail contract. Then, in August, a recommendation was made by the Royal Commission on Trade Relations between Canada and the West Indies that the mail service should be conducted entirely via Canada. This suggestion was considered impracticable, besides being distasteful to the West Indian colonies and to the entire West Indian community at home, who viewed with apprehension the possibility of the severance of another link between the West Indies and the mother country. On November 18th a conference of representatives of all the West Indian colonies was held in Barbados, under the presidency of Mr. V. Hänschell, Chairman of the Barbados Chamber of Commerce, at which the author was privileged to be present, and as the result

of this important gathering and of negotiations at home, the Imperial Government agreed to provide a subsidy of \$40,000 a year towards a direct transatlantic mail service, the colonies contributing a still more substantial sum. A contract was then entered into between the Crown Agents for the Colonies on behalf of the Imperial Government and the colonies concerned and the Royal Mail Steam Packet Company, for a regular fortnightly transatlantic mail service to run concurrently with the intercolonial service, viz., until 1917, on the basis of an annual subsidy of £88,000; a serious crisis was thus ended.

General satisfaction was expressed in the colonies at the conclusion of this arrangement, which has assured the West Indies-Jamaica excepted-of a regular mail and passenger service until 1917. By that year it is to be presumed that the Panama Canal will be open, and it should then be possible to make better terms and to reduce the time which it now takes to reach the West Indies.

Under the chairmanship of Sir Owen Philipps, K.C.M.G., and the management of Mr. R. L. Forbes, the Royal Mail Steam Packet Company, formed originally for the conveyance of West Indian mails, has made remarkable strides. There are now few parts of the world to which its ramifications do not extend.

In the following table particulars are given regarding the subsidies which have been paid to the Royal Mail Steam Packet Company since 1842 for the West Indian transatlantic service and intercolonial mail service :

				Duration of Subsidy.			Annual Amount,	Transatlantic Speed in Knots.		
1842	to	1845			yrs.		£240,000	 8 to 8½		
1846	,,	1850		5	,,	١	240,000	 9		
1851	,,	1863		13	,,		240,000	 9 & 10 .		
1864	,,	1874		11	,,		173,000	 10½		
1875	,,	1879		5	,,		87,000	 10½		
1880	,,	1885	(July)	5	,,		80,000	 11½		
1885	,,	1890		5	,,		90,000	 12		
1890	,,	1895		5	,,		85,000	 13		

MAIL SUBSIDIES SINCE 1842

	uration of Subsidy.	Annual Amount.	Transatlantic Speed in Knots.		
1895 to 1900	 5 yrs.	 £80,000		13	
1900 ,, 1902	 2 ,,	 80,000		13	
1903 ,, 1905	 3 ,,	 85,000		13 & 141	
1911 ., 1917	 6 ,,	 88,000		2	

In considering this table it should be borne in mind that from 1905 to 1911 there was no transatlantic contract, the mails being carried from 1907 to 1911 on a poundage basis. In 1907 a ten years' contract for an intercolonial service was signed on the basis of an annual payment of £25,000 payable half by the Imperial and half by the Colonial Governments. This is, of course, included in the figure £88,000 given above for the transatlantic and intercolonial services 1911-1917.

The contribution of the Imperial Government from 1903 to 1905 was £65,400 per annum. Now it is £52,500. Under the old contract the colonies contributed £19,600. Now they pay £35,500. Their individual annual contributions under the old and new contracts are shown in the

ol	lowing table:			1903-5	1911-17
	Antigua		 	£1,000	£879
	Barbados		 	4,000	4,000
	British Guiana		 	4,200	7,700
	Dominica		 	450	779
	Grenada		 	1,000	1,260
	Jamaica		 	2,100	_
	Montserrat		 	200	163
	Nevis		 	100	879
	St. Kitts		 	450	5 015
	St. Lucia		 	1,000	1,260
	St. Vincent		 	450	580
	Tortola		 	50	
	Trinidad	'	 	4,600	18,000
				£19,600	£35,500

Of the 1911-17 subsidies the following amounts are for the transatlantic service: Trinidad, £16,300; Barbados, £4,000; and British Guiana, £2,700.

¹ 13 knots to Barbados and 14 between Barbados and Jamaica.

In 1900 an element of competition was introduced by the entrance into the West Indian shipping trade of the well-known ship owner, Mr. (later Sir) Alfred Jones. For some time he had been looking about for new fields to conquer, and on April 19th in that year, as the outcome of negotiations between him and the Rt. Hon. Joseph Chamberlain, the then Secretary of State for the Colonies, a contract was entered into between the Crown Agents for the Colonies and Messrs. Elder Dempster & Company, the concern with which Mr. Jones was identified, for the provision and maintenance of a direct fruit, passenger, and mail service between Jamaica and the United Kingdom. Under this agreement the contractors, in return for a subsidy of £40,000 per annum for ten years, payable half by the Imperial Treasury and half by the Jamaica Government, were pledged to purchase and carry 20,000 bunches of bananas fortnightly from Jamaica to the United Kingdom, and to appoint instructors to educate the growers as to the best methods of cultivating, harvesting and packing bananas and other fruits. latter condition was, however, waived in 1906 on Messrs. Elder Dempster & Company agreeing to a reduction of the subsidy by \$500, which was deducted from Jamaica's share.

Bristol was selected as the terminal port in the United Kingdom for the new service, and on February 14th, 1901, the R.M.S. *Port Morant*, flying the flag of the Imperial Direct West Indian Mail Service, as the new company was called, left Avonmouth Docks for Kingston, Jamaica, with a full complement of passengers amid manifestations of rejoicing, her departure being witnessed by upwards of 10,000 spectators. In due course, she returned with her load of bananas, and for the first time it was demonstrated that this fruit could be successfully imported in good condition into the United Kingdom from the New World.

In an earlier chapter mention has already been made of

THE "BANANA SUBSIDY"

the circumstances which led to the United Fruit Company of America securing the control of the purchase of fruit and loading of the steamers.

This arrangement was greatly resented in Jamaica. It led to the refusal of the Legislature to approve of the general West Indian mail contract being given to Messrs. Elder Dempster & Company in 1905, and it led also to Jamaica refusing to renew the contract with that company for the direct steamship service when it came to an end by efflux of time early in the present year.

The history of what was called the "Banana subsidy" is certainly unfortunate. Though, however, the subsidy undoubtedly failed in its main purpose—that of affording competition and of counteracting American influence—it at any rate demonstrated that bananas could profitably be introduced into this country from the New World.

But, as Mr. Winston Churchill stated in the House of Commons on April 6th, 1908, the object of the subsidy was not solely the carriage of bananas to this country, but also to secure a direct service of mail and passenger steamers, and Jamaica reaped a benefit from the direct service in several other ways. To begin with, there was the wonderful advertisement which the island obtained. thanks to the irrepressible energy and never failing generosity of Sir Alfred Jones who was constantly sending journalists out to "write up" its admitted beauties, and doctors to report upon the salubrity of its climate, and otherwise bringing Jamaica before the public notice, until to the man in the street the West Indies were, as has already been emphasized: "Jamaica." No other West Indian island has ever received such an advertisement. Then, again, he instituted the system of offering reduced fares to school children and cheap excursions from Jamaica to England and back, which enabled many, who could not otherwise have left the island, to spend a holiday in the old country.

Sir Alfred Jones conceived, too, the idea of sending out undergraduates to Jamaica at a purely nominal rate, a privilege of which numbers availed themselves, and of which it would be impossible to exaggerate the importance from an Imperial standpoint.

Jamaicans have been accused of failing to appreciate all that Sir Alfred Jones did for them, but the idea has been repudiated by the local press, which has been warm in his praise, and it may well be left at that. It is, at any rate, significant that within a very few months of the cessation of the mail service the Legislature and principal commercial and agricultural bodies passed resolutions in favour of its renewal.

In 1900, as the outcome of the report of the Royal Commission of 1897, which advocated increased means of intercommunication, an agreement was made between the Canadian Minister of Trade and Commerce and Messrs. Pickford and Black, who had already been in touch with the West Indies for a number of years, for a fortnightly service between Canada and the West Indies, starting, alternately, from St. John (New Brunswick) and Halifax (Nova Scotia), and calling at most of the islands *en route*. The contract was for five years from July 1st, 1900, and the subsidy was £27,000, of which half was paid by the Canadian Government and half by the Imperial Government

From time to time the contract for this service, which has been conducted from the start by the Pickford and Black Steamship Company, has been renewed, and the following statistics regarding it may prove of interest:

					Duration Subsidy		Annual Amount.		Speed in knots.		
1900	to	1905			5 yrs.		£27,000	10)		
1905	,,	1906			1 ,,		27,000	10)		
1906	,,	1910			4 ,,		27,000	10)		
1910	,,	1911			1 ,,		27,000	10)		
1911	,,	1912		1	1 ,,	01	13,500	10)		

COMMUNICATION WITH CANADA

In 1911 the Imperial Government's share of the subsidy was discontinued, and at the time of writing a modified service is being conducted by arrangement with the Government of the Dominion of Canada.

Messrs. Pickford and Black, under the name of the Halifax and West India Steamship Company, also maintain a service between Halifax and Jamaica, calling at Grand Turk, for which the Canadian Government used to pay a subsidy of \$13,800 under a contract originally settled for one year from March 1st, 1908, to March 31st, 1909, and since carried on under an Order in Council. Now the service is conducted without a subsidy, but tenders for an improved service will, probably, soon be invited.

The question of more efficient and more frequent steam communication was included in the terms of reference to the Royal Commission on Trade between Canada and the West Indies, appointed in 1909, and the Commissioners, after taking abundant evidence in Canada and the West Indies and at home, dealt with it at some length in their report. They advocated a weekly service of 12½ knot steamers with a carrying capacity of 3,500 to 4,000 tons, from a Canadian port on the following plan: "One week the steamer would proceed only to the larger ports, Barbados, Trinidad, and British Guiana, touching on the return journey at all the ports now served [most of the Leeward and Windward Islands], with the addition of Grenada. The second week the steamer would call at all ports on the outward journey, returning by way of Trinidad and Barbados only. This would give in effect a weekly service to the larger ports, with a fortnightly one to the smaller islands, while in alternate weeks British Guiana, Barbados, and Trinidad would have fast direct communication with a Canadian port."

The Commissioners pointed out that such a service

would secure, for the larger colonies, fast and direct communication with a Canadian port, without which no development of the trade in perishable articles could be expected, and by the aid of which the manufacturers of many classes of goods in Canada would be in a position to compete with the New York houses, it would, too, ensure the continuance and improvement of the means of transport, which the smaller islands could not hope to obtain except through a subsidised service.

They also laid stress on the importance of the provision being made that all freight rates should be subject to a maximum fixed with the approval of the Dominion Government and the Secretary of State for the Colonies. They added that the contractors should further be bound to provide cool storage for fruit and other perishable goods, at rates similarly approved, and to run additional steamers in crop time if freight were forthcoming, and that it should also be provided that passengers must be embarked and landed at West Indian ports without charge to themselves.

These recommendations were warmly approved by the colonies; but the suggestion which was added as an afterthought by the Commissioners to the effect that in view of the termination of the transatlantic poundage arrangement with the Royal Mail Steam Packet Company a fast passenger and mail service via Canada should be established, met, as has been already mentioned, with

determined opposition and was soon dropped.

As affording an alternative and competing route it may, perhaps, be revived; but few West Indians would, for choice, return home via the North Atlantic and face the bitter cold between Newfoundland and Labrador just before the close of navigation on the St. Lawrence, to say nothing of the sixteen hour railway journey between Halifax and Rimouski, which the adoption of the Commissioners' suggestion would involve.

CHAPTER XVIII

TELEGRAPHIC COMMUNICATION

Besides being concerned in the inauguration of the Colonial Bank and the Royal Mail Steam Packet Company, the West India Committee had also much to do with the inception of telegraphic communication in the British West India. In 1858 an acting committee of the "West India and Pacific Telegraph Company" met frequently at the West India Committee Rooms and discussed alternative schemes for cable communication.

Nine years later, in a despatch to the Duke of Buckingham and Chandos, the then Secretary of State for the Colonies, the Committee deprecated the omission of reference to the West Indies in a Treasury Minute on the subject of telegraphic communication submitted to the House of Commons, and they stated that they continued to "think the establishment by a British Company, under the control of the British Government, of a Telegraphic line from Halifax to Bermuda and Turks Islands, and from thence on the one hand to Jamaica, and on the other to the Windward and Leeward Colonies, an object of great national importance. They have no doubt that if Her Majesty's Government were to express concurrence in this opinion, and consider the undertaking as combining equally Imperial and Colonial interests, the West India Colonies would be ready to provide, in due proportion to their population and commerce, such guarantees as would raise a moiety of the requisite capital."

If this scheme had been adopted, the West Indies would now be enjoying telegraphic communication by means of all-British cables; but unfortunately other proposals were substituted, which necessitate all messages for British colonies in the West Indies other than

Jamaica passing over foreign lines. These proposals were those of the West India and Panama Telegraph Company, which was floated in 1866 with a capital of £650,000, the first directors being Mr. Charles McGarel, who afterwards became Lord Magheramorne, Chairman, Mr. Quintin Hogg, afterwards Deputy Chairman of the West India Committee, Mr. (later Sir) G. H. Chambers, Mr. Alexander Macgregor, for many years "Managing Member" of the same body, and Mr. John A. Tinne, of Liverpool, while Mr. J. L. Ohlson, the Secretary of the West India Committee, was Secretary pro tem.

The practical history of West Indian telegraphic communication dates from 1868, when Sir Charles Bright undertook the work of laying cables to connect Punta Rassa in Florida with Havana in Cuba, the establishment of land lines across Cuba to Batabano and the laying of cables from that place along the south coast as far as Santiago-de-Cuba, and thence to Jamaica, Colon and

Georgetown, British Guiana.

The companies which were formed to carry out these undertakings were the International and Ocean Telegraph Company (now leased to the Western Union Telegraph Company), the Cuba Submarine Telegraph Company, and the West India and Panama Telegraph

Company.

The combined capital of the Cuba Submarine Telegraph and the West India and Panama Telegraph Companies was £1,000,000, and contracts in perpetuity for the exchange of traffic were made between them and the International and Ocean Telegraph Company, and also with the Western and Brazilian Telegraph and other companies for the transmission of traffic by their lines.

The work of laying the cables was begun from the Danish island of St. Thomas in 1870, and in August of the same year the Cuba Company's sections from Batabano to Santiago-de-Cuba were in working order.

LAYING A WEST INDIAN CABLE

Operations from Santiago for the West India and Panama Telegraph Company were begun in September, 1870, and were not completed until November, 1872.

