HANDBOOKS PREPARED UNDER THE DIRECTION OF THE HISTORICAL SECTION OF THE FOREIGN OFFICE .- No. 135

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# BRITISH GUIANA

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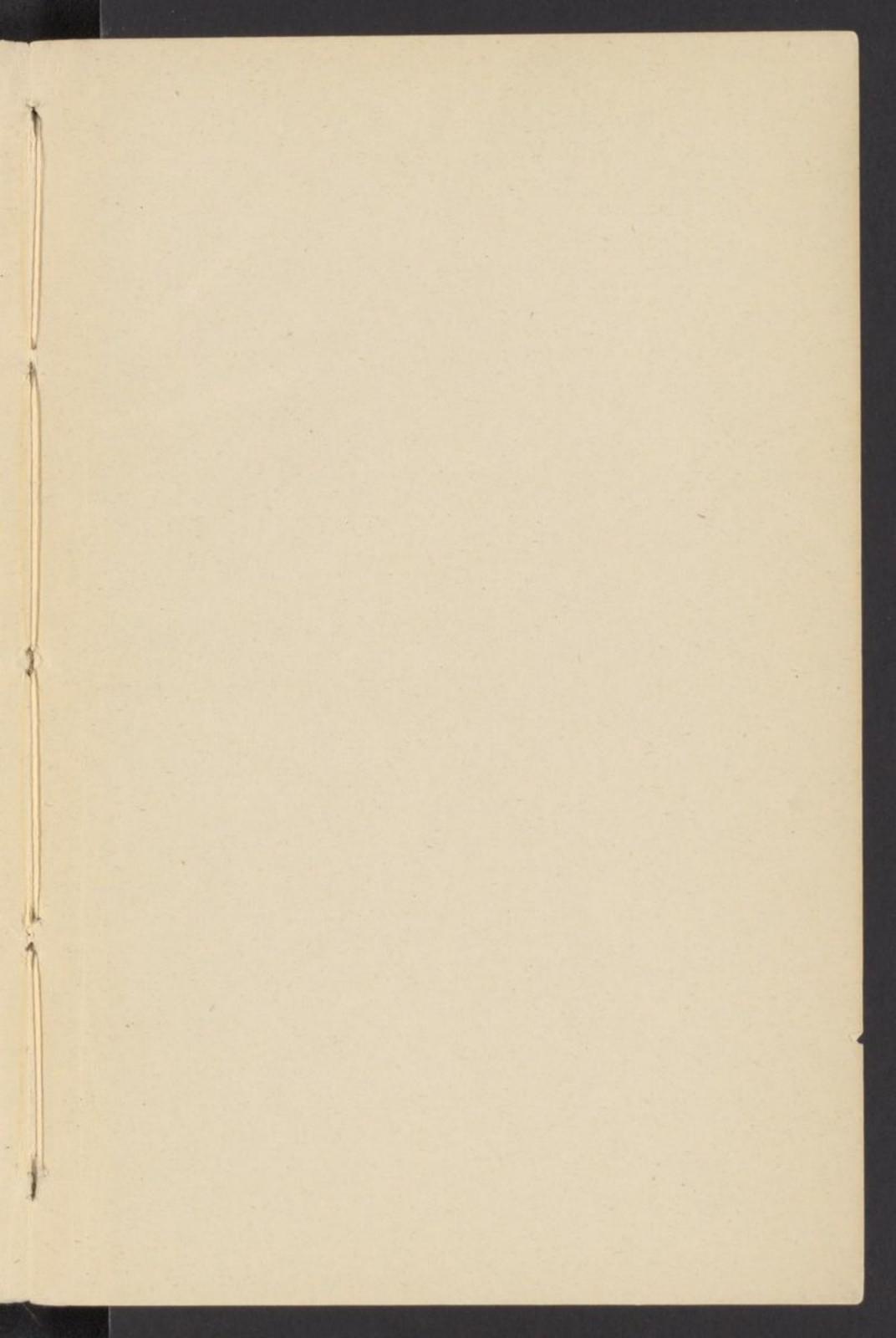
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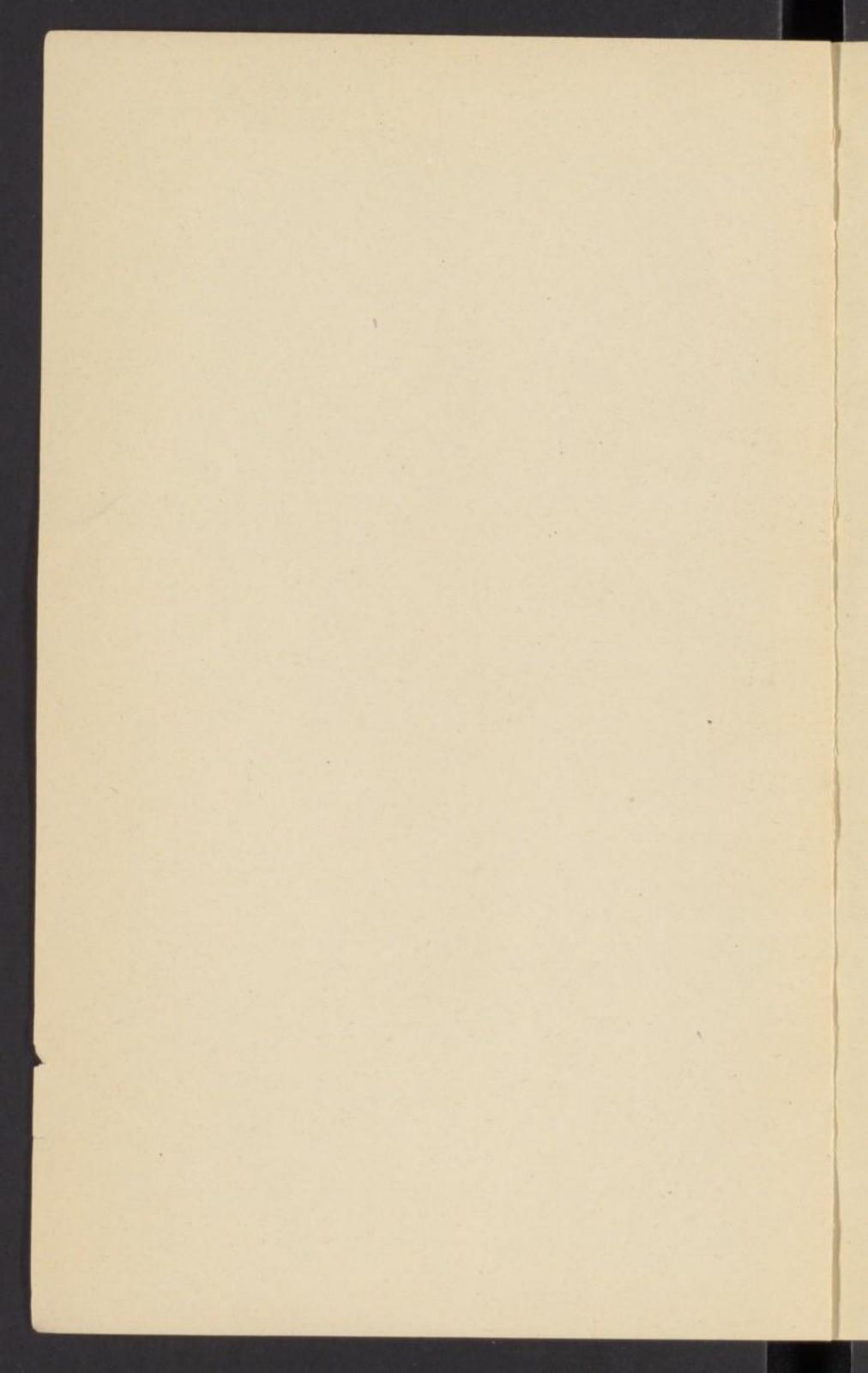