In those days the present methods of close surveys before laying, means of sounding, prevention of damage by teredo and corrosion in tropical climates did not exist, and a good account of the difficulties which were experienced by the telegraphic pioneers in West Indian waters is given in *The Life Story of Sir Charles Bright*.

According to that work, the cable was shipped in the steamers *Dacia* and *Suffolk*, and much time was lost through serious defects manifesting themselves in it, which necessitated the constant turning over of the cable from tank to tank. Breaks, too, constantly occurred, involving grappling for the broken ends and consequent delay. The staff suffered greatly from sickness, many of the crew died, and Sir Charles Bright himself returned to England broken in health and was compelled to leave to others the work of completing his task.

For many years these two above-mentioned companies enjoyed a monopoly of West Indian cable communication, the charges for which were even higher than they are at present, but in April, 1889, the Imperial Government authorised the laying of a cable between Halifax and Bermuda, and agreed to the payment of a subsidy of £8,100 a year for twenty years. The Halifax and Bermudas Cable Company, Ltd., was formed to carry out the work, and the line was duly laid and opened to the public on July 14th, 1890.

After further negotiations, a contract was granted to the Halifax and Bermudas Cable Company, Ltd., for the extension of their cable to Turks Islands and Jamaica.

It was signed on August 2nd, 1897, and the Direct West India Cable Company was formed to lay the cable, which was opened to the public on January 31st in the

following year. The subsidy was £8,000 a year for twenty years, and the Jamaica Government agreed to pay £2,000 a year for five years for a news service of not less than 400 words per day. The Turks and Caicos Islands Government also contributed £120 yearly for a news supply.

Although in practice five times this quantity of news was given, the Jamaica subsidy was, on the grounds of financial stress, reduced to £1,000 at the end of five years, and placed on a yearly basis, but the Company continued

the same news supply as before.

The laying of this new cable effected a marked reduction of rates, namely: from Halifax to Jamaica from 5s. $0\frac{1}{2}$ d. to 2s., and from New York to Jamaica from 4s. 10d. to 2s., and these reductions applied also to all places beyond Jamaica. Moreover, a press rate of $6\frac{1}{2}$ d. per word was inaugurated for the first time, and it has been estimated that the reduction of charges has resulted in a saving to the West Indies on ordinary traffic passing over the new lines alone of about £26,000 per annum.

The efforts of the Halifax and Bermudas and the Direct West India Cable Companies to extend their lines from Bermuda were vigorously opposed by the West India and Panama Telegraph Company and their allied companies, which, in 1902, retaliated by withdrawing "through" and press rates that had been accorded to others, and enforced high local tolls and a charge for the station of origin on messages over the new lines, a condition contrary to the intention of the International Telegraph Convention, to the regulations of which all the companies are official adherents.

Meanwhile charges to other parts of the West Indies remained high, and it was claimed that they could not be reduced without loss, the West India and Panama Telegraph Company being obliged by agreement in perpetuity to route their messages over the lines of the Cuba

WIRELESS TELEGRAPHY

Submarine unless the two companies mutually consent to the contrary. With the example of Jamaica before them it was not surprising that the other West Indian colonies began to cry out for telegraphic facilities similar to those now enjoyed by that island. The subsidies granted to the West India and Panama Telegraph Company were gradually reduced from £18,000 to £10,000, and in view of a possible change were placed on a yearly basis instead of being granted for a period of years.

Breaks in the cable between British Guiana and Trinidad became more and more frequent, and inasmuch as they generally occurred during crop time, during which it was particularly important that the planters should be in touch with the markets of the world, the

outcry in consequence was great.

In the belief that communication might be duplicated satisfactorily by means of "wireless," the Legislature of the former colony agreed in 1907 to renew the subsidy of £3,000 for five years on condition of their establishing wireless communication with Trinidad, and the fatal mistake was also made of not including in the agreement a stipulation for the reduction of the message rate. It was not until 1909 that the Lodge-Muirhead system of syntonic wireless communication was effected with Trinidad, and the message rate still remained at 7s. 0½d. per word.

In 1910 in response to the pressure of the Jamaica Government, shipowners and others, a three Kilowatt wireless ship and shore station of the Lepel shock excitation and the spark systems was erected by the Direct West India Cable Company at Bowden, Jamaica.

Owing to the limited amount of shipping, and notwithstanding the economical and efficient measures taken to secure success, the working has so far been conducted at a loss. Wireless between Trinidad and Tobago was set up in 1906.

Meanwhile throughout the West Indies resolutions

were being constantly passed in favour of improved and cheaper means of telegraphic communication, and the West India Committee advocated the extension of the cable from Bermuda to Barbados and from Barbados to Trinidad and Demerara, and the establishment of telegraphic communication on an efficient basis between the Windward Islands and the Leeward Islands and Barbados.

As is recorded elsewhere in this volume, this scheme met with the favour of the Royal Commission on Trade Relations between Canada and the West Indies, which not only recommended its adoption, but went farther, and advocated the state-ownership of the entire West Indian telegraphic system, adding, "We would hope that this might be arranged by the Imperial Government (on its own behalf, or with a view to subsequent transfer to the West Indian colonies) in conference with the Canadian Government." Active steps are still being taken to secure the carrying out of the above recommendations, and it is much to be hoped that they will not be allowed to stand over for long or—what would be worse—shelved.

It would be impossible to exaggerate the advantages which cheap and reliable telegraphic communication would confer on the West Indies. At present the cables are very little used in connection with those colonies, the charges being prohibitive. This necessarily involves a feeling of isolation which a cheap cable service would go far towards removing. Besides, the system advocated by the West India Committee would form an important link in the "all red" cable system, which is necessary for Imperial and strategic purposes, and, what is scarcely less important, would assist very materially towards bringing about that closer understanding between the various British West Indian colonies which is so much to be desired, thus further consolidating the scattered units and welding them into one homogeneous whole.

CHAPTER XIX

BANKING

THE oldest banking institution in the West Indies is the Colonial Bank, which was incorporated by Royal Charter of King William IV on June 1st, 1836, "for the purpose of carrying on the business of a Banker in Jamaica and the other West India Islands and British Guiana, and not elsewhere." The Petitioners for the Charter were John Irving, Andrew Colvile, Aeneas Barkly, David Barkly, James Cavan, John Alexander Hankey, William Tetlow Hibbert, John Gurney Hoare, John Irving the younger. Charles McGarel, William Miller, Thomas Masterman, Abraham George Robarts, Patrick Maxwell Stewart, Alexander Stewart, Samuel Gurney, Charles Marryat and Thomas Moody, all men well known in the West India trade or banking world. Andrew Colvile, for example, was at the time Chairman of the Committee of West India Merchants-now the West India Committee,-of which body J. A. Hankey, John Irving, Charles McGarel, and James Cavan, were also prominent members.

The capital of the Bank was £2,000,000 in 20,000 shares of one hundred pounds each, but they were subsequently divided into £20 shares; of the total capital, £600,000 is now paid up and the reserve funds stand at £150,000.

The Colonial Bank has branches in Antigua, Barbados, British Guiana (Berbice and Demerara), Dominica, Grenada (branchat St. George's and Agents in Grenville), Jamaica (branches at Kingston and Port Antonio and agents at Falmouth, Montego Bay, Port Maria and Savanna-la-Mar), St. Kitts, St. Lucia, St. Thomas, St. Vincent and Trinidad (branches at Port of Spain and San Fernando). The bank issues letters of credit, drafts on

demand and telegraphic transfers on the branches; it receives for collection bills of exchange and generally transacts banking business connected with the West Indies.

In the same year which saw the incorporation of the Colonial Bank, the British Guiana Bank was founded. Its head-quarters are in Georgetown, Demerara and its capital is \$1,400,000, of which \$926,520 is paid up. The bank has a branch in Berbice and agencies in all the British islands.

For many years the Colonial Bank had the field practically to itself in the islands, and it was not until the end of last century that competitors appeared in the shape of the Bank of Nova Scotia and the Union Bank of Halifax.

The Bank of Nova Scotia, founded in 1832, has a paid-up capital of \$3,000,000, total assets \$53,500,000, and a reserve fund of \$5,650,000, started business in Jamaica in 1889, and now has branches in Kingston, Port Antonio, Port Maria, St. Ann's Bay, Montego Bay, Savanna-la-Mar, Black River, and Mandeville. It holds its Charter under the Canadian Banking Act, and has power to issue notes to the amount of its paid-up capital. It first issued notes in Jamaica in 1900. The Jamaica Government Account is kept at this bank.

In 1902 the Union Bank of Halifax opened a branch in Port of Spain, Trinidad, and transacted business there until 1910, when it was taken over by the Royal Bank of Canada.

The Royal Bank of Canada, which has a paid-up capital of \$6,200,000, a reserve fund of \$7,200,000, and total assets of \$105,000,000, was incorporated as "The Merchant Bank of Halifax" in 1869, and received its present name in 1901. It first started business in the West Indies in Cuba in 1899, a branch being opened in Havana, immediately after the close of the Spanish-American War in that



A PICTURESQUE BANK BUILDING, KINGSTON, JAMAICA



THE ROYAL BANK OF CANADA

year, and it was entrusted by the Government of Cuba with the distribution of \$61,000,000 awarded to the "Army of Liberation." In 1907 a branch was started in San Juan, Porto Rico, and in the following year an office was opened at Nassau in the Bahamas. After absorbing the Union Bank of Halifax, the directors of the Royal Bank of Canada decided to extend their operations, and in 1911, branches were opened in Bridgetown, Barbados, and Kingston, Jamaica.

The Bahamas have a bank of their own called "The Bank of Nassau," which transacts every description of banking business, but pays no interest on deposits. British Honduras also has a local bank. It is known as The Bank of British Honduras, and began business on January 14th, 1903, with a modest capital of \$50,000, but that amount has since been increased to \$100,000. This bank does a deposit and discount but not circulation,

business.

There are Savings Banks in all the British West Indian colonies. In Barbados the Savings Bank was established by Act of the Legislature of July 28th, 1852, which has since been amended on various occasion. The rate of interest allowed is $2\frac{3}{4}$ %. The total number of depositors on March 31st, 1910, was 19,576, and the total amount at their credit £347,552.

Savings Banks were established in Jamaica as early as 1837 under Act 7 William IV, cap. 6, the first institutions of the kind in the island being opened in Kingston and in St. James' in 1838. The venture proved successful, and further banks were started in Trelawny in 1842, in St. Ann in 1845, in Hanover and St. Mary in 1856, and in Westmoreland in 1865.

These banks did good service and enjoyed the confidence of the public until the Secretary of the Trelawny Bank committed a series of forgeries for which he was indicted and sentenced to fourteen years penal servitude.

A panic ensued and the Government intervened, with the result that towards the end of 1870, a law was passed establishing a Government Savings Bank with branches throughout the island. The direct security of the public chest was given for the due repayment of all moneys deposited, and the rate of interest was fixed at 4% per annum. This was reduced in 1880 to 3%, and in December, 1897, to $2\frac{1}{2}$ %, at which figure it now stands. When the new law came into operation £75,654 2s. 4d. stood at the credit of the Trustee Banks, and that amount was handed over to the new Government Savings Bank. On March 31st, 1910, there were 40,027 depositors, with a total amount of £363,796 standing to their credit.

In 1839, the year following that in which operations were started in Jamaica, Savings Banks were established in Trinidad at Port of Spain and San Fernando by an Ordinance of the Legislature. They became popular from the beginning, and branches were inaugurated at Arima, Princes' Town, Tacarigua, Couva, Montserrat, Cedros and Mayaro, by a further Ordinance in 1882, and in Chaguanas in 1895, Manzanilla in 1899, Tobago in 1893, and La Brea and Toco in 1904. The rate of interest allowed is 3%, and on December 31st, 1910, there were 19,652 depositors with £360,797 standing to their credit.

Government Savings Banks were established at St. George's in Grenada in 1881 by an Ordinance of the local Legislature and at Gouyave, Sauteurs, Grenville, and Carriacou by a further enactment in 1889. Branches were opened in Victoria and St. David's in 1892 and 1897 respectively. The rate of interest allowed is 3%. On December 31st, 1909, the number of depositors was 1,812 with £20,672 standing to their credit.

In St. Lucia the Government Savings Banks owe their inception to an Ordinance of the Legislature in 1871, in which year banks were opened in Castries, and in the Second and Third Districts. Further banks were started

LOCAL SAVINGS BANKS

in the Gros Islet and Dennery Districts in 1905 and at Anse-La-Raye in 1906. The rate of interest allowed is 3%, and on December 31st, 1909, there were 1.685 depositors with £17.584 standing to their credit.

In St. Vincent, Government Savings Banks were started under the Savings Bank Act of 1866. The chief bank is at Kingstown and there are branches at Chateaubelair and Georgetown. The rate of interest allowed is 21 % and on December 31st, 1909, the number of depositors was 1,063 with £13,869 standing to their credit.

In the Leeward Islands the Savings Banks were established by Ordinances of the local legislature in Antigua in 1906. in St. Kitts in 1879. in Nevis. Dominica and Montserrat in 1881, and in the Virgin Islands in 1905. In the first four of the above-mentioned islands the interest allowed is 3%, and in the others $2\frac{1}{2}$ %. The number of depositors and the amounts standing to their credit on March 31st. 1910, were as follows:

St. John's Savings Bank, Antigua, depositors, 1,953, savings, £44.051; St. Kitts-Nevis Savings Bank, depositors 653, savings £20,378; Dominica Savings Bank, depositors 664, savings £13,418; Montserrat Savings Bank, depositors 213, savings £4,100; Virgin Islands

Savings Bank, depositors 98, savings £325.

It is only in the Bahamas and British Guiana that the Savings Banks are connected with the Postal Department as they are in England. In the Bahamas the Savings Bank is attached to the Post Office department; it gives 2½ per cent. interest on deposits, on June 30th, 1909, the number of depositors was 2,179, with savings of £28,643.

British Guiana has a Government Savings Bank; established under Ordinance 71 of 1836, with offices in Georgetown and New Amsterdam opened in 1836 and 1843 respectively, for the benefit of labouring classes and others, and also fifty Post Office Savings Banks created under Ordinance 6 of 1889. Both classes of bank pay

interest at the rate of 3% on sums from \$4 up to \$500, and $2\frac{2}{5}$ % from \$501 to \$1,500, and the Post Office Banks pay 3% on deposits up to \$500 and $2\frac{2}{5}$ % from \$501 to \$1,500. On December 31st, 1910, the number of depositors in the Government Savings Bank was 8,133, with £106,578 to their credit, and in the Post Office Savings Banks 18,004, with £151,685.

In British Honduras Government Savings Banks were opened at Belize in 1846, at Corosal and Orange Walk in 1881, and at Stann Creek, Punta Gorda and Cayo in 1892. The interest paid by them is 3% per annum, and on December 31st, 1909, there were 683 depositors, with \$75,340 standing to their credit.

In British Guiana and Trinidad the Savings Banks are particularly well patronised by the East Indian immigrants, who deposit considerable sums at them besides sending much of their savings back to India.

Thrift is also encouraged in the British West Indies by numerous Friendly Societies, established under various Ordinances of the local Legislatures.

The only Agricultural Bank is the Sugar Industry Agricultural Bank in Barbados. The funds were provided by the Imperial Government in 1902 and were not originally granted for the purpose of forming a bank, but were voted by Parliament in 1902, as the result of representations made by Sir Nevile Lubbock and Mr. George Martineau, the expert advisers to the British Delegates at the Brussels Sugar Conference, to enable the sugar industry to tide over the period until the Brussels Convention came into operation. The total grant-in-aid to the West Indies was £250,000, and after an interview between a deputation from the West India Committee and the Rt. Hon. J. Chamberlain, the then Secretary of State for the Colonies, it was decided that Barbados and the more necessitous islands should receive £2 for every ton of sugar produced, and the other colonies a lesser amount.

AN AGRICULTURAL BANK

The sum received by Barbados was accordingly (80,000, and though all proprietors concerned in the 1902-3 sugar crop were really entitled to their share of the amount, the Barbados Legislature decided to apply the capital sum towards making loans to those planters who wished to avail themselves of it. The Act which provided for this arrangement was known as the Plantation-in-Aids Act. Those planters who did not need assistance of this nature felt aggrieved at not participating in the grantin-aid which was clearly intended for them, and, as the outcome of their protests, an Act was passed by the Barbados Legislature, vesting the grant-in-aid in the Governor in Executive Committee, to be applied ultimately with the approval of the Legislature in such manner as would best promote the collective and permanent interest of the sugar industry of the island.

The Agricultural Bank was formed in 1906 and the total amount transferred to it at the opening was £96,360 5s.8d., being the grant-in-aid with accumulations. The bank is managed by seven directors, five of whom are nominated by the Legislature, and one by the Agricultural Society;

the Colonial Secretary is ex-officio chairman.

Though the Imperial grant-in-aid was diverted from the specific purpose for which it was voted, it is admitted on all sides that the Agricultural Bank has proved beneficial to the island. At the time of writing proposals are on foot for the establishment of banks on somewhat similar lines in British Guiana.

On the other hand, banking competition seems likely to be reduced by the absorption of the Colonial Bank by the Royal Bank of Canada, if rumour speaks correctly.

CHAPTER XX

DEPARTMENTS OF AGRICULTURE—BOTANIC STATIONS

THERE are Departments of Agriculture in Barbados, Jamaica, Trinidad, Grenada and British Guiana, and the Imperial Department of Agriculture attends to the requirements of planters in the Windward and Leeward Islands. In the old days the planters seemed almost to resent any offers of assistance in agricultural matters, each believing that what he did not know was not worth knowing. That school has, however, long since died out, and there are now few in the West Indies who do not appreciate the value of science as applied to agriculture.

There are, at the present time, such eminent scientists and agriculturists in the West Indies as Professor J. B. Harrison, C.M.G., Dr. Francis Watts, C.M.G., Dr. H. H. Cousins, F.C.S., and Mr. J. A. Bovell, I.S.O., whose work has proved, and continues to prove of immense

value.

One of the principal recommendations of the West India Royal Commission of 1897 was the establishment of a "Botanic Department for Tobago, Grenada, St. Vincent, Barbados, St. Lucia, Dominica, Montserrat, Antigua and St. Kitts-Nevis, to be administered by an Imperial officer who would also act as consulting officer to the colonies of Jamaica, Trinidad and British Guiana when they wished to obtain the benefit of his advice." This was also one of the first recommendations to which the Government gave effect, and in his memorable speech in the House of Commons on August 2nd, 1898, Mr. Chamberlain, the then Secretary of State for the Colonies, announced that a special public department would be established and placed under the direction of Dr. Morris, the Assistant Director of the Royal Gardens at Kew,

SEEDLING SUGAR-CANES

who was, he said, marked out by special qualifications for a post of that kind.

For the purpose of the maintenance of the Department for a period of ten years he proceeded to ask for a vote of £4,500 for the year then current and estimated that the

annual charge thereafter would be £17,500.

The vote was duly agreed to, and it was decided that the head-quarters and laboratories of the new department, which thus came into being, should be located at Barbados as being the most central island. Dr. Morris proceeded to Barbados at the close of 1898, and at the first Agricultural Conference held in the following January, he outlined the duties of the Department. They would, he said, be (1) to endeavour to restore the sugar industry to a condition in which it could be profitably carried on; and (2) to encourage the establishment of other industries in those colonies in which the conditions were suitable.

To accomplish the first object was altogether beyond the power of any Agricultural Department, because the sugar industry was being ruined by economic causes, namely, the foreign sugar bounties and cartels, and it was realised that the advantages of improvements in cultivation or agriculture might at any moment be more than offset by an increase in the foreign bounties and a corresponding decline in price. It was the fear of this taking place which effectively prevented the introduction of capital for the improvement of machinery. The Imperial Department of Agriculture, however, took under its wing the experiments which had been originally instituted in Barbados by Professor J. B. Harrison and Mr. J. A. Bovell, and carried out by the latter in conjunction with Professor J. P. d'Albuquerque after Professor Harrison's departure, in the direction of raising sugar-canes from seedlings, and was instrumental in raising many new varieties of seedlings, which have been successfully used in those

localities where the continued cultivation of the prolific Bourbon cane has been rendered impossible owing to disease.

The second of the objects of the Department has certainly been accomplished, and in the smaller islands with which it is more actively concerned, it has assisted materially in the development of subsidiary industries, the most notable being that of cotton, which, since 1903, has become the staple of St. Vincent, and a minor industry of value in Barbados, Montserrat, St. Kitts, Nevis, Antigua and Anguilla. The Department has also devoted attention to the improvement of the breed and condition of cattle, horses, and small stock, and to the extension of bee-keeping for the production of honey and beeswax.

Agricultural education has also received a considerable amount of attention. Jamaica had already taken the lead in teaching agriculture in elementary schools; by establishing annual courses of instruction to teachers in theoretical and practical agriculture at the Mico Institute and by the provision of a staff of travelling agricultural instructors, the local Government has laid the foundation for an efficient scheme of agricultural education throughout the colony.

The Department took up the matter with enthusiasm, and it is probable that no part of the tropics is now more fully provided with the means for extending agricultural knowledge among both the members of the rising generation and the adult population. In the first instance all teachers in charge of elementary schools were taken through successive courses of lectures and demonstrations in agriculture. They were afterwards supplied with school-readers and a book of nature-teaching specially prepared for use in the tropics. In Barbados, British Guiana, and Trinidad, a large number of schools have started small gardens, and in the Windward and Leeward Islands fair progress in this direction has also been made.

AGRICULTURAL TEACHING

Agricultural training schools have been established by the Department at St. Vincent, St. Lucia, and Dominica, where selected boys of the agricultural class are boarded and trained for a period of three years. They have clearly demonstrated the value of such practical training in raising the standard of cultivation and in spreading sound knowledge of the treatment of crops. About seventy students trained at these schools have already obtained employment as foremen and overseers, or are otherwise engaged in agricultural work.

Agricultural teaching in secondary schools and colleges continues to progress at Harrison College, Barbados, and at Queen's College in British Guiana, Queen's College in Trinidad and also in Jamaica. Agricultural Science is also taught at the Grammar Schools in Antigua and St. Kitts, and scholarships have been provided by the Imperial

Department of Agriculture.

In gauging the value of the Imperial Department of Agriculture it should not be forgotten that the active operations of that organisation have been confined to Barbados and the Windward and Leeward Islands. It must, however, be recognised that the inauguration of the Department gave a great impetus to the application of science to agriculture. It was created in 1898 when there was no free interchange of ideas on agricultural matters between the various West Indian colonies, and when the efforts at agricultural research, such as were in progress in Jamaica, Trinidad, British Guiana, Barbados and the Leeward Islands, were rather isolated efforts, largely dependent on the energy and enthusiasm of the men in charge of the work.

At this time the various Governments had no very clear ideas on the subject of agricultural policy and even less on the necessity for working together and along common lines. The formation of the Imperial Department of Agriculture was a definite official pronouncement in

favour of agricultural research and education, and enabled it to be shown that agriculture was intended to play an important part in matters of administration. The result has been that the aspect of affairs has been largely altered, and though British Guiana, Jamaica, and Trinidad preferred to hold aloof from the new central authority, the consolidation of the existing scientific and agricultural machinery in those colonies into Boards and Departments of Agriculture was undoubtedly stimulated by the example of the Imperial organisation at Barbados.

The actual expenditure down to 1908 was at the rate of £17,400 per annum, of which amount about £5,000 represented the cost of the head office, the balance being applied in grants-in-aid to botanical and experimental stations, agricultural schools and other educational services in the individual colonies.

As has been shown, the original vote provided for the maintenance of the Department for a period of ten years, and the uncertainty as to the continuance of the work after that period proved rather a severe handicap, many of the best officials accepting pensionable appointments in India and elsewhere. In 1908 the life of the Department was prolonged for three years, and in 1911, as the result of the recommendations of the Royal Commission on trade between Canada and the West Indies; the Imperial Government agreed in principle to the continuance of the Department with assistance of Imperial funds until 1922.

Botanic stations play an important part in the agricultural development of the West Indies. Thirty years ago there were only three institutions of this kind in existence in those colonies, but when the Royal Commission visited the West Indies in 1897, thirteen had already been established. The Royal Commissioners in their report laid stress on the desirability of developing the

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work of the stations in the Windward and Leeward Islands and Barbados on the lines which had already proved so successful in Jamaica. "In the latter colony" they said "it is admitted that intelligent and progressive action in the direction of encouraging a diversity industries has produced most satisfactory results. achieve this result has, however, taken more than twenty vears of persistent effort, and the Government has spent more than £100,000 during that period on its botanic establishments. The department has distributed seeds and plants at nominal prices by means of the post office, Government railways, and coastal steam service; it has supplied information orally, or by means of bulletins, regarding the cultivation of economic plants, and has encouraged the careful preparation of the produce by sending agricultural instructors on tour through the island to give lectures, demonstrations and advice."

Among other duties to be discharged by the botanic stations, Dr. Morris outlined the following: "They are to devote themselves in a systematic manner to the work of introducing, propagating, and distributing all the promising economic plants of the tropics; they are to initiate the experimental cultivation of new or little known plants, and assist in the efforts made in the larger colonies to secure improved varieties of the sugar-cane. They are to act as centres for diffusing accurate information, and as training institutions for the practical teaching of tropical agriculture, and also as the head-quarters from which agricultural instructors may be sent to give lectures and demonstrations bearing upon the selection of land for tropical economic plants, their suitable cultivation, and the best methods for curing and packing the produce."

As the outcome of the report the stations already established at Tobago, Grenada, St. Vincent, Barbados, St. Lucia, Dominica, Montserrat, Antigua, and St. Kitts-Nevis passed under the immediate control of the Imperial

Department of Agriculture, Imperial funds being voted for their maintenance, but no such grants-in-aid were voted by Parliament for Jamaica, Trinidad and British Guiana, as the Commissioners were of the opinion that those colonies were in a position to maintain their own Botanical Departments.

The conduct of the botanic stations has closely followed the lines of the recommendations of the Royal Commissioners, and it is generally admitted that they render a valuable service to planters in raising and distributing economic plants and in supplying information and advice on all matters connected with tropical agriculture.

Most of these botanic stations have Botanical Gardens attached to them which add considerably to the pleasures of life in the tropics, and form also a source of great attraction to visitors to the West Indies.

The oldest of these gardens in the West Indies and probably in any part of the world is the one at St. Vincent, which was established as far back as 1763, when the control of it was entrusted to the Secretary for War, to whom regular reports were transmitted.

It is shown in another chapter how it was to supply this Garden with the Bread-fruit that Captain William Bligh made his memorable voyage to the South Seas, which resulted in the mutiny of the Bounty and the establishment of the settlement at Pitcairn Island. The Mango and Cinnamon, which were introduced by Lord Rodney into Jamaica in 1782, were also sent to the establishment at St. Vincent, and two Nutmeg Trees were procured for it from Cayenne by Dr. Anderson in 1809, while the Clove was obtained from Martinique as early as 1787. The Garden was successively in the charge of Dr. Young, Dr. Anderson, Mr. Lockhead and Mr. Caley who, as Mr. Charles Shephard tells us, received a liberal salary from the Government and "a supply of twelve negroes."



THE BOTANIC GARDEN, PORT OF SPAIN, TRINIDAD



A WAR OFFICE GARDEN

But on Mr. Lockhead's death in 1814, the prosperity of this establishment began to decline; his successor was discontented with the attitude of the inhabitants. and harrassed his superiors at the War Office by constant complaints. The Government, in consequence, took the opportunity of causing most of the plants to be removed to Trinidad, and of discontinuing the allowances which had been made for upkeep. So the land was offered to the Colony on the condition of a Government House being erected on it.

For some few years £800 currency was annually expended by the Legislature in partially maintaining the Garden, and preserving the remaining trees, but in 1828. this allowance was discontinued.

The Botanic Gardens in Trinidad, made famous by

Charles Kingsley's delightful description of them in At Last, were established under the direction of Mr. David Lockhart in 1820. Here the cultivation of seedling canes and economic products was carried on for many years under the supervision of the late Mr. J. H. Hart, F.L.S. The Botanic Gardens at Georgetown, British Guiana, which now cover about 150 acres of land, were laid out by Mr. G. S. Jenman, Government Botanist, towards the end of the 'seventies. At these Gardens experiments with existing varieties of canes from all parts of the world were carried on, and, since the arrival of Professor J. B. Harrison as Director of Agriculture, also in the direction of the raising of seedling canes.

Jamaica is particularly rich in Botanical Gardens. The principal of them are Hope Gardens and Agricultural Experiment Station beyond Kingston, on the Liguanea Plain, near the foot of the hills. Here there are large nurseries containing economic plants such as cacao, citrus, rubber, nutmegs, vanilla, etc., and a large assortment of ornamental foliage and flowering plants. Castleton Gardens in St. Mary's Parish also contain a large collection

of tropical plants, the chief features of the gardens being the Palmetum and a collection of economic spice and fruit trees. There are also the Hill Gardens in the Parish of St. Andrew, on the slopes of the Blue Mountains, beyond Gordon Town, where an experiment was made some years ago with the cultivation of Cinchona, and the garden and grounds of King's House which are surpassingly beautiful. Here there are many economic plants and fruit trees under cultivation, besides the rarer tropical palms and orchids.