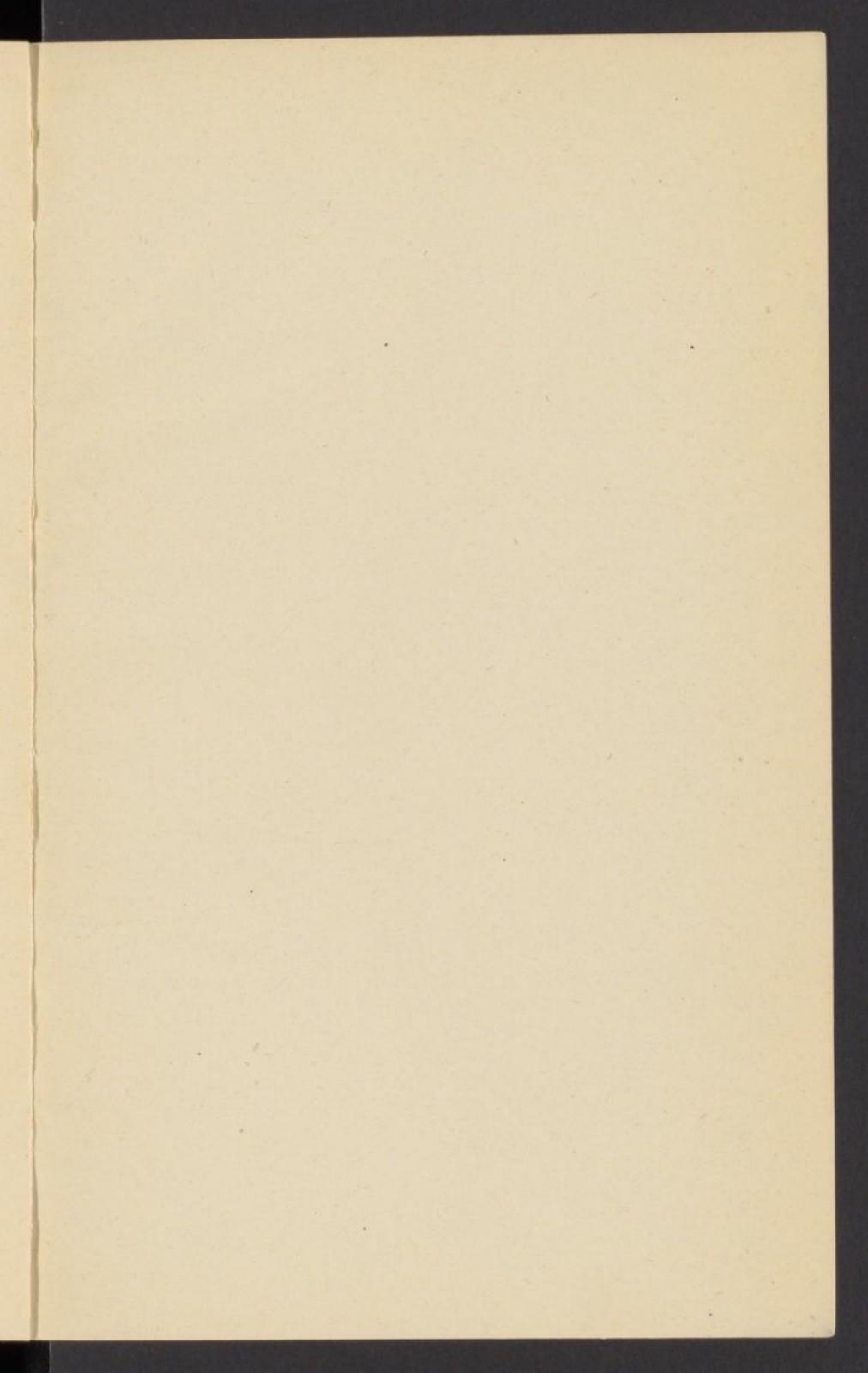
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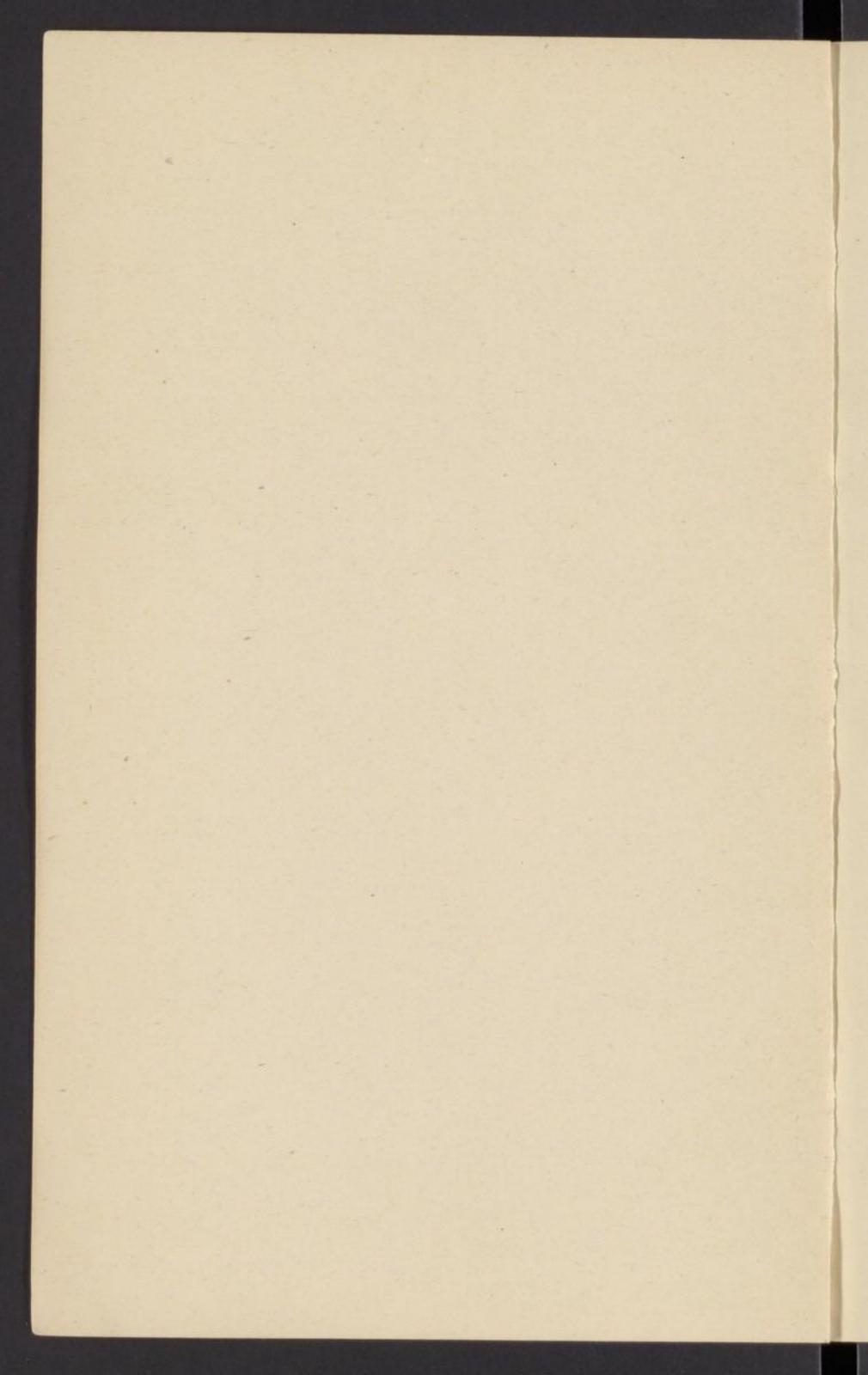


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# BRITISH GUIANA

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#### Editorial Note.

In the spring of 1917 the Foreign Office, in connection with the preparation which they were making for the work of the Peace Conference, established a special section whose duty it should be to provide the British Delegates to the Peace Conference with information in the most convenient form—geographical, economic, historical, social, religious and political—respecting the different countries, districts, islands, &c., with which they might have to deal. In addition, volumes were prepared on certain general subjects, mostly of an historical nature, concerning which it appeared that a special study would be useful.

The historical information was compiled by trained writers on historical subjects, who (in most cases) gave their services without any remuneration. For the geographical sections valuable assistance was given by the Intelligence Division (Naval Staff) of the Admiralty; and for the economic sections, by the War Trade Intelligence Department, which had been established by the Foreign Office. Of the maps accompanying the series, some were prepared by the above-mentioned department of the Admiralty, but the bulk of them were the work of the Geographical Section of the General Staff (Military Intelligence Division) of the War Office.

Now that the Conference has nearly completed its task, the Foreign Office, in response to numerous enquiries and requests, has decided to issue the books for public use, believing that they will be useful to students of history, politics, economics and foreign affairs, to publicists generally and to business men and travellers. It is hardly necessary to say that some of the subjects dealt with in the series have not in fact come under discussion at the Peace Conference; but, as the books treating of them contain valuable information, it has been thought advisable to include them.

It must be understood that, although the series of volumes was prepared under the authority, and is now issued with the sanction, of the Foreign Office, that Office is not to be regarded as guaranteeing the accuracy of every statement which they contain or as identifying itself with all the opinions expressed in the several volumes; the books were not prepared in the Foreign Office itself, but are in the nature of information provided for the Foreign Office and the British Delegation.