CHAPTER XXI

SOME WEST INDIAN INSTITUTIONS

OF all the associations in the United Kingdom concerned with the welfare of the colonies the West India Committee is the oldest. Owing, however, to frequent change of offices and to the consequent loss of records, the actual year in which it was formed is not known; but the earliest minute book of the West India Merchants is dated 1769, and it is generally believed that the Committee was

established early in the eighteenth century.

The full title of the organisation in those days was "The Standing Committee of West India Planters and Merchants." It embodied the Committee of Merchants and the Committee of West India Planters. Of these, the former was probably the older institution. The merchants used to meet at the King's Arms Tavern in Cornhill, and also from time to time at the office of the Marine Society, the London Tavern in Bishopsgate Street, the Jamaica Coffee House, the Colonial Club House, and the Thatched House Tavern. At one period the meetings were held in a stately and palatial suite of rooms at the West India Club House, 60 St. James's Street. It is, indeed, a tradition that complaints were frequently made concerning the serious interference with the traffic in that street which was caused by the coaches of the wealthy West Indian proprietors.

Mr. Beeston Long, afterwards Chairman of the London Dock Company, was one of the earliest Chairmen, and among those who regularly attended the meetings were Sir Alexander Grant, Bart., the Right Hon. Samuel Turner, Lord Mayor of London in 1769, Mr. Alderman Trecothick, and Mr. Alderman Hopkins, both of whom were subsequently Lord Mayor, Mr. Wm. Beckford, son of

the famous Right Hon. William Beckford, twice Lord Mayor, Mr. Bryan Edwards the historian, Sir Richard Neave, Bart., and Mr. Alderman Oliver. Among other familiar names those of Hankey, Ellis, Plummer, Luard, Stephen Fuller (agent for Jamaica from 1765 to 1795), Malcolm, and Boddington frequently appear in the minutes.

In those days the West India body was wealthy, and contributed largely to charity. Thus we find the Committee on December 5th, 1769, voting £500 from the general fund for the relief of the sufferers by fire at St. John's, Antigua, and in the following year contributing a substantial sum to the treasury of the Marine Society, of which it was already a benefactor, "towards clothing out Boys for the Sea Service"; the Committee was not, however, above combining business and pleasure, for it is recorded in the minutes that in the same year the annual dinner was held at the King's Arms Tavern

Matters concerning duties and drawbacks were constantly engaging attention, and in the early days it was the sugar industry, for the welfare of which the Committee was most solicitous. The figures of the annual imports of sugar were regularly recorded in the minutes. The Committee subscribed a considerable sum towards the cost of the publication of a pamphlet concerning "The Salubrious Qualities of Rum in preference to Brandy," and otherwise exerted its influence in benefiting the sugar and rum industries, which were at this time its principal care.

An important function performed by the Committee was that of fixing the rates of freight to and from the West Indies, and it is interesting to note from the old records that the freight "in Time of Peace" on "Four Wheel Post Chaises" was £7 7s. and that in time of war it was, with all other rates, doubled. The normal rate on "Sedan Chairs in cases" was £2 10s., and on the Kitterings, which were so largely used in the West Indies, £3 3s.

THE WEST INDIA COMMITTEE

The rate on sugar from Jamaica was then as high as

4s. per hundredweight.

But the Committee was not only concerned with the sugar industry. At a meeting on February 7th, 1775, a letter was read from George Walker, Esq., to the Chairman, relative to the introduction into England of the "Bread-Fruit and Mangostan (sic) from the East Indies, in order for their being sent over and propagated in the West Indies," and it was agreed that the West India merchants were "willing to be at any reasonable expense in endeavouring to introduce the above trees into the West Indian Colonies." This was twelve years before Bligh's memorable voyage to the South Sea Islands in quest of the bread-fruit, to which reference has already been made.

In the late 'seventies of the eighteenth century the provision of adequate convoys for the West India merchantmen became a matter of paramount importance, and the Committee was in frequent communication with the Lords Commissioners of the Admiralty on the subject. Resolutions similar to the following constantly

appear in the minutes of that period:

"March 25th, 1777. That application be made to the Right Hon. the Lords Commissioners of the Admiralty that a convoy for the West Indies may sail from Portsmouth on April 20th next, waiting forty-eight hours for a fair wind for the ships from the Downs, and that the

convoy may stop at Madeira."

Zealous for the safety of the West India trade, the Committee protested forcibly if the captains of the convoy were lacking in their duties as when "His Majesty's ship Squirrel... arrived in England some weeks before any of the Merchant Ships that sailed from Jamaica under her Convoy," which resulted in the court martial of Captain Douglas. On the other hand, the merchants never failed to convey their thanks to those captains who efficiently performed the duties entrusted to them, as the following

extract indicates: "That the thanks of the West India Merchants be transmitted to Captain Pasley of His Majesty's Ship *Glasgow*, for his unremitting attention to the security of the very valuable Fleet which sailed under his Convoy from Portsmouth for the West India Islands on 5th December last, and for his conducting the

ships to all their destined ports."

On February 23rd, 1779, we find the Committee expressing its grateful acknowledgments to Admiral Keppel: "for your constant attention to the protection of their fleets, by which you have to the utmost of your power verified the sentiment expressed in your letter to me [the Chairman] of 15th July last, viz.:—'that the Protection of the Trade of Great Britain ought to be the first object for the consideration of a good Sea Officer,' a sentiment which comprehends the great interest of this commercial country."

To this Admiral Keppel replied:

"The unanimous Approbation of the Society of West India Planters, and Merchants, of my Conduct in the Protection of their Trade, I look upon as the strongest Proofs that can be given of my being considered by them as a good British Sea Officer, acting uniformly in his Duty, and attention to the true Interest of this Country.

"The great and memorable Sea Officers I served under during part of two Wars, Lord Anson, Lord Hawke, Admiral Boscawen, and Sir George Pocock, were such Examples to me in their constant Attention to the Trade that I owe much of the Sentiments that have directed me in my Duty in this particular to them. Their Principles prompted the Expressions in my letter to Mr. Long, when I said that the Protection of the Trade of Great Britan ought to be the first Object for the Consideration of a good Sea Officer, such is still my Opinion.

"I feel much honour in being so well thought of by you Gentlemen, that give me your Testimony of it this

KEPPEL AND PALLISER

day, and I hope my future Attention to the Trade will at no time diminish your good Opinion of me."

The Committee subsequently invited the Admiral to a banquet, and Keppel's reply recalls the rioting which followed his acquittal by the court martial held at the instance of Sir Hugh Palliser, whom he had declined to exonerate from certain charges of cowardice in the action with the French Fleet under d'Orvilliers on July 27th, 1778.

"The Honour intended me by the Society of the West India Planters and Merchants," wrote Keppel, "in their Invitation to Dinner with them in the City, I shall ever esteem with much Gratitude, as a mark of their very kind attention to me, and I felt at the time of the Invitation, the greatest Satisfaction from it, but the Experience of what happened on Saturday Night, from the extraordinary Concourse of People as I returned from Dinner in the City, (which the Committee of Aldermen and Common Council of London, had done me the Honour to give me;) has led me to be apprehensive that the Honour of another public Dinner at this time in the City, may be attended with the like Consequences.

"I cannot but be proud of the Demonstrations of Joy, so generally expressed, and especially in this Metropolis, yet I should feel myself much reprehensible If I afforded a Pretence to anyone to say, that I encouraged any Excesses at a late hour at Night, which tend to alarm and disturb the Quiet of the Town, and the more so, as those Excesses have been attended with real prejudice to the Health, and Property of many Persons, and I can truly say that I did all in my Power to prevent the least Instance of it.—these Considerations, I must own, operate so much upon my Mind, as to have determined me to beg Sir, that you will in my Name, present my most grateful Thanks to the Gentlemen, intreating their Permission, to decline accepting their most obliging and

kind Invitation at this Time, I trust you will be persuaded of the true Cause which weighs with me, to the relinquishing, what would be to me the highest Gratification."

Keppel, after his acquittal, became a popular hero. The mob showed their joy by tearing down the Admiralty gates, smashing the windows of the official residences, and gutting Palliser's house in Pall Mall.

At the next meeting of the West India Committee Mr. Long reported that the intended entertainment for Admiral Keppel cost fifty guineas. "Mr. Laforest having represented that he had paid Mr. Negri a Confectioner, Twenty Guineas, for what had been prepared for the Desart, and Mr. Laforest being called in was informed that they thought Mr. Negri's Charges very high." History does not, however, relate how the matter was eventually settled.

This was an anxious time for all having interests in the West Indies, and it is easy to imagine the satisfaction with which Mr. Long and Mr. Neave learnt from the Earl of Sandwich, Lord George Germain and Lord North, upon whom they waited on January 30th, 1782, that orders had been despatched "for the immediate sailing [to the West Indies] of a great Naval Force, in addition to the Squadron of Eight Ships under Sir George Rodney." Island after island was falling into the hands of the French, who were contemplating a descent upon Jamaica, and these were the vessels with which Rodney inflicted the crushing defeat on Count de Grasse on April 12th, which secured to us our West Indian colonies.

• The above brief reference to the old minutes of the West India Committee will give some idea of the manifold activities of that body during the eighteenth century. In the early years of the nineteenth century the defence of the West Indies was still a source of apprehension, and the letter from Lord Nelson, which is given in another

A NOTABLE BANQUET

chapter of this book 1 shows how the anxiety of the West India merchants was again relieved by his brilliant pursuit of Villeneuve to the West Indies and back, and how the Committee marked its approval of his action.

The struggle over the abolition of the slave trade and slavery was now beginning in earnest. As might be expected, the West India Merchants took a prominent part in it, and all that can be said is that the campaign which they conducted was based upon their genuine convictions. Successive English Governments for generations had acquiesced in the system of slavery, the Baptists in their instructions to early Missionaries deprecated opposition to it in slave-holding countries, and the Society for the Propagation of the Gospel, as trustees for the two Codrington estates in Barbados, were slave owners and did not emancipate their slaves until 1834.

In the action which the Committee took in connection with slavery, the Merchants had a strong supporter in the Duke of Clarence, afterwards King William IV,2 who with his brother, the Duke of York, was entertained by them in 1815 at a banquet at which such distinguished guests as Lord Combermere, the Earl of Liverpool, Earl Bathurst, the Earl of Westmoreland, the Earl of Harewood, Marquis Camden, Lord Rodney, the Rt. Hon. George Canning, the Rt. Hon. Robert Peel and a large number of members of Parliament were present. Among prominent members of the West Indian community who attended this banquet, over which Mr. Charles N. Pallmer, M.P., presided, were many whose names are still familiar, notably Mr. James Dawkins, Mr. M. Cavan, Mr. John Blagrove, Mr. Joseph Marryat, Mr. John Daniel, and Mr. George Carrington.

When the slave trade and slavery were abolished the labour question became acute, and the Committee was largely responsible for the initiation of the very

¹ See page 52. ² See page 4.

successful system of East Indian immigration referred to in another chapter, after an experiment had been made with the importation of Chinese, which only failed owing to the great expense which it involved.

Meanwhile, the equalisation of the duties in England on free and slave-grown sugar was the subject of constant representations to His Majesty's ministers, and the iniquitous system of giving bounties on the production of sugar was growing up on the continent of Europe to the ruin of cane sugar-growing colonies.

In contesting the bounty system, immense sums of money were spent by the West India Committee. whose action; in co-operation with the sugar refiners, and the planters of Mauritius and other places affected, resulted in the abolition of bounties and cartels by international agreement, through the Brussels Convention of 1902, a subject which has already been dealt with at some length. In this campaign, so stubbornly fought step by step, the names of Thomas Daniel Hill, Nevile Lubbock, Wallwyn P. B. Shepheard, Forster M. Alleyne, J. E. Tinne, Quintin Hogg, Sir George Chambers, W. F. Lawrence, M.P., and Mayson M. Beeton, the Secretary of the Anti-Bounty League, stand out prominently among those of West Indian stalwarts.

At the beginning of the present century the West India Committee entered upon a new phase of its existence. For over a hundred and fifty years it had been a rope of sand only; but its membership had latterly been steadily increasing, and it was felt that the time had arrived when it should become a corporate entity.

Sir Nevile Lubbock, the Chairman, Sir Henry Davson, the Deputy Chairman, and the author, then as now, Secretary, petitioned His Majesty King Edward VII for a Royal Charter of Incorporation, and this was duly granted to them on August 4th, 1904. The West India Committee is defined in the Charter as an Association

A TELEGRAM FROM KING EDWARD VII

formed of British subjects personally interested in the agricultural and manufacturing industries and trade of the British West Indies, British Guiana, and British Honduras, and subscribing voluntarily to the funds of the Association. "The object of the Association is by united action to promote the interests of such industries and trade and thus increase the general welfare of Our above mentioned Colonies and Possessions."

This auspicious event was duly celebrated by a banquet, presided over by the Chairman, Sir Nevile Lubbock, on June 22nd, 1905, at which, in response to a loyal message, a telegram from King Edward was received: "I have had the honour of submitting to the King the telegram signed by you, the Deputy Chairman and the Secretary of the West India Committee. I am commanded by His Majesty in reply to inform you that it gave him much satisfaction to approve of a Royal Charter of Incorporation being granted to the Committee, and that he highly appreciates their words of loyal devotion towards him and the Royal Family. Knollys."

The scope of the West India Committee has now been extended in many directions, and the author believes he may very confidently state that it is now generally recognised that the work which it is doing on behalf of the West Indies is a valuable one. "Both you in the West Indies and we here at home," said the Prime Minister, the Rt. Hon. H. A. Asquith, at a dinner given by the West Indian Club on June 15th, 1911, "have to acknowledge our obligations to the West India Committee, presided over by my friend Mr. Middleton Campbell, which so zealously promotes the effective discussion and understanding of West Indian questions in England, and whose representations are always carefully and sympathetically considered by His Majesty's Government."

In recent years there has been a good deal of progress in the West Indies in the direction of securing publicity

for those colonies and for the undoubted attractions which they offer to young and energetic men with a moderate amount of capital, to capitalists, and to visitors during the winter months. For this the West India Committee has been in some measure responsible.

As the result of a suggestion which was made by them after the Colonial Exhibition of 1905, Permanent Exhibition Committees have been established in all the islands and in British Guiana. These organisations make the necessary arrangements locally for the participation of the colonies which they represent in any exhibitions, whether in the United Kingdom, Canada, or elsewhere, in which it may be felt desirable to take part.