The books are now published, with a few exceptions, substantially as they were issued for the use of the Delegates. No attempt has been made to bring them up to date, for, in the first place, such a process would have entailed a great loss of time and a prohibitive expense; and, in the second, the political and other conditions of a great part of Europe and of the Nearer and Middle East are still unsettled and in such a state of flux that any attempt to describe them would have been incorrect or misleading. The books are therefore to be taken as describing, in general, ante-bellum conditions, though in a few cases, where it seemed specially desirable, the account has been brought down to a later date.

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General Editor and formerly January 1920. Director of the Historical Section.

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#### I. GEOGRAPHY PHYSICAL AND POLITICAL

# (1) Position and Frontiers

British Guiana is the westernmost of three colonies, lying adjacent to each other on the north-east coast of South America, which belong respectively to Great Britain, to Holland, and to France. The British colony, which occupies an area of 89,430 square miles, lies between 1° and 8° 26′ north latitude and 55° 53′ and 61° 33′ west longitude; on the east and south it marches with Dutch Guiana and Brazil respectively, the Corentyne River forming the boundary with the former, and

on the west with Venezuela and Brazil.

The western boundary starts from the coast at Punta Playa in about 60° west longitude, runs for a short distance south-eastwards, crosses the Barima River, and then strikes to the south-west as far as a point on the Sierra Imataca in about 61° west longitude. It then turns in a south-easterly direction and follows that range to a point about 60° 20' west, where it bends south-west again and follows the courses of the Acarabisi, the Cuyuni, and the Wenamu rivers to the source of the latter (about 61° 30' W.). From here the boundary runs in a straight line south-east to Mount Roraima, near the Brazilo-Venezuelan frontier, and thence in a generally south-south-easterly direction, partly following the courses of the Mahu and upper Takutu rivers and the range of the Uassari or Moon Mountains to the west end of the Sierra Acarai in about 59° 30' west longitude and 0° 30' north latitude.

The southern boundary then follows the watershed of the Sierra Acarai to a point in about 56° west longitude near the source of the Cutari River, one of the

head streams of the Corentyne.

The western boundary has a length of about 600 miles, and the eastern and southern of about 250 miles each.

# (2) SURFACE, COAST, AND RIVER SYSTEM

## Surface

The surface of the colony may be divided roughly into three belts: (1) the cultivated area of some 300 square miles known as the coast lands or front lands; (2) savannahs, covering 11,700 square miles; and (3) forest lands, which include the mountain regions and comprise about six-sevenths of the whole colony.

(1) The cultivated area lies in the alluvial belt along the coast and up the estuaries of the rivers, and varies in depth between 5 and 60 miles. This belt is to a considerable extent below the level of ordinary spring tides, and is liable to flooding at high water, so that areas intended for cultivation have to be reclaimed by dykes.

(2) Savannahs are of two kinds, swamp savannahs and back-country savannahs. A large tract of swamp savannah extends east and west of the Berbice for some 50 miles behind the alluvial belt, tapering to a point some 100 miles up stream. The back-country savannahs occupy a tableland about 300 to 400 feet above sea level, which covers some 6,000 square miles, and is undulating and broken by rocks. Clumps of trees rise here and there, and palms, ferns, and marantas grow in the depressions; but elsewhere wiry sedges and hard herbaceous plants predominate.

(3) The forest region is a portion of the great tropical forest of South America, where a high degree of humidity prevails and growth is consequently luxuriant, although on the slopes and sand dunes sparse trees and low bushes are found. Part of this belt has a sandstone soil, and this district possesses an abundance of springs and streams, and is rich in flowering plants and ferns.

Two parallel mountain systems, rising in a succession of terraces, cross the colony from west to east. The greater, which rises in Mount Roraima to a height of 8,635 ft.. is that of the Pacaraima and Merume; the lesser includes the Canuku mountains. The southern frontier range of the Acarai rises in places to a height of 2,500 ft.

#### Coast

The coast has a length of some 250 miles, and has no striking headlands or bays, the only indentations being the estuaries of the rivers. The shore is generally low and swampy.

# River System

The most important rivers of British Guiana are the Essequibo, the Corentyne, the Berbice, and the Demerara. Of smaller rivers the chief are the Waini and the Pomeroon. With the exception of the Corentyne, all these rivers rise in British Guiana and flow through it in roughly parallel courses from south to north.

The Essequibo, with its left bank tributaries, the Cuyuni (Cuyuwini), Mazaruni, Potaro, Siparuni, and Rupununi, drains considerably more than half of the total area of the colony. Its total length is over 600 miles. The estuary has a width of 14 miles, and contains three considerable islands, the largest of which is about 12 miles long.

The Corentyne does not receive many tributaries, and the largest in British Guiana is the New River. About 52 miles from the mouth of the river occur sandhills about 60 ft. high, and above this the country

through which it flows is uninhabited.

The importance of the Berbice lies in the fact that it is navigable for large craft for a longer distance than any other river in the colony. There are sugar plantations on its banks in the neighbourhood of New Amsterdam, but for the most part the land on the lower river is low-lying, and the banks are clothed with

stunted trees. At about 46 miles from the mouth the land rises, and for 4 miles the river flows through an open grass-clad stretch of savannah, the country then merging again into forest.

The Demerara, though commercially the most important river in the colony, is relatively a small stream, with a total length of only 200 miles. Large vessels can pass its bar with safety, however, and Georgetown, the capital and chief port, is within its mouth.

The Waini and its tributary the Barama flow through forest-clad country; the former river is about 2 miles wide at its mouth. On the southern side of the Waini, 3 miles from its mouth, is the Mora Passage, a deep waterway about 7 miles in length, through which steamers can pass into the Barima River at Morawhanna. The Barima, which flows into the sea in Venezuela, gives access to the principal gold-bearing areas of the North-West District.

The Pomeroon or Moruka drains the district between the Essequibo and the upper Waini. The low, flat, alluvial lands on the lower river are among the most fertile in British Guiana, and flourishing farms extend as far as Macassema, about 34 miles from the sea. The Pomeroon is navigable for steamers beyond Macassema.

#### (3) CLIMATE

In the coastal and forest regions the mean shade temperature is about 79° F. (26° C.), and even at night seldom falls below 73° F. (23° C.). The hottest months are August, September, and October, but the maximum shade temperature during this period seldom reaches 89° F. (31.6° C.). In the savannah region the range of temperature is somewhat greater, and the hot season falls in October and November.

From June to November variable winds prevail, but during the rest of the year the north-east trade wind blows with comparative regularity and moderate force. Although there is bright sunshine on nearly every day in the year, the constant winds temper the sun's heat

and make the climate very attractive in comparison

with that of other tropical countries.

British Guiana

The mean rainfall for the whole country in 1916 was 92·13 inches. In the coastal region there are two wet and two dry seasons, the former occurring from mid-April to mid-August and from mid-November to the end of January. Berbice County has an average rainfall of 91 in. (2,311 mm.), Demerara County of 95 in. (2,413 mm.), and Essequibo County of 101 in. (2,565 mm.). In the savannah region of the interior it would seem that the average rainfall is about 50 in. In the forest region the rainfall is regularly distributed throughout the year, and it rarely happens that ten days pass without rain. The average yearly fall varies from 84 in. to 159 in.

# (4) SANITARY CONDITIONS

The climate is nowadays not unhealthy. The usual tropical complaints are found, but they are under control, and there is now no yellow fever, small-pox, or epidemic disease. A white man who settles in the colony, however, must expect to go through a few months' seasoning. For some years past anti-malaria and anti-mosquito measures have been generally enforced with evident success; quinine is sold at cost price in all post-offices and is distributed free to labourers on the estates. Ankylostomiasis is found on the plantations, but it has been lessened of late years by improvements in sanitation. Sickness of the lowfever type prevails among the negroes, and a severe form of ophthalmia is very common among the natives, and also affects travellers. There is a leper asylum at Mahaica.

In Georgetown, which stands on land below high-water mark, the problems of draining and water supply have been attended by peculiar difficulties. Since 1913, however, an ample supply of exceptionally pure water has been obtained by the sinking of artesian wells.

### (5) RACE AND LANGUAGE

The population of British Guiana is composed mainly of aboriginal Indians or Bucks, Europeans, African negroes, Portuguese from Madeira, coolies from the East Indies, Chinese, and half-castes. The true natives of the country are the Buck Indians, who are the aboriginal inhabitants of the three Guianas.