The Permanent Exhibition Committees tend to bring about valuable uniformity in exhibition matters, the object aimed at being to have, at suitable exhibitions, a general West Indian Court in which the several colonies have their separate sections, thus maintaining their identity while still co-operating for the general good. The Committees have already taken part in the annual Canadian exhibitions, in the highly successful fruit shows organised by the Royal Horticultural Society, in the International Rubber Exhibitions of 1908 and 1911, and elsewhere. The necessary funds are voted as occasion requires by the respective Legislatures, which, when they appreciate the value of these exhibitions more, as the self-governing colonies already do, will no doubt adopt a more generous attitude towards them.

Handbooks and pamphlets have also been published and circulated in considerable numbers, while several of the colonies have applied sums of money towards advertisements in the English and American Press. The chief onus of advertising the islands as winter tourist resorts is still, however, left to private enterprise, and it remains yet to be realised to the full extent what a magnificent field for development as a tourist resort the

A NOTED WEST INDIAN FIRM

West Indies afford with their superb winter climate and

glorious scenery.

Another tangible result of the Colonial Exhibition of 1905 was the formation in London of the West Indian Produce Association, an organisation having for its object the promotion of the sale of cane sugar and other West Indian produce in this country.

The movement, at present under the management of Mr. C. A. Philip, who comes of an old St. Kitts family, proved so successful that in 1911 the Association was able to acquire the historic business of Davison, Newman & Co., a firm with West Indian connections, which was founded as far back as 1650 by Daniel Rawlinson, the friend of Samuel Pepys and father of Sir Thomas Rawlinson, Sheriff of London in 1687 and Lord Mayor in 1706. "Dan Rawlinson" is frequently referred to by the diarist. Thus we find Mr. Battersby informing Pepys on August 6th, 1666: "After all this sickness, and himself [Rawlinson] spending all the last year in the country, one of his [Rawlinson's] men is dead of the plague, and his wife and one of his maids sick and himself shut up."

At this Pepys says that he was "mightily troubled." We learn from the same source of the death, three days later, on August 9th, of Mrs. Rawlinson, of the continued illness of the maid, and of the fact that Mr. Rawlinson had been forced to quit his house. On September 8th, 1667, Mr. Pepys relates how he met Mr. Rawlinson in Fenchurch. Street, the merchant having been looking over the ruins of his premises which were destroyed by the Great Fire of the previous year.

The business was started in Fenchurch Street over 260 years ago, and was carried on there until 1890, when the then partners were compelled, owing to rebuilding, to migrate to 14 Creechurch Lane in the same neighbourhood.

In 1763 the firm was known as Rawlinson, Davison & Newman. In 1777 the style Davison, Newman & Co.

was adopted, and in the same year Monkhouse Davison and Abraham Newman admitted into partnership three of the clerks who put various small sums into the business, no amount, however, exceeding £500; one of them was a Mr. Thwaytes. These small sums of money qualifying for partnership in a well-established firm whose capital was £80,000 seems ridiculous in these days, but the fact is, nevertheless, true. In 1792 the capital of this very

prosperous business was increased to £196,000.

Abraham Newman amassed great wealth. He died on March 8th, 1799, and his death is recorded in the Annual Register for that year: "At his house in Fenchurch-street, Abraham Newman, esq. He was one of the richest citizens of London, and a happy instance of the wonderful powers of accumulation by the steady pursuit of honourable industry. Without speculation or adventure, he acquired 600,000l as a grocer. He retired from trade about four years ago; but so forcible was his habit, that he came every day to the shop, and ate his mutton at two o'clock, the good old city hour, with his successors. He has bequeathed upwards of 100,000l to each of his two daughters, Mrs. Caswall, of Portland-place, and Jane, married, May 22nd, 1788, to William Thoyts, esq., 7 Sulhamstead-Abbot, Berks."

Davison and Newman were once the owners of Rose Hall Estate in St. Thomas-in-the-Vale, Jamaica, and it is a tradition that it was this historic house which shipped to Boston the famous chests of tea which were thrown into the Harbour on the occasion of the "Boston Tea Party," and were the immediate cause of the breaking out of the American Revolution. The old sign, which consists of three golden sugar-loaves surmounted by a crown, still hangs above the doorway of the warehouse and offices of this historic firm, where they are an object of curiosity to the passer-by.

CHAPTER XXII

THE WEST INDIAN PRESS

THE early settlers in the West Indies were, apparently, too busily occupied in establishing their plantations to find time to read the paper, for quite a long time was allowed to elapse before printing presses were established in the West Indies.

According to Mr. Frank Cundall, the cultured Secretary of the Institute of Jamaica, than whom there could be no better authority, the weekly Barbados Gazette, which was first published on May 18th, 1731, was probably the earliest British West Indian newspaper. Printing was practised in Martinique as early as 1727, and at Havana in Cuba two years later; and a Royal printing house was established in St. Domingo in 1750. The earliest Jamaicaprinted book known is the Merchant's Pocket Companion, printed in Kingston-not in Spanish Town, the then capital of the island-in 1751; this was the first almanac printed in the colony. A copy of it is in the library of the Institute of Jamaica. The next oldest Jamaica-printed book known is an almanac, of the year 1776, printed, curiously enough, at Montego Bay. A copy of this is also in the Institute library. There may be early volumes of the St. Jago de la Vega Gazette (founded in 1756) in existence, but the earliest in the Institute library bears date 1791, and the earliest of the Royal Gazette (founded in 1779) there bears the date 1780. The best known of the early Jamaica newspapers was the St. Jago de la Vega Gazette, but the Weekly Courant was in existence as early as December, 1735. On the 19th of that month it was decided by the Council to print in it the speech of the Governor (Henry Cunningham) to the Council on the occasion of his taking the oaths on the assumption of his office.

John Luffman, in a letter dated April 12th, 1788, records that in that year there were three weekly newspapers in

Antigua, namely, the Antigua Chronicle, the Antigua Gazette and the Antigua Journal, and he bemoans their lack of freedom. The papers were venal and on one occasion, when "the impositions practised in conducting a part of the public business" and the "amours" and "ridiculous attachments" of a man in office were exposed, a threat from thirty-three persons of weight to withdraw their subscriptions sufficed to make the editor consider it "most prudent to stop" the "further publication of such statements." Luffman remarks: "The Antigua Chronicle has now sunk into that nothingness (which had already pervaded the other two) suitable to the genius

of arrogance, folly, and despotism."

The West Indies now have many newspapers, several of which, in the larger colonies, leave little to be desired as regards appearance and style. In many of the smaller islands, however, the newspapers are poorly and carelessly printed, the paper used is abominable, and the journals contain little or no original matter, depending solely on the cabled news bulletins and advertisements to fill their pages. Where a leading article does appear, it is as often as not lifted bodily from a contemporary, unless it is, perhaps, used to hurl invective in true Eatanswill style at the local government or at some unfortunate official. who, by the regulations of the colonial service, is compelled to take such attacks "lying down." Proceedings against the editor used to be of no avail, as damages were unrecoverable, and "official baiting" bade fair to become a recognised sport among a certain class of editor. ordinary citizen would sometimes take the law into his own hands, and if he felt he had a grievance against an editor, invade the newspaper office and "pie" the type and make hav in it generally. Such a proceeding effectively prevented the reappearance of the offending organ for many days.

To obviate the frequent libels, Ordinances were passed

JOURNALISTIC ENTERPRISE

in several of the colonies necessitating the deposit of guarantees for a certain sum before a paper could be published. This, at first, gave rise to loud protests against interference with the liberty of the Press; but the

situation has since been accepted.

It must be clearly understood that the above remarks do not apply to the West Indian Press as a whole, or the more responsible editors, several of whom are men of ability and learning, who would make their mark among journalists of distinction at home. Their articles are forceful and well reasoned, and their news supply admirable. The pity is that under the existing system the cost of sending even press messages by cable to the West Indies is, except in the case of Jamaica which thanks to competition enjoys a cheaper message rate, practically prohibitive. This state of affairs naturally checks journalistic enterprise and the appearance of an "exclusive" cablegram is quite exceptional, and it is only in respect to purely local news that a journalist can hope to secure what is popularly known in the region of Fleet Street as a "scoop."

That West Indian journalists are not lacking in enterprise was shown at the time of the Jamaica earthquake. Within eight days of that disaster the Gleaner, burnt out of its old home, made its reappearance from the Government Printing Office, while the Jamaica Daily Telegraph also came out in its normal guise on the same day. This must rank as no mean achievement, considering the appalling state of havoc to which Kingston was reduced, as is indicated by the following significant headlines in the issue of the last-named paper for January 22nd, 1907:

City of Kingston wrecked by Earthquake on Monday 14th.

Nearly one Thousand Persons killed by Falling Walls in Stores and

Thoroughfares.

Prominent Merchants among the Dead.

Many bodies Cremated.

Debris being Removed.

In some of the smaller islands the old-world Eagle press is still in use, but in the larger colonies the printing machinery is quite "up to date," the type-setting being

done by linotype and monotype machines.

Besides the newspapers proper, Official Gazettes are published in all the colonies which give, in the somewhat chilling style characteristic of such publications, news of official movements, meetings of the Council, and the like. Sometimes they appear on the least provocation, and it is not unusual for a single sheet to be published with the object of making such an announcement as that "Lady So-and-so will be at home at Government House on—from 4.30 to 6 p.m."

The various Agricultural Departments and Agricultural and Commercial Societies issue bulletins of general information, which form useful media for the interchange of views, and the Imperial Department of Agriculture, in addition to a Bulletin, issues fortnightly the Agricultural

News.

Another paper which is widely circulated throughout the West Indies is the West India Committee Circular, the official organ of the West India Committee which is published in London every fortnight, and deals with West Indian affairs generally. As to the merits or demerits of this publication, the author—being its present editor—must maintain a discreet silence.

CHAPTER XXIII

THE WEST INDIES AND THE PANAMA CANAL

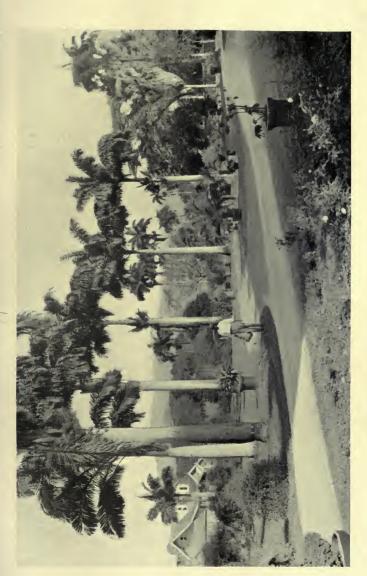
The opening of the Panama Canal, which is confidently expected to take place in 1915, should prove to be an event of immense importance to our West Indian colonies. In attempting to gauge the probable effect of the throwing open of the great water-way, which is to link together the Atlantic and the Pacific, it is not possible to estimate with any degree of certainty the extent to which the canal will be used: this must depend upon the scale of canal dues, which is already becoming a subject of considerable controversy in political circles in the United States. If the dues are fixed at a high rate it may still be more profitable, in many cases, to make the long voyage round Cape Horn than to incur them by taking the short cut through the canal.

It may, however, be taken for granted at the outset, that the Panama Canal will mainly serve American interests, just as the Suez Canal does those of Great Britain. While the distance by sea between New York and Australia, Hong Kong, Shanghai, Yokohama, and Manila, will be reduced by many hundreds of miles by the opening of the Panama route, the shortest voyage to all those places from Great Britain and Europe will still be by way of the Suez Canal. Again, the Panama Canal is certain to be largely used by America as a means of communication between her eastern and western sea-boards. Indeed, it was the perilous voyage of the Oregon from the Pacific to the Atlantic to join the main fleet during the Spanish-American War which prompted the American Government to construct a canal "under the control, management and ownership of the United States."

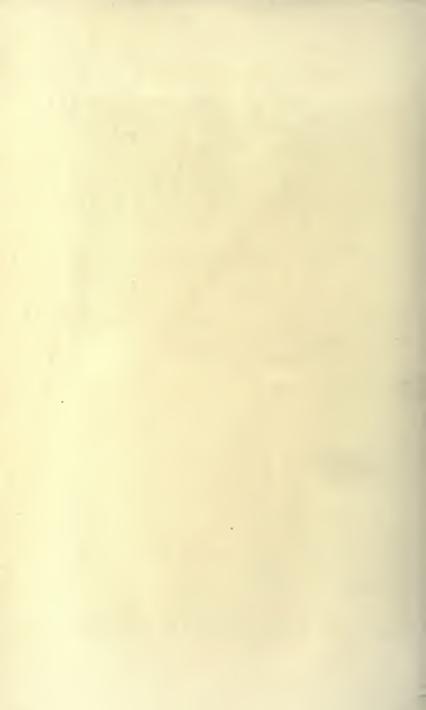
It being assumed then that the United States will be the chief users of the canal, it is clear that Jamaica, being as it is on the direct route between New York and the mouth of the Panama Canal, should derive the greatest benefit from the opening of the new water-way. A glance at the map will at once show how favourably the island is situated, lying, as it does, across the Windward Passage between Cuba and Haiti, through which all shipping from North America must pass if the shortest route to the canal is chosen. When the canal is completed, the volume of shipping which calls at Jamaica should increase very materially, and the island will, no doubt, be visited by many large passenger liners on their journey to the Pacific. Vessels will put in to Jamaica for coal and repairs, and the island will generally be brought into prominence as being the nearest port to the mouth of the canal; its strategic position too will become of paramount importance. Provided that Jamaica is alive to its opportunities, and that steps are taken in time to provide suitable docking facilities for which the sheltered harbour of Kingston is so admirably adapted, that island should certainly be the one to derive the greatest advantage.

Though, however, the problematical loaf would appear to be likely to fall to Jamaica, the other West Indian islands stand to gain some financial crumbs from the opening of the Panama Canal. In many cases the most convenient course to Colon from British ports would be through the neighbourhood of Barbados or Trinidad, instead of one so far north as that by the Windward Passage. A route via Barbados or Trinidad would certainly be the most advantageous for steamers calling at La Guaira, Puerto Cabello, Puerto Colombia and Cartagena on the Spanish Main on their way to and from Colon.

It must not be forgotten that Trinidad has, like Jamaica, a superb natural harbour in the Gulf of Paria, and the



THE HOSPITAL GROUNDS, PORT OF SPAIN, TRINIDAD



A SUPERB NATURAL HARBOUR

advantage which Kingston Harbour, Jamaica, has not of being outside the hurricane zone; it has also a floating dock moored in Chaguaramas Bay. Another inducement for steamers to call at Trinidad will be the supplies of oil-fuel to be obtained there from the natural sources in the island, now, as is shown in another chapter of this book, being rapidly developed.