At the census of 1911 the population was estimated at 296,041, the chief elements in it being as follows:— Europeans other than Portuguese, just under 4,000, or 1.3 per cent. of the total population, consisting of British colonists and their descendants, and of some families of Dutch descent; Portuguese, 10,000, or 3.4 per cent., of whom over three-quarters were born in the colony; East Indians, 126,000, or 42.7 per cent., of whom more than half were born in the colony, many being settled in the region of the Corentyne; Chinese, 2,600, or 0.89 per cent., of whom three-quarters were born in the colony; negroes, 115,000, or 39 per cent., less than 10 per cent. being foreign born; mixed races, 30,000, or 10 per cent.; aborigines, who are returned at about 7,000 for the settled lands and 13,000 for the unfrequented forest region, this total, however, being purely conjectural. There are four tribes of these native Indians in British Guiana, each with its own language. With the exception of the remaining Caribs, who are hardy and warlike, they are few in numbers, and of trifling economic importance.

In 1917 the population was estimated to have increased to 313,859.

#### (6) POPULATION

# Distribution; Towns and Villages.

The bulk of the population is concentrated within the alluvial coastal belt between the Pomeroon and Corentyne rivers; within these limits are the two chief towns of the colony, most of the villages, and nearly all the sugar estates, roads, and railways. Of the total population in 1911, which, as has been said, was returned at 296,041, 22:34 per cent. were then resident in the towns and 77:66 in the country. The distribution by counties was as follows:—Demerara County, 175,596, or 59:31 per cent.; Berbice County, 65,862, or 22:25 per cent.; and Essequibo County, 54,583, or 18:44 per cent. The two chief towns are Georgetown, the capital, with a population of 57,577, and New Amsterdam, with 8,604. The population of the "villages and settlements," which have been a very important factor in the development of the country, amounted to 158,938, leaving a total of 70,922 for the rest of the colony.

#### Movement

In 1831 the population was estimated at 104,000, and it had nearly trebled at the census of 1911. The increase is due almost entirely to immigration, and especially to that of East Indians, some 250,000 of these having entered the colony since 1834. The negroes show no tendency to increase in numbers. In 1831 there were 90,000 negro slaves and 10,000 free black and coloured people, and between 1834 and 1884 there was an immigration of well over 50,000 Africans and West Indian islanders, yet in 1911 the negroes amounted only to 115,000. The mixed races show some increase, but for the whole country the mean percentage of births is little, if at all, in excess of that of the deaths. It is therefore apparent that immigration is the dominant element both in the position of man in the colony and in the economic development of the country.

### II. POLITICAL HISTORY

#### CHRONOLOGICAL SUMMARY

#### Essequibo and Demerara

- 1738 Gravesande Governor-General of Essequibo.
- 1739 Horstman's explorations of the interior.
  Mining expedition explores the Cuyuni.
- 1746 Settlement on the Demerara River.
- 1750 Governor of Demerara Settlement appointed.
- 1773 Demerara becomes a separate colony.
- 1780 Holland joins France and Spain against Great Britain.
  Capture of Demerara, Essequibo, and Berbice by British.
  English Governor sent to Demerara.
- 1782 French gain possession of the Three Rivers.
- 1783 Treaty of Paris: the Dutch colonies restored.
- 1784 The colonies evacuated.
- 1789 Report on the West India Company.
- 1792 Demerara and Essequibo directly governed by the State.
- 1793 Van Grovestins appointed Governor of Essequibo and Demerara.
- 1795 The British ship Zebra demands the submission of the colonies to the Prince of Orange.
- 1796 Seizure of the colonies by the British.

#### Berbice

- 1678 Berbice recognised as property of Van Peere.
- 1689 Berbice attacked by French corsairs.
- 1712 Berbice attacked by French squadron.
- 1713 Berbice handed over to Marseilles merchants, and sold to Amsterdam merchants.
- 1720 New company formed.
- 1732 Charter granted to the Berbice Company.
- 1760 Van Hoogenheim made Governor of Berbice.
- 1762-63 Slave revolts in Berbice.
- 1781 Berbice captured by the English.
- 1782 French squadron seizes Berbice.
- 1783 Berbice restored to the Dutch.
- 1791 States-General refuse to renew charter of West India Company.
- 1796 Berbice surrenders to the English.

#### British Guiana

- 1802 Peace of Amiens. Dutch colonies restored.
- 1803 England again seizes the colonies.
- 1807 Abolition of slave trade.
- 1812 Union of Demerara and Essequibo.
- 1814-15 The colonies pass under British rule.
- 1823 Civil rights conferred on slaves. Insurrection of slaves.
- 1833 Abolition of slavery.
- 1834 All slaves declared free.
- 1838 Indian coolies first introduced.
- 1853 Chinese labour introduced.
- 1854 Barkley's unfavourable report on the colonies.
- 1884 Gold rush.
- 1893 Report of Surgeon-Major Comins.
- 1897-99 Venezuelan boundary arbitration.
- 1901-04 Brazilian boundary arbitration.
- 1910 Report of Lord Sanderson's Committee.

# (1) Under Dutch Rule (1674-1796)

# (a) Essequibo and Demerara

With the peace of 1674 the Dutch West India Company had a fresh lease of life, being reconstituted under a new charter. The colony of Essequibo was thoroughly re-established and its control extended. Officials named post-holders were placed at fortified posts. Plantations and settlements were made on the lower reaches of the Upper Essequibo, on the Mazaruni and on the Cuyuni; and other plantations began to creep down the shores of the estuary of the Essequibo, and also farther west upon the Pomeroon. Soon afterwards great activity was shown in opening up trade by way of the River Essequibo and its tributary the Rupununi to the Rio Branco, and even as far as the Rio Negro itself.

Later the Essequibo colony owed much to the administrative ability and devoted labours of a great Governor, Laurens Storm van 's Graves and e. He went out as Secretary to the colony in 1738, and was Governor for thirty years. His voluminous and carefully written despatches during the whole

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of that period have been preserved and are now in the British Record Office. To his long and able administration, in the face of countless difficulties and the neglect of the Government at home, the colony we now call British Guiana probably owes its existence. He consolidated the Dutch dominion by the encouragement he gave to cultivation (especially of sugar) and trade, by his firm resistance to all Spanish encroachments on the frontiers, by his conciliatory policy in dealing with the Indian tribes, by his exploration of the far interior, and above all by his foundation of the settlement on the Demerara.

It was at his suggestion that an official named Horstman was sent in 1739 to explore the far interior and discover the true facts concerning the connection between the Essequibo and Amazon waterways. Horstman ascended the Essequibo and the Rupununi, passed by the Pirara portage into affluent of the Mahu, and by the Mahu into the Rio Branco, and so to the Rio Negro, where he was made prisoner by the Portuguese and passed into their service. This expedition, however, and Horstman's map and narrative laid the foundation of the true knowledge of the geography of this hithertounknown interior of Guiana.2 At the same date, 1739, a mining expedition was sent up the Cuyuni by Gravesande, which led to the discovery of workable copper mines and to a further geographical knowledge of the country westwards.

Up to 1746 the Dutch had merely maintained an ordinary trading post on the River Demerara. Gravesande saw the great advantages which the river would afford to a colony on its banks; and the settlement which, under his auspices, began in that year met with such success that within five or six years the new colony began to outstrip that of Essequibo. In 1750

1 Still in existence.

<sup>&</sup>lt;sup>2</sup> The first correct delineation of this part of Guiana was made by the French cartographer, D'Anville, who had Horstman's MS. in his possession. D'Anville's map was published in 1748.

such progress had been made that the settlement received a Commander of its own, subordinate to the Director-General of Essequibo, the first Commander being Gravesande's son, Jonathan. It is interesting to note here that this flourishing condition of the Demerara colony was largely the work of English settlers from Barbados. It was the capital and the activity of a father and son, both named Gedney Clarke, that erected the first plantations and sugar mills on the Demerara River; it was through their energy and influence at the time of the great slave revolt in Berbice in 1763 that a force of 200 men was sent to Demerara by the Governor of Barbados, which with the help of the native Indians effectually prevented the spreading of the revolt to Demerara and Essequibo. Nor was this influx of English settlers confined to the Demerara; numerous plantations on the Essequibo estuary, both in the islands and on the shore, were the property of Englishmen.

The Director-General was assisted in the discharge of his duties by two bodies, the Court of Policy and the Court of Justice. The functions of the Court of Policy were mainly the care of the trade interests of the West India Company, and included the giving of grants of land, of permits to cut timber, and similar matters. Those of the Court of Justice are defined by its title. There was also a special Court (recht-bank) in Demerara for the trial of small matters, with an appeal to the higher Court sitting at Fort Zeelandia, in

Essequibo.

British Guiana

It had always been the Dutch policy in Guiana to cultivate friendly relations with the native Indian tribes, especially in Essequibo with the Caribs and Arawaks; and Gravesande spared no pains in carrying out this policy throughout the whole of his long period of office. The success which attended his efforts was shown by the way in which the Indians at the time of the slave revolt in Berbice rallied to the help of the Dutch, and took a considerable part in the suppression of the rising.

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Gravesande was succeeded by Hendrik Trotz, in the beginning of whose term of office an important step was taken by the Council (the Ten) of the West India Company. It was resolved that Demerara should be erected (1773) into a separately organized colony. The first Commander of Demerara under this arrangement was Paulus van Schuylenburg. The supremacy of Essequibo was, however, still recognised, since in matters affecting the two colonies the Courts of Policy and of Justice of both districts met for joint consultation at Fort Zeelandia. Trotz continued his predecessor's policy of maintaining close relations of friendship with the native tribes, and in 1778 he presented the chiefs (or Owls, as they were called) of the friendly tribes with staves of office. These were much prized, and the system was continued by the British, and is still

in force.

On December 20, 1780, Holland joined the alliance of France and Spain against Great Britain at the moment when that country was hard pressed by the revolt of its North American

colonies. One of the first results of hostilities was the capture of Demerara, Essequibo, and Berbice by the British Fleet; and in the following October an English Governor, Kingston, arrived at Demerara. Finding that the seat of government had been placed by the Dutch inconveniently high up the river, he resolved to move it nearer to the mouth, and he had actually begun to build public offices on the spot where Georgetown now stands when a strong French squadron appeared, and compelled him to surrender (March 1782). The Three Rivers thus passed into French possession. During his short term of office, Governor Kingston had interfered as little as possible with the existing system of administration, and had made himself acceptable not only to the English planters but to the Dutch settlers also. During the two years of occupation by the French, these colonies of their Dutch allies were treated just as if they were conquered territories,

with the result that French methods were unfavour-

ably contrasted with English, and generally disliked. By the Treaty of Paris (September 1783) the colonies were restored to the Dutch, and were evacuated on March 6, 1784. One permanent result of the French rule was the continuation of the work of building a seat of government (initiated by Governor Kingston) near the mouth of the river, and the erection of a fort to protect the entrance, named by them Fort Dauphin, but renamed by the Dutch Fort William Frederick, a name that it still bears. As there could be no question as to the advantageous site of the new capital, its construction was continued by the Dutch authorities, and it was called Stabroek.

The first result of the restoration of the colonies was discord and chaos. The colonists were unwilling to be again placed under the arbitrary control of the practically bankrupt West India Company; and, above all, they resented a high-handed attempt of the Company to create a new form of government in which the old elective element was to be abolished. Petition after petition was sent to the Stadholder, the States-General, and the Ten, protesting against the system of government which had been imposed upon the colony. There was widespread insubordination, with a general refusal to pay the taxes. The result was that in 1788 the States-General took up the question, and at their request the Stadholder appointed two Commissioners-Baron Van Grovestins and Willem Boey-to go out with full powers to enquire into all grievances and disputes and restore harmony in the colonies. Their report in the autumn of 1789 was unfavourable to the Company; and, as its charter expired in 1791, the application of the Ten for its renewal was refused, and from January 1, 1792, Demerara and Essequibo were governed directly by the State, and a Colonial Council was appointed to take the place of the defunct company. The title of Director-General was abolished; and in 1793 Baron Van Grovestins went out as Governor of Essequibo and Demerara, having his seat of government at Stabroek,

where the Court of Policy and the Court of Justice for

The conquest of Holland in 1795 by the French revolutionary armies, the flight of the Stadholder, and the

establishment of the Batavian Republic once more brought disorder and discord into the colony. In May 1795 the British ship Zebra arrived with despatches informing the Governor that the Prince of Orange commanded the authorities of Demerara, Essequibo, and Berbice to admit British ships of war and a force of British troops into the rivers in order to defend them from French invasion. But French republican ideas had already taken deep root in the colonies, and the majority of the Court of Policy, in opposition to the advice of the Governor, refused to obey the Prince. Upon this the Governor abandoned his post and went on board the Zebra. The Court of Policy undertook the administration, but had to deal with violent disturbances among the settlers, accompanied by a negro revolt; and it was only after considerable bloodshed that order was restored. Antony Beaujon, who had been appointed Governor by the Batavian Republic, arrived later in the year; and the rival parties became outwardly quiescent, both republicans and Orangists expecting, but with very different feelings,

the early return of the British Fleet.

They had not long to wait. On April 15, 1796, three British men-of-war, accompanied by a number of small vessels conveying 1,200 troops, set sail from Barbados, and anchored on April 20 off the mouth of the Demerara River. The surrender of the colony was demanded; and, being unable to offer any effective opposition, Governor Beaujon had no alternative but to capitulate. The British were, indeed, welcomed by a considerable part of the inhabitants, and the Dutch garrison to a man entered the British service as "The Loyal Orange Battalion." The favourable conditions offered by the British commander, Major-General Whyte, were accepted (April 22). Complete security was given for public and

private property and for personal freedom, with the same trade privileges and rights as those possessed by British subjects in the West Indies. The Governor, the officials, and Councillors were to remain in office, but were required to take the oath of allegiance to the King of Great Britain until the restoration of the Stadholder to Holland. General Whyte then despatched a frigate with a body of troops to Berbice, which surrendered on the same terms as Demerara and Essequibo.

#### (b) Berbice

Berbice was the only one of the Guiana colonies that escaped invasion and devastation during the Anglo-Dutch war of 1665-67. It remained after the Peace of Breda, as before, the property of the Amsterdam family, Van Peere. The dissolution of the West India Company at the end of 1674, and the erection of a new company with a fresh charter, raised the question of the position of this colony. The patrons claimed the same rights and liberties as before, but the Council of the new Company held that Berbice, being comprised within the limits of their charter, stood in the same relation to them as Essequibo. At last, in 1678, through the mediation of the States-General, Berbice was recognised (under specified conditions as to good government and the payment of certain dues) as the perpetual (onsterflijk) inheritance of Van Peere and his descendants; and from 1678 onwards a regular series of Commanders was appointed and Courts of Policy and of Justice formed.

From 1678 to 1712 little is known of Berbice, except that it suffered from a raid of French corsairs in 1689. A much more formidable attack was made by a small French squadron under the command of Baron De Mouans on November 8, 1712. This squadron formed part of a larger fleet fitted out not by the State, but by some Marseilles merchants under Admiral Cassard; it was, in fact, a corsair fleet, whose object was plunder. The French demanded a ransom of 300,000 florins.

With the utmost difficulty 118,024 florins was raised, and a bill of exchange on the patrons, the Van Peeres, payable at sight in six months, was given for the balance. The invaders having thus squeezed out of the colony everything of value, sailed away (December 8), taking with them two of the Councillors as hostages

for the payment of the bill of exchange.

The Van Peeres refused to honour the bill of exchange, on the ground that the Commander had no authority to give it, and that 118,000 florins was more than the colony was worth. The French plenipotentiaries at Utrecht pressed for payment, but did not succeed in obtaining it. In these circumstances the question resolved itself into a matter of legal process; and on September 13, 1713, the colony was handed over, in settlement of the debt, to the Marseilles merchants who had fitted out the expedition. Berbice might thus have become a French colony; but the French company at the end of an exhausting war had no means for exploiting their new possession, and preferred to negotiate its sale to four Amsterdam merchants for 108,000 florins.

This limited proprietorship was of short duration. The ruined state of the colony required more capital for its restoration, and in 1720 it was proposed to form a new company, with a capital of 3,200,000 florins. The first care of the Directorate of the new Company was to obtain an adequate supply of slaves. But here the Company met with the usual difficulty, in that the West India Company had the monopoly of the slave trade, and an arrangement had to be made with them, which led during a series of years to constant wrangling and disputes. At last the Directors made application to the States-General for a special charter, which was granted to them (December 6, 1732) on condition that the navigation and trade of the colony should be thrown open to all inhabitants of the United Provinces. The administration of the colony was to be in the hands of a Governor appointed by the Directors and of a Council (later Court of Policy) of six persons, who should administer justice in criminal cases. For civil justice a special Court of six persons was created, under the presidency of the Governor. At every vacancy the Governor was to nominate two persons, of whom the Court of Policy chose one. Appeals could

be made to the States-General.

The colony now began to make considerable progress. According to a map¹ of the year 1740 there were ninety-three plantations on the River Berbice and the Wironje Creek, and twenty on the River Canje. There were no company plantations on the Canje; all on that river belonged to "free" planters. The seat of government was at Fort Nassau, high up the river; and close to

it had arisen a village named New Amsterdam.