But, apart from this, Trinidad should become a port of transhipment and a clearing house for cargo from steamers plying north and south to those sailing east and west, and vice versa; other islands in the neighbourhood

should reap a similar advantage.

Speaking generally, the West Indies should derive substantial benefit not only from the increased amount of shipping which will be attracted to their ports with a consequent reduction in freight charges, but also from the extension of the coaling business and the increased publicity which they will obtain—publicity which should tend to increase the number of tourists visiting the islands. the development of the agricultural resources of these colonies, and the influx of capital. The canal will also provide the islands with a shorter route to Vancouver and the east coast of Canada, where their exporters may expect to find a market for their sugars if the present preference in the Canadian market is continued or a reciprocal trading arrangement arrived at. At present the West Indian sugar producers complain that they are rather too much at the mercy of the Canadian refiners in the eastern provinces, and it has already paid them on occasion to send their sugar on the long voyage round Cape Horn to Vancouver. But whether cargoes of West Indian sugar will pass through the Panama Canal must, as already stated, depend upon the scale of the canal tolls.

It is to be assumed that by the time the Panama Canal is completed some steps will have been taken to strengthen

the defences of the West Indies, though no official pronouncement has been made on the subject in reply to the many questions which have been asked in the House of Commons regarding it. Until 1905, Barbados, St. Lucia and Jamaica were garrisoned by white troops; but in that year the policy of the Committee of Defence underwent a complete change, and the West Indies were informed of the intention of the Government to withdraw the garrisons. In a letter to the West India Committee dated February, the Rt. Hon. Alfred Lyttelton, the then Secretary of State for the Colonies, wrote: "His Majesty's Government have decided to withdraw all the British Infantry at present stationed in the West Indian colonies at an early date; and that Port Royal [Jamaica] will no longer be retained as a naval base, but both that place and the coaling depôt at St. Lucia will be reduced to cadres on which the expenditure in the time of peace will be small, but which can, in time of war, be at once developed according to necessity. Stocks of coal will, however, continue to be kept at both ports for the use of His Majesty's ships, and the West Indian colonies will be visited, as heretofore, every winter by a naval squadron, and a fast cruiser will be permanently situated in the West Indian waters."

As might be expected, this announcement caused profound dissatisfaction throughout the West Indies. Protests were sent home by the commercial bodies, and resolutions were passed in the Legislatures. They proved, however, of little avail, and only resulted in the promise of a cruiser being stationed in West Indian waters.

In the House of Commons on March 22nd, 1904, the Earl of Selborne said: "The whole naval strategic situation has undergone a complete revolution... That revolution is the birth of the American Navy." On May 11th in the same year, in Committee of Supply, the Rt.

WITHDRAWAL OF THE TROOPS

Hon. A. J. Balfour, then Prime Minister, explained the reasons which led the Committee of Defence to arrive at their decision. "It seemed to us," he said, "with the changes in naval warfare, with the changes in the seat of sea-power of other nations, a redistribution of both our Fleet and our Army was desirable; and we have gone upon the broad line that, as the British Fleet and as the British Army should be available for the defence of the British Empire in all parts of the world our force should be, as far as possible, concentrated at the centre of the Empire, from which it could be distributed as each necessity arose to that part of the Empire which stood most in need of it. I have to acknowledge that this has rendered unnecessary expenditure which has been undertaken under a different view of our military needs. The most notable case is the case of St. Lucia. The general problem was considered by a Commission, of which Lord Carnaryon was the head, and it was in deference to Lord Carnarvon's recommendation that St. Lucia was made a great naval base. One of the reasons for making it a great naval base was that it was not farther than 80 miles from the French naval station in those seas. What was a reason for having such a base at St. Lucia in Lord Carnaryon's time is a reason for not having it there at the present time. We have to take into account the theory of torpedo boats. It is a distinct disadvantage for any harbour required as a place of repair, refitting, and refreshment that it should be within easy reach of a hostile or potentially hostile Power. There is more in the abandonment of St. Lucia than that. The Defence Committee, who have considered the matter, with the advice of the Admiralty and War Office, do not think St. Lucia is likely to be the scene of any great naval operations. It is not a place which we think could be with advantage used, or is likely to be required to be used, for our purposes; and with the modern battleship there are

strong reasons for thinking that in so far as we required any place of coaling and refitment in those seas, both Jamaica and Trinidad would be better. The harbour at St. Lucia, though sheltered, is not very convenient, and does not hold a large fleet. These are the reasons why St. Lucia ceases to be regarded as a great naval station. This is all in obedience to a trend of opinion which Lord Carnarvon's committee were strongly in favour of—namely, that we should cease to scatter our forces in small isolated bodies throughout the world, and that we should concentrate them in important tactical units, have them under our hand, and be able to use them in places where they would be most likely to control the hostile forces of any enemy we are likely to have to deal with."

That there were good grounds for the apprehension which was felt in the West Indies at their isolation was demonstrated in a striking manner in Jamaica on the occasion of the earthquake and fire in Kingston on January 14th, 1907. How, for a whole week, the hapless inhabitants of that stricken city never saw the white ensign, but were dependent on foreigners for assistance, will not easily be forgotten; how, with the best possible intentions, an armed force of American marines were landed on British soil, and how very properly, though in a letter couched in unfortunate terms, they were requested to withdraw by Governor Swettenham, who was, in consequence, called upon to apologise by the British Government, and did so and then resigned, will also live in the memory. "It is difficult to describe the sense of humiliation with which an Englishman surveys Kingston harbour this evening," telegraphed the Times correspondent five days after the earthquake, "two American battleships, three German steamers, a Cuban steamer and one British ship; she leaves to-night, and the white ensign and the red ensign will be as absent from Kingston Harbour as from the military basins of

MR. CHURCHILL AND JAMAICA

Kiel and Cherbourg." Yet the lesson was not taken to heart.

From the speeches which were made subsequent to this unfortunate affair, there seemed to be some hope that steps would be taken to obviate the recurrence of such a disaster to British prestige. Speaking at Leeds on February 5th. 1907. Mr. Winston Churchill, M.P., said he ventured to hope, that within the lapse of a few months-he would not call it years—Kingston might rise from its ruins. improved, beautiful, enlarged, and that the importance which that town would receive from the opening of the Panama Canal might make Jamaica a far more splendid and far more wealthy state than anything that had ever been known in the West India islands. Many of those whom he was addressing must have regarded with some uneasiness the prolonged absence of British ships from the scene of the disaster. The late Government inaugurated and the present Government had pursued the wise policy of naval concentration in order to guard us from vital dangers, but this policy led to certain other services being left undischarged which the Navy used to discharge. latter services had got to be met from some quarter or another. There were pirates in the Persian Gulf. There were lonely islands in the sea never visited from year's end to year's end. There were governors or agents who had spent long and weary years without the advantage of seeing the white ensign near their shores. There were disputes about fish in Newfoundland and about seals in other quarters. There were earthquakes and possibilities of riots, and a score of needs for the meeting of which we did not require the first-class battleships and cruisers that were needed to lie in the European line of battle, but for which, nevertheless, we needed urgently a squadron of ships of some sort or other. What he hoped the Government might be able to effect was the institution of a squadron of vessels that would discharge

all these patrol and other duties absolutely necessary to the efficiency and dignified conduct of the administration

of an Empire so wide as ours.

Mr. Balfour, in the House of Commons, on March 5th. 1907, was equally emphatic as to the need of adequately defending the West Indies and of showing the Flag in the Caribbean. "I remember." he said. "receiving a private deputation of gentlemen interested in the West Indies [he referred to a deputation of the West India Committee] who expressed strongly the belief that their interests were somewhat imperilled by the concentration both of the Fleet and of the Army. They were more exercised at the moment with the removal of a regiment from the West Indies than in the concentration of the ships: but the problem is fundamentally the same in both cases, and the reasons for concentration are exactly the same, really, in the case of the Army as they are in the case of the Navy. I talked the matter over with them, and what I said I have no doubt has been reported to the department concerned. What I suggested to them was that a possible method of dealing with this matter was for the Government of the day frankly to admit that a new situation had arisen, a situation entirely different from that which existed when the ship that was best qualified to carry large bodies of marines, and to do police work, was also a very good fighting vessel and not a very expensive vessel. Now the changes in naval architecture have had this result, that if you are going to have a large ship which is also to be a first-class fighting ship, its production will be expensive, and much of the expense will be wasted if she is to do police duty. If, on the other hand, you are going to have a small fighting ship and are going to do police duty with her-a torpedo vessel or a small cruiser, a third-class cruiser—then you will find that she is unfitted for that sort of duty, that she does not hold a sufficient number of men, is not sufficiently

VESSELS FOR POLICE WORK

comfortable, and that she has not the conveniences and mechanical arrangements fitting her for police work; and I believe the Government will have to face the problem of differentiating between the fighting and nonfighting part of the Navy. The Admiralty have, rightly, the strongest objection to that ship which, professing to be a fighting ship, cannot fight efficiently—a ship which can be picked up by any effective foreign cruiser or battleship of the most modern type. I think this argument is unanswerable, and that the only way out of the difficulty is by building special ships, which are not fighting ships, but which can do police duty, can carry bodies of marines and bluejackets, can show the Flag, and can be adequately armed for all the fighting that can be required except when we are engaged in serious naval warfare. . . . I think that the Government whom they serve will have to face the problem of this policing of waters as distinct from the problem of dealing with great naval operations. They will have to do it, I am sure, by differentiating the ships which have to do police duty from ships which are to do fighting work. It must cost some money-I do not know how much; it depends upon the scale upon which it is done; but that that is the only issue out of the present difficulty I am almost assured."

After these very definite statements by a member of the Government and the then Leader of the Opposition, it was confidently hoped that some steps would be taken to prevent the recurrence of a similar scandal to that which attended the Kingston earthquake. Hopes were, however, in vain, and it required another lesson before the Government could be persuaded to supplement the single cruiser patrolling West Indian waters with a second vessel. This lesson was furnished by an outbreak of rioting in St. Lucia, which began on April 23rd, 1907. Though a Dutch man-of-war, the Gelderland, was anchored in Castries harbour, there was again no British

warship at hand, and again a week elapsed before a cruiser flying the white ensign arrived on the scene. The matter was taken up with some warmth in the Press, both at home and in the West Indies, and under pressure of public opinion it was decided to detail a second cruiser for service in the West Indies, and H.M.S. Indefatigable—which became known as the "Ungetatable"—was joined later in the year by H.M.S. Scylla. The Scylla has now been withdrawn and the only cruisers in West Indian waters are the obsolete H.M.S. Melpomene—alias the old "Ungetatable"—and H.M.S. Aeolus.

Since the St. Lucia affair no serious disturbance has called for the intervention of the sailors and marines of either vessel; but it is still a regrettable fact that West Indians see the flags of foreign nations far more frequently than they do the white ensign, and it is hardly necessary to point out what effect this has on British prestige. With the approaching completion of the Panama Canal it is much to be hoped that wiser counsels may prevail. The amount to be expended by the United States on the defences of the Canal has been estimated at \$12,475,328, and it is reasonable to expect that His Majesty's Government will realise the importance of placing islands of such undoubted strategic value as Jamaica and Trinidad in an adequate state of defence.

Is it too much to hope that Mr. Winston Churchill, who expressed his views so freely in 1907 as to the need of policing the Caribbean, will, now that he has become First Lord of the Admiralty, secure the establishment of the squadron of Imperial patrol vessels, the need for which he recently so warmly emphasized?

CHAPTER XXIV

THE WEST INDIES AND CANADA

THE feeling in the West Indies in favour of closer trade with Canada has been steadily growing in recent years. Like so many West Indian problems in the past this question hinges closely on sugar, which is still the most important staple in the West Indies as a whole, though it is run very close by cacao.

Imperial sentiment counts for much, but, looking at the matter as a business proposition, producers naturally want to know what they are going to gain from a reciprocal arrangement with Canada, and it must be admitted that few West Indian industries, except that of sugar, would

reap an immediate benefit from preference.

Take cacao for example. The production of this commodity in the West Indies now amounts to no less than 85,000,000 lbs. per annum, while the consumption of cacao, chocolate-paste, etc., in Canada is only 7,780,000 lbs. It is true that the population of Canada is increasing very rapidly, but even if it were doubled or even trebled, and even if the consumption of cacao rose to the height which it has reached in the United States—which has the highest consumption of that product per head in the world—Canada could only take a very small proportion of the total cacao crop of the West Indies.

It is very much the same with fruit. The production of bananas in Jamaica now amounts to over 16,000,000 bunches per annum, and the consumption of that fruit in Canada is only a few million bunches. At the same time, Canada is a "live" country, the importance and wealth of which increases year by year. Its markets are expanding rapidly, and the West Indies would be

unwise to ignore their potentialities.

The first practical move in the direction of closer trade between Canada and the West Indies was made in 1890, when the Hon. G. E. Foster, the Finance Minister and now Minister of Trade and Commerce of the Dominion, visited the West Indies with the object of ascertaining whether it would be possible to establish a reciprocal trade arrangement between these two parts of the Empire. At that time, however, the proposal met with very little favour, as the West Indian colonies were hoping to arrange reciprocity treaties with the United States. Besides, as the West India Committee pointed out, Canada could, in those days, only consume about a third of the total amount of sugar then produced by the British West Indies, and her market was therefore of comparatively little consequence.

In 1898, a preference of 25% was extended by Canada to the West Indies and other parts of the Empire, and the Hon. W. S. Fielding, then Finance Minister of Canada, in his Budget statement, said that the object which the Dominion had in view was to benefit those colonies whose position, owing to the foreign sugar-bounties, had

become so serious.

Little advantage was, however, taken of the preference at the time, for owing to the fact that the United States had, in 1898, imposed countervailing duties on bounty-fed sugar, West Indian producers had a better market for their sugar in the United States than they had in Canada.

Two years later, the Hon. G. Townsend Fenwick, senior unofficial member of the Legislative Council, and the Hon. R. H. McCarthy, Collector of Customs, were sent by the Trinidad Government as delegates to Ottawa with a view to negotiating a reciprocal trading arrangement, and, as a result, the Canadian Government made certain proposals to Trinidad, the suggested basis of an arrangement being the free interchange of the products of

THE CANADIAN PREFERENCE

Trinidad and the Dominion, except spirituous liquors and tobacco, provided that the goods were carried direct between the West Indies and Canada.

The cacao merchants, proprietors and attorneys in Trinidad, in a petition to the Governor, Sir Alfred Moloney, voiced, however, their fear that "in the event of a convention being arranged with Canada," the United States would retaliate and would "select cacao as one of the items best adapted for that purpose." They pointed out that the trade between Trinidad and the United States in cacao had steadily increased until it had reached one-third of the crop, and that the imposition of even the smallest tax would close the market against them. The result of this was that nothing came of the proposals.