The Berbice Company did fairly well; but during its first thirty years its prosperity was not great. Parsimony ruled in the directorate, with the usual consequences; and none of the Governors sent out before 1760 were men of any special energy or initiative. In that year Wolfert Simon van Hoogenheim was appointed, a man destined to save the colony by his courage and ability from utter ruin and destruction. On his arrival he found that the entire population, but especially the white men, had been for some three years suffering from an epidemic of fever and dysentery, which had spared few and had carried off the late Governor and many others. At this time the total number of the garrison was sixty. The population consisted of 346 white men, 244 Indian or red slaves, and 3,833 negro slaves. These negro slaves had, in many cases, been very harshly treated by their masters, and suffered under many grievances.

In February 1763 a negro revolt broke out on two plantations on the Canje, and rapidly spread over the whole colony. The plantations on that river were plundered, and everywhere the Europeans who did not fly were murdered. Hoogenheim did all he could to

<sup>&</sup>lt;sup>1</sup> The work of the engineer, Jan Daniel Knapp. now in the National Archives at The Hague.

save the fugitives and to defend Fort Nassau. But the fort, on inspection, was found to be untenable against attack; and, as the rebel forces were approaching, the Governor had to yield to the unanimous determination, both of soldiers and fugitives, to abandon it, take refuge on the ships, and go lower down the river. On March 8 the fort was abandoned and burnt, and Hoogenheim retired to Fort Andries, at the mouth of the Canje and close to the sea-shore, where the fugitives from the Canje plantations were already gathered (March 26).

Here for many months he held out with the aid of small reinforcements sent from the other Dutch colonies. At the end of December a body of 660 troops, despatched by the States-General in response to Hoogenheim's urgent request for help, landed in Berbice, and a united offensive was undertaken against the rebels. Some severe fighting took place; but before the end of March 2,600 ex-slaves had been captured, including the chiefs, and the rest driven into the bush. Severe reprisals took place, and many cruel executions, in spite of the Governor's counsels of moderation.

Hoogenheim, though in enfeebled health, at once set to work to restore the ravages wrought in the ruined colony. Only six out of the Company's eleven plantations were in a workable state, and sixty-one private plantations were either wholly or partially ruined. At first the Directors despaired of being able to find sufficient money for the rebuilding of the fort and the reconstruction of the colony, and the question of giving it up was seriously debated. But the States of Holland came to the rescue with a timely loan; and, although recovery was slow, the plantations were gradually brought back into working order.

In March 1781 Berbice was captured by the English and remained in English possession until January 1782, when a French squadron compelled the English garrison to surrender. The colony was restored to the Dutch at the Peace of Paris (1783). Once more the States of Holland came to the help of the Directors

with an advance of money sufficient to enable them to carry on the administration. One of the first steps taken was to abandon Fort Nassau and the adjoining village of New Amsterdam as lying too high up stream, to strengthen Fort St. Andries at the mouth of the River Canje, and to build on the point between that river and the Berbice between 1785 and 1790 another

New Amsterdam as the seat of government.

In 1791 the States-General had refused to renew the charter of the West India Company, and had instituted a Council of the Colonies to take over the charge of the Company's colonial possessions; in the following years they put an end to the Directorate of Berbice and the Association of Surinam, which likewise passed under the control of the Council. Its rule was of short duration. The year 1795 saw the French conquest of the United Provinces and the flight of the Stadholder to England, followed by the formation of the Batavian Republic in close dependence upon France. On May 3, 1796, a British frigate with a detachment of troops appeared off the mouth of the River Berbice, being part of the squadron to which the colony of Demerara-Essequibo had surrendered on April 22. The surrender of Berbice was demanded in the name of the Prince of Orange; and the Governor Batenburg, lacking the means of defence, capitulated on the same easy terms as had been granted to the neighbouring colony.

# (2) Under British Rule (1796-1914)

#### (a) Transitional Period, 1796-1815

The British, after their capture of the Dutch colonies, made no change in administration. They regarded themselves as caretakers in the interest of the Prince of Orange. Lieutenant-Colonel Hyslop, the commander of the force of occupation, was entrusted with large powers as the representative of the British Government. There was little friction, and all worked smoothly and well. It has already been pointed

out that the early progress of the Demerara Colony was due in no small degree to English enterprise and capital. Since then many English and Scottish settlers had taken up plantations, and no sooner were the colonies in British hands than a steady stream of immigrants from the British West Indies gave a great impetus to the trade and prosperity of the Three Rivers. The prices of colonial products ruling high at that time, large profits were made. According to the official maps drawn by Major Von Bouchenroeder in 1798 and 1802 there were (about) 400 plantations under cultivation in Demerara and Essequibo, and (about) 300 in Berbice. Almost the whole stretch of sea-coast was empoldered, and here cotton was almost exclusively The town of Stabroek was considerably increased and many improvements in its sanitary conditions were carried out; and New Amsterdam, which, when the British came, was little more than a forest clearing, rapidly became a rising town.

This prosperous state of things was rudely interrupted by the Peace of Amiens (March 25, 1802). By Article III of this treaty Great Britain agreed to restore to the French Republic and to its Spanish and Batavian allies such of their colonies as had been conquered and occupied during the war, with the excep-

tion of Trinidad and Ceylon.

The Dutch colonies in Guiana were thus restored to the Batavian Republic. This was a great blow to the English settlers; for the new Dutch Governor, Antony Meertens, was hostile to them. The Englishmen were virtually informed that they must sell their plantations and leave the colony; and the shipping of produce to British possessions was prohibited. It seems strange that no clause had been introduced into the treaty forbidding such a course of action. But the interregnum was of short duration. War broke out again in May 1803, and in September the colonies once more passed into British possession.

The principal event of the period of English rule that followed was the blow which fell upon

the planters in 1807 and succeeding years through the abolition of the slave trade. Work in the sugar, cotton, and coffee plantations could only be carried on by black labour; and, the supply being stopped, the development of the grants of land that were being brought under cultivation was checked. Nevertheless, the prosperity of the colonies, especially of Demerara, continued, but did not advance so rapidly as before; and from year to year the English element in the population, and, still more, English influence, became predominant. One of the last acts of Governor Bentinck (April 28, 1812) was the issue of a proclamation uniting the two colonies of Demerara and Essequibo, the post of Commander of Essequibo and the separate Courts of Policy and Justice being abolished. This meant a considerable saving in salaries. The name of the capital of the united colonies was at the same time changed from Stabroek to Georgetown.

This change of name was actually made by Lieutenant-General Carmichael, Bentinck's successor. The new Governor was a strong man, and he had to deal with a difficult situation; for the Guiana colonies, which had not been hitherto troubled by enemy attacks or raids, suffered much from the audacity of American privateers, which, after the declaration of war in 1812 between Great Britain and the United States, infested the Caribbean Sea, and for a time practically blockaded the mouths of the Guiana rivers. Carmichael fitted out a number of armed trawlers, and succeeded in partially averting a serious peril. He was no less determined in dealing with the internal affairs of the colony. He remodelled the constitution of the Courts of Policy and of Justice, insisting that an English element should be introduced, and that the English as well as the Dutch language should be used in the Court of Justice. In Berbice the same process of gradual anglicization had been taking place. The Dutch Governor, Batenburg (1804-6), began it by abolishing the rights of the Berbice Company, and declaring that their plantations (societeits-plantagien) and other possessions had become the property of the British Government.

The news of Napoleon's abdication and of the creation of the Kingdom of the Netherlands under William I caused for a time much perturbation in the minds of the white settlers in the two colonies, whether English or Dutch. The memory of what had taken place in 1802 made them fear that once more Demerara and Berbice might be restored to Dutch rule. Only a very small minority desired this.1 Not till after the Battle of Waterloo were the colonies definitely ceded to Great Britain. The terms under which the cession was made had, indeed, been secretly discussed between the Prince of Orange and the British Foreign Minister, Lord Castlereagh, early in 1814, and a Convention between Great Britain and the Netherlands had been drawn up and signed (August 13, 1814), but owing to various causes the settlement was delayed. It was not till July 1815 that the news reached the colony that the Three Rivers had passed under British rule. In the Gazette of July 22 the announcement was made :- "At last they have condescended to inform us to whom we belong."

By the Convention of August 13, 1814. Great Britain restored to Holland all the captured colonies with the exception of Demerara, Essequibo, and Berbice in Guiana, and the Cape of Good Hope. But these former Dutch possessions were not taken without compensation. Article IX of the Convention provided that £2,000,000 should be paid by Great Britain to the Netherlands for the fortification of the frontiers of the new kingdom, £1,000,000 to pay off a claim of Sweden upon Holland, and £3,000,000 for the establishing of the Union between Holland and Belgium. If to this

<sup>1</sup> Netscher, Geschiedenis van de Kolonien Essequibo, Demerary en Berbice, remarks (p. 289): "No one believed any longer in the possibility of an eventual restoration to the Netherlands; and fairness compels me to add ("de billijkheid gebiedt ons hier bij te voegen") that no planter there any longer desired it."

sum were to be added the cost of administration and defence of the colonies from 1796 to 1814, it will be seen that the price paid for them was fully adequate; and, indeed, it was only to be justified by the fact that they contained so many English settlers, who had made large investments in sugar and other plantations.

## (b) British Sovereignty, 1815-1914

The condition of the colonies when they passed finally into British possession was prosperous. The abolition of the slave trade had not as yet greatly affected the available number of slaves in Guiana; but the fact that no fresh supply could be imported led to a gradual diminution of the number. In 1814 there were in Demerara-Essequibo 77,163, and in Berbice 24,549. But cotton and coffee had seen their best days; prices were beginning to fall; and many cotton and coffee plantations along the coast were abandoned in the succeeding years. The slaves were used in the cultivation of sugar, which was still profitable and required more labour than either cotton or coffee. No change was made in the administration, the Courts of Policy and of Justice continuing as in Dutch times. By the subsidiary Convention of August 1815 the British Government undertook to restore the Berbice Company plantations, which had been confiscated to the British Crown ten years before, and were now claimed by the surviving directors of the company as private property. This was an act of generosity; for the plantations when restored were in a far better state than when taken; and they had no longer, as formerly, to bear the charges of the colonial administration and They did not remain long, however, in the hands of the Dutch proprietors, but were sold to English planters in 1818 for £66,000. The colony of Berbice ceased to have a separate existence in 1831, and its administration as a county of the colony of British Guiana was henceforth conducted from Georgetown.

The anti-slavery campaign in England had, during the period between 1815 and 1823, been making headway; and at the same time Christian missionaries had been very active in Guiana, and their teaching had made a deep impression upon the slave population, amongst whom they worked zealously, but sometimes without much discretion. On the initiative of Fowell Buxton, proposals were carried in the British Parliament (1823) which conferred on the slaves certain civil rights and social privileges; penalties were to be inflicted upon the owners and their foremen for harsh treatment; and the flogging of female slaves was forbidden. This well-intentioned piece of legislation did not, as a matter of fact, effect much real change in the condition of slaves in the Guiana colonies. Since the abolition of the slave trade slaves were far too precious to be ill-treated; and the English planters had already of their own accord granted many privileges to their slaves.

Nevertheless, the language and the doctrines of the anti-slavery agitators, brought to them by the agency of the missionaries, had been stirring a spirit of insubordination amongst an ignorant and excitable race. In this connection the activities of the Rev. John Smith had been particularly notable. The slaves were led to believe in the summer of 1823 that the British Parliament had granted their freedom and that the planters were withholding it. This led to a plot for a general rising, which was betrayed by a mulatto servant; there were some armed collisions, but the promptness with which the authorities acted soon brought the attempted rising to an end.

This abortive rising and the death of Smith in prison added force to the anti-slavery movement in England; and the leaders left no stone unturned in their efforts to improve the conditions of slavery. At last, in 1833, the famous Act<sup>2</sup> for the abolition of

<sup>1</sup> Of the London Missionary Society.

<sup>2</sup> Its shorter title was "The Act of Apprenticeship."

slavery throughout the British colonies was passed. On August 1, 1834, all the slaves were declared free. This freedom was, however, not absolute. The slaves, henceforth called "apprenticed labourers," were required to work for their former masters, who in their turn, as before, had to provide for and maintain the "apprentices" and their families. The hours of labour were restricted to seven and a half hours per day, and magistrates sent out from England had the charge of seeing that the new regulations were carried out. This "apprenticeship" period was for plantation slaves to continue till August 1, 1840; for domestic and town slaves till August 1, 1838. The joy of the negroes on hearing of their emancipation was somewhat damped when they learnt that six years must elapse before the Act became fully operative, and there were some disturbances; but by the firmness and tact of the Governor, Sir James Carmichael Smyth, and of the magistrates they were without difficulty suppressed. One of the causes of dissatisfaction, the difference in the date of full emancipation between the two classes of slaves, was by common consent of the Government and the planters removed. All the negroes became free men in 1838. The compensation paid to the owners (£4,297,117) amounted to about one-third of the value of the slaves; and, as many of the estates were heavily mortgaged, and after 1838 the freed negroes would only work when and for as long as they chose, the result was that many planters were ruined.

It has already been stated that in 1814 the cultivation of cotton and coffee had begun to decrease and more capital had been placed in sugar plantations. The export of this last commodity reached its maximum in 1829. In that year, although the number of slaves had fallen from 101,000 (in 1814) to 83,000, the exports amounted to 107,000,000 lb. of sugar, 7,000,000 lb. of coffee, and 2,000,000 lb. of cotton. To what extent the Act of 1834 affected the produce of the Guiana plantations is seen from the returns for 1839 the exports being 60,000,000 lb. of sugar, 1,500,000 lb.

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of coffee, and 400,000 lb. of cotton. The sugar export, with small fluctuations, remained stationary until 1849, while that of coffee and cotton practically ceased in 1844.

A report as to the condition of the colony, drawn up by a Commission appointed by the Governor, Sir Henry Barkley, in 1850, reveals a sad state of things. The proprietors of estates had almost all been reduced to insolvency. Most of the sugar plantations had been purchased by English capitalists. The and coffee estates along the sea-front had been simply abandoned, and had passed into the hands of the emancipated slaves, who continued to occupy their old dwellings and to form communities, which exist as the negro villages of to-day. These free negroes, however, having few wants in a tropical climate, did no work that they could avoid. The dykes and embankments which kept out the ocean tides and the inundations from the inland swamps during the rainy season were neglected, as well as the elaborate system of canals and trenches required for the drainage of the waterlogged soil, so that much of this carefully empoldered belt of coastland reverted to its original condition of mud and marsh overgrown with tropical vegetation.

To rescue the colony from complete ruin an adequate supply of labourers was absolutely necessary. Attempts were made to induce free negroes from the West India Islands or from Africa to immigrate, but the results were unsatisfactory. The subsequent introduction of Portuguese, Chinese, and East Indian labourers is de-

scribed elsewhere (see pp. 47 et seq.).

The rush for gold led, from 1884 onwards, to serious disputes between the British and Venezuelan Governments, as some of the most important auriferous districts were on territory to which both countries laid claim. The boundary dispute, which in 1896 might have led to war between the United States and Great Britain, but was happily settled by arbitration, is the subject of the next sub-section.

# (3) BOUNDARY DISPUTES AND ARBITRATIONS

# (a) The Venezuelan Arbitration, 1897-99

When the Dutch colony of Essequibo became British in 1815 no definite boundary line between the territories under Dutch and Spanish jurisdiction had been settled. The settlements of the Dutch were mainly on the seacoast and on the lower reaches of the rivers; but by means of post-holders and traders the Dutch had for a century and a half maintained friendly relations with the Indian tribes, and exercised administrative control over the whole area watered by the Essequibo and its affluents and along the coast as far as Barima Point, at the mouth of the Orinoco. The only Spanish settlement, that of Santo Thomé, about 140 miles up the Orinoco, had been abandoned in favour of Angostura,2 some 100 miles farther up stream, in 1764, only some old forts being maintained. Mission stations of the Catalonian Capuchins, established during the eighteenth century in the district lying between the Orinoco and the upper waters of the Cuyuni, but never reaching the Cuyuni Valley, were the only signs of Spanish occupation east of the Orinoco.

Mr. (afterwards Sir) Robert Schomburgk, who in 1836-37 had explored the whole course of the River Essequibo, and discovered its sources in 1840, was appointed by the British Government to survey provisionally the boundaries of British Guiana, using all the historical and local evidence that was available. After four journeys, in which he made an exhaustive and thorough examination of the country, Schomburgk drew the boundary line which bears his name on the principle of not pressing the extreme claims of Great Britain, but of proposing a boundary which would offer

a satisfactory basis for negotiation.

The reply of Venezuela in 1844 was a claim for the possession of all the territory lying to the west of the

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<sup>&</sup>lt;sup>1</sup> Known afterwards as Vieja Guyana. <sup>2</sup> The present Ciudad Bolivar.

River Essequibo; in other words, to about half the colony of British Guiana. The British Foreign Minister, Lord Aberdeen, while declaring that the Venezuelan claim was absolutely without foundation, offered to make considerable concessions for the sake of a friendly agreement, concessions which were viewed most unfavourably in the colony. The Venezuelan Government, however, made no reply; and in 1850 it was informed by the British Foreign Office that the proposal had lapsed. This step led to an Agreement by which both Powers declared their intention of not occupying or encroaching upon disputed territory until a settlement was reached. Such an agreement was unsatisfactory in itself, and the gold discoveries reopened the controversy in an acute form. In 1883-84 the Venezuelan Government granted to foreign concessionnaires the whole of the territory between the Orinoco and the Essequibo. Warning was at once given by the British authorities that no such encroachment would be allowed, but would be resisted by force; and they declared their intention of maintaining the Schomburgk line as a provisional boundary.