In the same year the Canadian preference was increased from 25% to 33\frac{1}{3}%, but still comparatively little sugar was attracted to the Canadian markets for the reasons above stated.

Meanwhile, the United States were becoming every year more self-supporting in the matter of sugar supplies, having, besides their own sugar beet industry, Louisiana, Cuba, Porto Rico, the Philippines and Hawaii to draw from. Then after the abolition of bounties and cartels by the Brussels Convention of 1902, and the consequent removal of the countervailing duties in the United States, the situation underwent a complete change. More and more West Indian sugar went to Canada, whose consumption was increasing very rapidly. Whereas in 1907 the imports from the West Indies into Canada did not exceed 11,000, they reached no less than 133,000 tons in 1909.

Now that the Canadian preference became effective, proposals for a reciprocal arrangement between Canada and the West Indies were again revived, it being felt in the highest degree important to the West Indian sugar industry that a continuance of the advantage which they were enjoying should be assured.

In 1903 the Legislature of British Guiana considered proposals for a reduction by 10% of the Customs tariff on importations from Canada and the United Kingdom, and in the following year the proposals of 1900 were revived by the Trinidad Chamber of Commerce; but in neither case was the matter carried beyond the realms of discussion.

Two years later the West India Committee took the opportunity afforded by the Colonial Exhibition to entertain the members of the Canadian Manufacturers' Association of the Crystal Palace at Sydenham, and on this occasion the question of closer trade with Canada was again ventilated.

The Boards of Trade of Halifax, Toronto, and St. John sent a Commission down the islands in 1907, to study the trade conditions there and in British Guiana, and in their report the Commissioners emphasized the desirability of closer trade relations between Canada and the West Indies being established, and laid stress upon the need of improved steamship and telegraphic facilities.

The visit of these trade delegates was followed in 1908 by an intercolonial Conference in Barbados at which Mr. W. G. Parmelee, then Deputy Minister of Trade and Commerce in Canada, and Mr. Jones, a former president of the Halifax, N.S., Board of Trade—an organisation similar to a Chamber of Commerce at home—were present.

The colonies represented at the Conference were Barbados, which had nine agricultural and commercial delegates and one official, British Guiana, Jamaica, Trinidad, and St. Kitts, each of which sent a commercial as well as an official delegate, and Grenada, St. Vincent, St. Lucia and the Leeward Islands, which were represented by officials. After an interesting series of discussions, the views of the Conference were recorded in the following resolutions which were carried with only one dissentient:

"In order to place on record in a definite form the views

A BARBADOS CONFERENCE

of this Conference on the subject of Reciprocity, it is hereby resolved:

"That the end to be sought is an arrangement for mutual concessions between the Dominion of Canada on the one side and the British West Indies (including British Guiana) collectively on the other side, on the broadest basis consistent with financial requirements:

"That owing to differences in their respective circumstances it is at present impracticable for the West Indies to unite in such an arrangement, and only indefinite postponement can result from making unanimity a

necessary condition:

"That to the colonies which are mainly dependent upon the sugar industry it is of urgent importance to render secure the advantage now obtained in the Canadian market, and any delay in enabling them by mutual tariff arrangements to do so would be regrettable:

"That for the foregoing reasons the initial step might most conveniently be taken by a group of the most vitally interested colonies, together with such other colonies as may desire to co-operate, jointly negotiating upon a tariff, uniform or assimilated, as regards certain

specified commodities:

"That the United Kingdom and all British Possessions should have the benefit of any concessions granted to Canada, and that in any arrangement provision should be made for subsequent adherence by other British West Indian colonies."

In the same year, the House of Assembly of Barbados passed a bill imposing a surtax of 20% on certain specified articles when imported from elsewhere than Canada. The Act, however, had a suspending clause, providing that it should not come into force until the Dominion Government had authorised the admission of Barbados sugar in Canada at a duty of 20 cents per 100 lbs., the duties on sugar under the then existing intermediate and general

tariffs remaining the same; in other words, Barbados asked for an increase in the Canadian preference as a condition precedent to the granting of any concession to Canada. The Governor of Antigua also submitted a Bill to the Secretary of State for the Colonies on somewhat similar lines, but without asking for further concessions.

Then came the proposal of the Canadian Government that in view of the obvious difficulty of concluding separate reciprocity agreements with the several West Indian Colonies, the whole subject should be considered by a conference organised by Imperial authority in the form of a Royal Commission or otherwise.

At a banquet given to the Earl of Crewe, the then Secretary of State for the Colonies, by the West India Committee and West Indian Club, on February 19th, 1909, the appointment of a Royal Commission was foreshadowed, and in August the Right Hon. Lord Balfour of Burleigh, P.C., K.T., the Hon. William Stevens Fielding, the Hon. William Paterson, Sir John Poynder Dickson-Poynder, M.P. (afterwards Lord Islington), and Sir Daniel Morris, K.C.M.G., were appointed Commissioners with Mr. H. R. Cowell as Secretary "to enquire into the question of trade relations between Canada and the West Indian colonies."

The terms of reference were wide, and included the improvement of transportation and a cheaper and more

efficient telegraph system.

Accompanied by Mr. R. H. McCarthy, C.M.G., the late Collector of Customs of Trinidad and Tobago, as expert adviser, the members of the Commission resident in the United Kingdom left for Canada in September, 1909, and the full Commission sat for the first time in Ottawa on the 22nd of that month. Meetings were subsequently held in Toronto, Montreal, Quebec, St. John N.B., and Halifax N.S., in each of which cities the Commissioners were received with the greatest cordiality. In the following

ROYAL COMMISSION OF 1909

January the Commissioners, with the exception of Sir John Dickson-Poynder and Hon. W. S. Fielding, met in Jamaica and then visited in succession Dominica, where they were joined by Sir John Dickson-Poynder, St. Lucia, Barbados, British Guiana, Antigua, St. Kitts, Montserrat, St. Vincent, Grenada, and Trinidad, finally leaving Barbados for Southampton on the 8th of March.

Evidence was afterwards taken in London, and the report, which was dated August 19th, was issued in September, 1910. It would be impossible, within the compass of this book to give, in full, the findings of the Commissioners, but they may briefly be summarised as follows—

The Commissioners were convinced that the preferential policy initiated by the Canadian Government had already been of very great benefit to the West Indian producer of sugar, and they were of opinion that, taking one year with another, those interested in the production of British West Indian sugar had received from $\frac{1}{3}$ to $\frac{1}{2}$, or approximately from 9s. to 14s. per ton above the price which they would have been able to obtain without the preference.

It being conceivable that public opinion in Canada might come to regard the continuance of the existing conditions, under which the preference was one-sided, as unsatisfactory, and that on those grounds the preference might be abolished, the Commissioners were of opinion that if that contingency could be avoided or even deferred by some present concession on the part of the West Indian colonies, that concession ought to be made. While in some circumstances, objection might be taken to the inauguration by a group of Crown Colonies of a system of discriminatory tariffs, they felt that the very special relations which existed between Canada and the West Indies justified them in supporting the adoption of such a policy in this case.

The Commissioners were hopeful that several of the larger colonies would be disposed to enter into a scheme for reciprocity, and they accordingly suggested a suitable

form of agreement.

They recommended that in any arrangement that might be discussed between Canada and the West Indian colonies it should be understood that the position of Jamaica was entirely distinct from that of the other colonies, but that the way should be left open for the subsequent adhesion of Jamaica if that colony should afterwards so desire.

The Commissioners then warmly advocated the improvement of steamship communication between Canada and the West Indies. Owing to the termination of the contract for the conveyance of mails from Southampton to the West Indies and the expiration of the contract with the Imperial Direct West India Mail Service Company for the Bristol-Jamaica direct service, they strongly recommended that tenders should be invited for a mail service between the United Kingdom and the West Indies by way of Canada, with 15-knot steamers starting from Halifax or St. John immediately on the arrival at that port of the weekly mails from Liverpool, which in summer, when the St. Lawrence was open, would be landed at Rimouski and conveyed to Halifax or St. John by rail.

They then eulogised the work of the Imperial Department of Agriculture, and strongly urged that the grant of £5,000 per annum for the maintenance of the central office of that organisation should be continued for a

definite term of years.

Dealing with the development of trade between Canada and the West Indies generally, they considered that beneficial results would follow from the appointment of a Trade Commissioner fully conversant with the circumstances of the West Indies to represent those colonies in Canada, who would advise the producers of the

A TRADE COMMISSIONER

West Indies and bring them into communication with Canadian buyers, the cost of the appointment being shared between the colonies represented, and they thought that it would be desirable, in order to secure the advantages of the existing organisation, that the office should be in close association with the Imperial

Department of Agriculture.

On the subject of telegraphic communication the Commissioners were in favour of public ownership and operation of the cables in the West Indies, and possibly of the whole system northward to Halifax. They hoped that this might be arranged by the Imperial Government (on its own behalf or with a view to subsequent transfer to the West Indian colonies) in conference with the Canadian Government, and they continued: "The single cables now connecting Halifax with Bermuda and Bermuda with Jamaica ought either to be duplicated or supplemented by wireless. A cable should be laid between Bermuda and Barbados, with a branch to Trinidad. and perhaps another to British Guiana. The cables which run from Jamaica to the eastern islands and British Guiana, sometimes single and sometimes duplicate, are in many cases very old. The bed of this part of the Caribbean being trying for cables, we believe it would be found advantageous in most cases not to renew them. but to replace them by wireless installations. If these were well arranged they might form a satisfactory connection between the eastern islands and Jamaica, and an alternative route to Bermuda, and render unnecessary duplication of the suggested Bermuda-Barbados cable. While it is desirable to connect British Honduras with Jamaica, we consider that the probable volume of traffic would not warrant the cost of a cable. We therefore recommend the employment of wireless for the purpose. Small installations should also be supplied to the outlying Leeward and Bahamas islands."

Finally, the Commissioners pointed out that the continuance and improvement of the steamship service between Canada and the West Indies, the maintenance of the Imperial Department of Agriculture, and the provision of an improved telegraphic service would involve an expenditure at present quite beyond the means of the Governments of the West Indian colonies, and they strongly represented that the time had not yet come when the assistance which the Imperial Government had granted since 1897 to the West Indian colonies could be wholly or even largely withdrawn.

Unfortunately, such benefit as the West Indian producers had been obtaining from the preference given to their sugar in Canada was reduced, in some cases to vanishing point, and in others entirely, by the privilege which was extended to the Canadian refiners in 1909 of importing one-fifth of their requirements from foreign sources on the basis of the British preferential tariff.

It was alleged that the producers had been combining with the object of compelling the refiners to give them the whole of the preference in the price quoted, and it was to counteract the effects of this reported offensive combination that the privilege referred to was given.

The Royal Commission made an exhaustive enquiry into this alleged combination, but found that there was no evidence of its existence. The Canadian refiners had, indeed, discovered a mare's nest.

The refiners' privilege has not yet, however, been removed, and supplemented as it is by the privilege given to the beet sugar factory at Wallaceburg, Ontario, of importing two tons of sugar from any source on the terms of the British preferential tariff, for every ton of homegrown beet used by them, it effectively prevents the West India producer from getting an appreciable amount, and in many cases any of the preference.

MR. BORDEN AND RECIPROCITY

Meanwhile, before the resignation of the Laurier Ministry the Ministers of the Dominion intimated that the arrangements contemplated by the Royal Commissioners could only be made effective through the participation of a number of the colonies, including several of those having the largest population and trade. If it were ascertained that a sufficient number of the West Indian colonies viewed the proposals with favour, and were willing to enter into negotiations with Canada, they would, they said, be prepared to enter upon such negotiations at a convenient time.

All the West Indian colonies, with the exception of Jamaica and Grenada, had approved of the report in principle, and the way was paved for closer negotiations.

The General Election in Canada on September 21st, 1911—a memorable day in the annals of the British Empire,—followed, resulting in the defeat of the Liberal Party and of the policy of Reciprocity with the United States. Mr. R. L. Borden succeeded Sir Wilfrid Laurier as Premier of the Dominion, and it is generally believed that the cause of reciprocity between Canada and the West Indies is as safe in his hands as it was in those of the great French-Canadian statesman.

At any rate, in an interview which he granted to the author at Ottawa shortly after the election, Mr. Borden said:

"It would be my desire—my warm desire—to improve trade relations between Canada and the British West Indies in every feasible way. The opportunity for the interchange of products is perfectly obvious. The natural products of either country are not raised in the other country, and for this reason the advantages of an exchange are observable at the outset.

"The Report of the Royal Commission on Trade between Canada and the West Indies, and the subsequent action taken by the majority of the West Indian

colonies regarding it, will receive our consideration at the earliest opportunity.

"We appreciate the importance of adequate telegraphic and steamship facilities between these two parts of the

Empire."

At the time of writing there would appear to be good prospects of a Conference between representatives of the Dominion of Canada and the British West Indies meeting to discuss the details of a reciprocal trade arrangement. Whether, however, such a conference meets or notand it is to be hoped that it will—it is probable that the trade between Canada and the West Indies will continue steadily to expand as, with a rapidly growing population, the demand in the Dominion for tropical produce increases. Meanwhile the markets in the West Indies for flour, salt-fish, lumber, etc., are not to be despised, a fact which seems already to be appreciated by the exporters of those commodities in the Dominion, and when the Panama Canal is opened the temptations for one of the trunk railway companies of Canada to extend its operations to the West Indian islands will become stronger than ever.

CHAPTER XXV

THE UNITED WEST INDIES

THE West Indies have frequently been compared to the sticks in the fable, and many writers and speakers have pointed out how much more powerful they would be if they were tied in a bundle. The question of the "federation" of these colonies is, however, one of great complexity, owing to the distances which separate many of them one from another, to their great diversity of interests, and to the differences in the constitutions of several of the units. It is not generally realised at home that Jamaica is fully a thousand miles from Barbados, the nearest British island to it, and that under existing conditions a journey from Barbados to Jamaica now occupies no less than ten days. Distance would render the inclusion of Jamaica in any proposals for the actual "federation" of the West Indies extremely difficult.

How could the West Indies speak with united voice if Jamaica were omitted from the federation? The West Indies without Jamaica would be like Hamlet without the Prince of Denmark! It is of little use tinkering with a matter of this sort. Barbados again is an obstacle, for how is a colony with representative institutions to be federated with Crown Colonies? The residents in Barbados are justly proud of their representative institutions, which they have enjoyed for over two hundred and fifty years, and it is in the highest degree unlikely that they would consent to give them up, and it is equally improbable that representative institutions would be restored to the other islands by which they were surrendered last century.

One thing, at any rate, is perfectly certain and that is that any attempt to "federate" the West Indies must come from the colonies themselves, for experience has shown

what deep resentment is felt at any interference in such matters on the part of the Home Government.

A case in point occurred in 1876 in Barbados, when Mr. John Pope-Hennessy was sent out as Governor of that island, with a mandate to bring about the political federation of Barbados, St. Vincent, St. Lucia, Grenada, and Tobago. The disturbances and rioting to which this gave rise are still remembered in the island and by those connected with it at home.

Mr. Pope-Hennessy, who had been Governor of Labuan. the Gold Coast, and the Bahamas successively, was appointed in 1875 Governor of the Windward Islands, the seat of which was then at Barbados.

His federation proposals, which had the support of the Home Government, were from the first warmly opposed by the planters and merchants and most of the upper and middle classes in the island, and the strongest exception was taken to the methods by which he endeavoured to enforce them. An anti-confederation meeting was held, presided over by the Hon. Nathaniel Foderingham, at which Mr. P. L. Phillips made a patriotic speech. Mr., afterwards Sir, Graham Briggs, on the other hand, spoke in favour of the proposals, and subsequently started a propagandist work on their behalf, importing a printing press and founding a paper called The Barbados People and Windward Islands Gazette.

A Defence Association was then formed by those opposed to federation, and Mr. P. L. Phillips and the Rev. P. Bruce Austin were ultimately sent to England as

delegates to plead its cause.

Meanwhile, the ignorant of the peasantry attributed this opposition to selfish motives, and hopes were freely expressed that federation would bring, with higher wages, the division of land among the people. Rioting took place involving much destruction of property, and the island was in a turmoil. Some idea of the state of affairs

THE POPE-HENNESSY RIOTS

may be gauged from the following telegram which was received by the West India Committee from the Defence Association on April 22nd, 1876:

"Riots throughout island—plantation houses sacked—animals destroyed—enormous destruction of property—over forty rioters shot—troops actively employed—city threatened—business suspended—families seeking shipping—rioters repeat they have Governor's sanction—Hennessy's immediate recall requisite to save colony."

The House of Assembly also memorialised the Queen, calling for the withdrawal of the Governor who, still determined to enforce the obnoxious measure, appointed five officials to the Council. The response to this step was the resignation of the four unofficials en masse.

The 35th Regiment, then quartered at St. Anns, was called out, and as the telegram above shows, blood was shed before Lord Carnarvon, the then Secretary of State for the Colonies, yielded to pressure and promoted Mr. John Pope-Hennessy to Hong Kong, where, it is said, he was scarcely less unpopular than he was in Barbados.

The remarkable part about the whole episode was the difficulty with which the public and Press at home could be induced to believe how serious matters were in the colony; and the implicit faith which Her Majesty's ministers showed in Pope-Hennessy and in his ability to carry through a scheme which was ill-thought out and badly handled from the start. Lord Carnarvon was, however, eventually compelled to admit that Pope-Hennessy's action had been "indiscreet," and that, to quote the *Annual Register*, "his words were dangerously suggestive of undue construction by an excitable negro population."

What happened in 1876 would, undoubtedly, occur again if an attempt were made to force federation upon the West Indies against the wish of the people.

The futility of attempting to force federation down the throats of the West Indians was further demonstrated in St. Vincent in 1905, when a proposal made by the Imperial Government to unite the two colonies of Grenada and St. Vincent into a single colony with a common Executive and Legislature, and a common purse, met with the strongest opposition, giving rise, to quote the Administrator's report on the Blue-book, to "considerable feeling and excitement, which lasted for some months." The Government eventually withdrew the proposal and decided to take no further action in the matter.

The federation of the Leeward Islands was, as has been shown in a previous chapter, successfully carried in 1871, after the passing of resolutions in favour of it through the local legislatures of the islands to be federated. This remains the only example of a really federal colony in the West Indies, for the Windward Islands are only federated for certain purposes, there being no common

legislature nor common laws in them.

The members of the Royal Commission of 1897, went very closely into this question, but after carefully considering the pros and cons they were unable to recommend the federation of the West Indian colonies under a single Governor-General, adding that they were doubtful whether any economy would be effected by it. They pointed out that the colonies were widely scattered and differed very much in their conditions, and that they were satisfied that, at all events at that time, the control of a Governor-General could not be exercised in an effective and satisfactory manner. They went on to say: "Even if the great waste of time and the physical strain that would be involved in the necessary journeys be disregarded, the absence of any residence for a Governor-General in the several colonies would, if he were to visit them with any sufficient degree of frequency, and remain in each for periods long enough to enable him to gain a

THE 1897 ROYAL COMMISSION

real knowledge of the officials, the people, and the condition of the colony, make it necessary that he should be furnished with a special vessel and establishment, which would involve a considerable cost. A General Council would also be required, and great difficulties would be involved in arranging for its constitution and for the conduct of its business.

"Nor does it seem to us that the very important island of Jamaica, which is separated by many hundreds of miles of sea from all the other West Indian colonies, could dispense with a separate Governor, even if there should be a Governor-General; whilst the circumstances of British Guiana and Trinidad almost equally demand the constant presence and attention of an Administrator of Governor's rank.

"It might be possible, without disadvantage, to make some reduction in the number of higher officials in the smaller islands, and we are disposed to think that it would be conducive to efficiency and economy if the islands of the Windward Group, that is, Grenada and the Grenadines, St. Vincent and St. Lucia, were again placed under the Governor of Barbados, as they were for many years previous to 1885. We have no doubt that a Governor residing at Barbados could efficiently control the administration of these islands, and that the Judges of one Supreme Court could perform all the higher judicial duties for this group, especially if our recommendations for the improvement of steam communication are adopted. This change would enable a material saving to be made.

"We are also disposed to think that the island of Dominica, which is not much farther than Grenada from Barbados, and which, in its physical, social and industrial conditions partakes more of the character of the Windward Islands than of that of the other Leeward Islands, might be placed under this Government instead of being

considered one of the Leeward Group."

The Commissioners added, however, that it might be found possible to bring the whole of the Leeward Islands under the same government as Barbados and the Windward Islands, and thus effect further economy. This arrangement, they said, might receive consideration when improved steam communication between the islands had been established for some years. After dealing with federation, they went on to discuss the question of a combined civil service for the West Indies, regarding which proposals had been submitted to them. They found that such a scheme would only nominally affect the many subordinate officers on small salaries. "whom it would be impossible to transfer from one colony to another without inconvenience to themselves and expense to the Government. As regards the higher officers, promotions and transfers from one colony to another were, they said. already freely made by the Secretary of State, according to the requirements of the public service and the merits and claims of officers. "Although, therefore, there might be some advantage in such an amalgamation, especially as regards the security for the pension rights of officers now transferred from one colony to another, we do not see that any appreciable evil or inconvenience necessarily arises from the present system which would be removed by the change proposed, nor do we see reason to believe that any substantial economy could be effected by such a modification which would not be equally possible under the present system."

Unfortunately the improvement in the steamer communication between the islands has not been so great as it was hoped that it might be. It cannot be said that the establishment of the subsidised steamer service down the islands from Canada has done much to facilitate a solution of the problem, and comparatively little headway has been made, though the lessons of the federation of the States of Australia and the Union of South Africa have

THE NEED FOR UNIFORMITY

not been without their effect on public opinion in the West Indies. There is, however, no blinking at the fact that there are still many insular prejudices and petty jealousies to be overcome before the federation of the West Indies can be brought about, even if it be practicable.

There must be, to begin with, a far better understanding among the residents in the various colonies, and this better understanding could best be brought about by a still further improvement in the intercolonial steamer services, and what is equally, if not more, important, the establishment of a far cheaper system of telegraphic communication, which would enable residents in the several colonies to communicate one with another at a uniform and reasonable rate. It will hardly be believed that at the present time news frequently travels from one island to another via London or New York. There is little doubt that cheap and reliable means of intercommunication would do more to bring the West Indian colonies together than the Act of any legislature.

If it be agreed that the federation of the West Indies is a desirable object to be aimed at, how can it best be brought about? In the opinion of the writer, the movement must receive its initiative force from the West Indies themselves and be brought about gradually. To begin with, there should be greater uniformity in all that concerns these colonies. A step in the right direction has been the Quarantine Convention, and the annual Agricultural Conferences which are attended by representatives of all the West Indian colonies, are also a valuable factor towards bringing about a better understanding. Greater uniformity would add to the strength, prosperity, and influence of the West Indies.

It is uniformity, then, which should be aimed at. There is at present a lamentable lack of it in the West Indies, and this could be righted gradually without any violent political upheaval, and the meeting of an intercolonial

conference at Barbados periodically, to consider how uniformity could be brought about in various directions, would prove of immense value.

There are many matters which could usefully be discussed at such conferences, such as the existing anomalies concerning education, currency, statistics, mail and telegraph subsidies, defence, etc. Again, why should there not be uniformity of practice in such matters as the registration of titles, in the usage in regard to bills of exchange and promissory notes, in bankruptcy laws and so forth. A common customs tariff may not be immediately obtainable, but there is prospect of considerable progress towards that end being made even now by securing uniformity of definition under existing tariffs. Then there is an entire lack of co-ordination about the systems of law prevailing in these colonies. There is no better system than the Roman law, which forms the basis of jurisprudence in British Guiana, but it has been so much overlaid with judge-made law that it is often hardly recognisable. Is it too much to hope that one system of law might be devised for the whole of the West Indies? Then, again, there is infinite diversity in the custom of practice before the courts, to which reference has already been made. Surely it would not be difficult to come to an agreement upon such a subject as this.

If any or all of the above points could be adjusted, a great step would be gained towards the fusion of common interests, and it is the author's conviction that deliberations entered upon with the view of finding common ground by mutual concessions and the laying aside of local jealousies would be productive of fruitful results. The Press of the West Indian colonies can do much to help, if they approach the subject with a broad mind, and not in a partisan spirit. As *The Times* said in its Empire number of 1910: "All the interests of the West Indies point in the direction of their closer co-operation. That

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their ultimate goal is to be welded together into one integral portion of the Empire seems certain. That goal may be far off, but it should never be lost sight of, and nothing should be neglected which will help to make its attainment easier."

Schemes for the federation of the West Indies have frequently been propounded. Mr. J. Rippon has warmly favoured the establishment of a central Council for the West Indies, and only recently the Hon. C. Gideon Murray read a paper before the West India Committee in which he advocated the federation of the British islands of the Lesser Antilles and British Guiana in the sense of providing them with a Federal Council and a High Commissioner. Such a Council would, however, be of little practical value unless it could control expenditure (which, being under existing constitutional conditions impracticable, was not proposed), and how, as has been asked before, could a group of colonies in the Lesser Antilles claim to speak for the British West Indies as a solid unit if Jamaica, the largest and one of the most important islands, the Bahamas, and British Honduras were left out ?

The West Indies are, already, far more united than is generally supposed at home. When matters arise which concern them collectively they can speak, and have spoken, with a united voice. Such matters of common interest have been the abolition of bounties, mail and steamship communication and reciprocity with Canada—to give recent examples only. Regarding each of these subjects intercolonial conferences have been held, and the West Indies have presented a solid front. By a process of gradual evolution the West Indies are being brought closer together, and it is satisfactory to note that the Colonial Office appears now to appreciate the importance of bringing about uniformity in all that concerns these colonies. A valuable step in this direction would be the

co-ordination of statistics and the publication of an annual statistical Year Book for the entire West Indies, which are, after all, a solid unit within the Empire. Political federation is another matter altogether.

An article on the West Indies and confederation, by Mr. Wallwyn P. B. Shepheard, of Lincoln's Inn, which appeared in the *Journal of the Society of Comparative Legislation* for August, 1900, concludes as follows:

"The policy of so-called 'confederation' has evolved complication rather than simplification in the government and legislatures
of the West Indian communities. The abrogation of the representative element in several of the islands has rendered them
voiceless communities; they have no longer any power to speak
by a representative vote. The real bond of union is the Crown.
The desire for union seems satisfied by the common allegiance;
but for unity into one colony, province, or dominion, no desire
is apparent, nor would it be easy to give effect to such a desire
were it to arise. These island communities of British subjects
should all possess some simple means of voting by elected representatives their own taxation, and an address when necessary
to the Crown. The islands are separated by miles of sea; and
to a closer and more territorial political union it may be said
opposuit Natura."

In this conclusion the writer is, at the present time at any rate, disposed to concur.

The West Indies, as we have shown, consist mainly of Crown Colonies, and it is, perhaps, for this reason, and not because they are not politically federated, that they are sometimes belittled by politicians at home.

The sittings of the recent Imperial Conference and the notes of their proceedings reported from day to day emphasized the anomalous, not to say ignominious, position of the West Indies. Here were a group of colonies, whose history is part of the inheritance of the mother country, whose trade is constant and increasing, whose loyalty is proverbial (though it has cost them much in days not far distant), with no status whatever in this

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great consultative Council of the Empire. Matters were discussed in which they were intimately concerned, such as Imperial Defence, and steamship and cable communication; yet they could put forward no views, and make no suggestion. New Zealand, with a population of just over 1,000,000, and Newfoundland with less than 250,000 inhabitants, took an active part in every discussion; but the opinion of the British West Indies, which have an aggregate population of over 2,000,000, was unheard and unacknowledged.

But the author does not wish to bring this book to a close with a grumble. Every year the West Indies are receiving an increasing degree of attention in the mother country, and, what is also very important, in Canada. Meanwhile, too great emphasis cannot be laid on the fact that the West Indies are prospering. Their trade continues to expand year after year, and an examination of the statistics will show that the present degree of prosperity which they are enjoying is more widespread than it was in the days of the Sugar Lords, when the fortunes were in the hands of a few only. The outlook is full of promise, and no one who has had anything to do with those colonies can doubt that, provided they no longer suffer economic disadvantages through the action, or inaction, of the Home Government, a prosperous future awaits the united West Indies.



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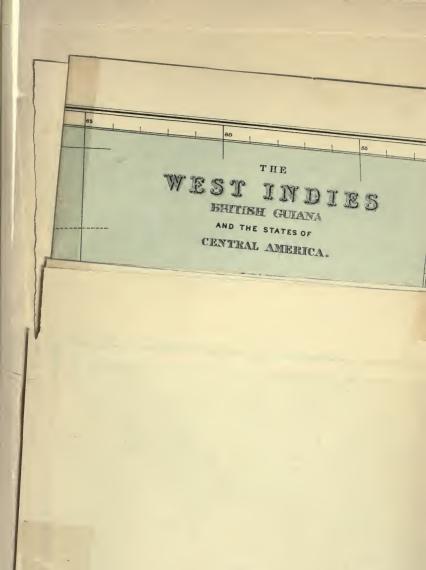
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