This act of the Venezuelan Government was the more aggressive because Lord Granville had in February 1881 proposed a frontier line which gave considerable concessions to Venezuela. There were many exchanges of Notes; but they brought no change in the attitude of the Venezuelan Government, which continued to assert its claim to all territory as far as the Essequibo. In February 1887 the British Minister at Caracas was given his passports, and diplomatic relations between the two countries ceased. In 1894 the Venezuelans destroyed a station occupied by the colonial police, and in 1896 arrested a Government surveyor engaged in making surveys for a road in de facto British territory. Upon the British Government announcing its intention of asserting its territorial rights within the Schomburgk line, if necessary by force, the Venezuelans sheltered themselves behind the Monroe Doctrine, and appealed to the United States.

President Cleveland, without consulting the British Government, in December 1896 issued a decree appointing a Commission to investigate the boundary question, and declaring that the Commission's report on the matter was to be final. This step might easily have had serious consequences; but Lord Salisbury dealt with the question in a spirit of moderation, and his proposal to refer the matter to arbitration was accepted by all parties. The treaty for a settlement of the boundary dispute was signed on February 2, 1897.

Two years were occupied in historical investigations (covering three centuries) in the Dutch and Spanish. archives for the establishment of the territorial claims of the two parties, the case of Venezuela being prepared by American counsel and historians. The Court of Arbitration sat at Paris, and consisted of two English judges, two American judges, and a Russian expert in International Law, M. de Martens, who acted as President of the Court. The result was eminently satisfactory to Great Britain. The Court by a unanimous vote (1899) gave to Venezuela only two small portions within the Schomburgk line, amounting in all to an area of 200 square miles out of a claim of more than 30,000 square miles; and it was understood that Great Britain had made these concessions at Barima Point and on the Upper Cuyuni in order to secure the unanimous verdict, a majority of the Court being favourable to a larger British claim.

### (b) The Brazilian Arbitration, 1901-4

The Paris Court of Arbitration, in settling the boundary between British Guiana and Venezuela, decided also in favour of the Schomburgk line as the boundary on the south between the British colony and Brazil, but without prejudice to Brazilian claims. These claims, however, had long been insistent, and clashed entirely with the arbitral decision. The territory here in dispute was the savannah land beyond the mountain

range of Pacaraima, and lying between the Rupununi and the Rivers Takutu and Cotinga, which flow into the Rio Branco, an affluent of the Amazon. It lies, in fact, in the Amazon basin, and, being in the far interior, had never been settled by white men, but was inhabited by Indian tribes, whose mode of life had not greatly altered since the days of Columbus. possible, however, to pass by water from the Essequibo by the Rupununi<sup>1</sup> into the River Mahu, and thence down stream into the Rio Branco; and historical evidence shows that from the middle of the seventeenth century this route had been regularly by Dutch traders, and that friendly relations had been established with the natives. Before the middle of the eighteenth century a Dutch post had been established at the point of junction of the Rupununi and the Essequibo to exercise a certain political control over the savannah region. It was through an official Dutch expedition in 1739-40 that the geography of this portion of the interior of Guiana was first made known to the world; and no thorough survey of this region was ever made until the exploration by Schomburgk for the British Government (1840-41). The Portuguese, on the other hand, had never established any jurisdiction, even on the Rio Branco, until 1776, when a small post, São Joaquim, was placed at the junction of the Takutu with that river; but this was the extreme limit of their advance northwards, and was regarded by Schomburgk and earlier British travellers as a frontier station. The news of Schomburgk's activities, however, stirred the Brazilian authorities to action.

In 1837 it was determined by the Church Missionary Society to establish a permanent mission at the village of Pirara, on the little river of that name close to the portage into the Rupununi. The missionary arrived at Pirara on May 15, 1838. The Commandant of São Joaquim requested him to withdraw, and on his refusal

In the season of floods directly by canoe; at other seasons by a portage of about one hour, called the Pirara portage.

occupied Pirara with a detachment of Brazilian troops, stating that the Brazilian Government claimed the whole of the territory to the Rupununi and the Upper Essequibo as far as the 4th degree of north latitude. The British Government strongly protested, and, when protest was unavailing, despatched a body of British troops from Georgetown to assert and maintain British rights. On February 14, 1842, they entered Pirara, which had on the news of their approach been abandoned by the Brazilians, and hoisted the British flag. They remained until September 1, when they were withdrawn.

It is unnecessary to follow the diplomatic controversy which followed, for it did not lead to any understanding or agreement, the divergencies of view between the two Governments being irreconcilable. In 1891 the British Government proposed as a concession to accept the River Mahu or Ireng from its source to its junction with the Takutu as the British western boundary instead of the Cotinga, which was the Schomburgk line. The Brazilians replied by claiming the line of the watershed. This Lord Salisbury declined, but repeated his offer of the Mahu line as a compromise. This was definitely refused by Brazil (December 1897). decision, therefore, of the Paris Arbitral Court in favour of the Schomburgk line was not likely to find acceptance at Rio Janeiro. Finally it was agreed by the British and Brazilian Governments to refer the matter to the arbitration of the King of Italy, and the treaty was signed on November 6, 1901. The question in dispute required an even more lengthy and laborious research into historical records than had been the case in the Venezuelan arbitration; and the decision, which was given by the King of Italy (June 15, 1904), accepted as a reasonable compromise the proposal made by Lord Salisbury in 1891, and again in 1897, that the Rivers Takutu and Mahu from their sources to their point of junction should form the boundary between British Guiana and the United States of Brazil.

Thus the question of the boundaries of the colony was finally laid to rest. It is interesting to note that the piece of territory thus definitely assigned to Great Britain in 1904 included the site of the fabled sea of Parima and the Golden City of Manoa, of which Raleigh wrote, and the lure of which led to the unfortunate expedition up the Orinoco, whose failure was the cause of his imprisonment and death.

# III. SOCIAL AND POLITICAL CONDITIONS

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THE PERSON INCOME.

### (1) Religious

The Church of England and the Church of Scotland until 1899 alone received official recognition; Government grants were assigned for the payment of the clergy and for the maintenance of the parsonages and manses. The system of parishes was arranged in 1825 on the principle that alternate parishes should be assigned to the two Churches.

In 1899 the establishment was abolished, and all denominations placed upon an equal footing.

## (2) POLITICAL

When the Guiana colonies were taken over from the Dutch it was stipulated that the system of government and the Dutch laws and usages should not be changed. Accordingly for many years the old Roman-Dutch law was the code used in the Courts of Justice. But in process of time modifications and changes have taken place; and the criminal law at the present time, though with some remnants of the old system, is modelled on that of England. In certain civil causes the Roman-Dutch law is still in force.

The Dutch administration consisted of a Governor with large executive powers and a legislative body called the Court of Policy. The Court of Policy had eight members—four ex officio and four others chosen by the College of Kiezers (electors), who were themselves elected by the inhabitants subject to a certain property qualification. For financial matters the Court of Policy had an additional six members (the financial college), elected on the same property qualification as the College of Kiezers. This enlarged body was

known as the Combined Court. This Court had no power to alter the amount of the Budget, but only the character of the taxes which had to be imposed. limited powers in matters of finance, as might be expected, did not give satisfaction to the inhabitants; and at times considerable friction occurred between the elected members and the official element appointed by This led in 1891 to certain changes in the Constitution. The Governor is now assisted by an Executive Council, all the members of which, official and unofficial are nominated by the Crown. College of Kiezers was abolished, and the Court of Policy consists of sixteen members, i.e. the Governor, who is the President, seven nominated officials, and eight other members directly elected by the inhabitants. The Combined Court has the additional six directly elected members, and its powers have been greatly enlarged in regard to all expenditure, except the Civil List.

### (3) EDUCATIONAL

Compulsory education has been established in the settled districts on a denominational basis Each Church has its own schools, which are examined by Government inspectors, and receive subsidies for every child when the report of efficiency is satisfactory. There is an excellent secondary school, called Queen's College in Georgetown.

#### GENERAL OBSERVATIONS

Probably there is no other territory in the world where the settled inhabitants contain a greater variety of races divided from one another by history, tradition, and colour, all living side by side on terms of friendly co-operation, and without any of the bitterness or strife arising from class or caste distinctions.

British Guiana can never be a white man's colony. The large negro population is, for various reasons, not increasing; and the negroes generally are inclined to

take life easily and not to do more work than is absolutely necessary. The British Indian immigrants, however, have in recent years in ever-growing numbers made British Guiana their home. They are thoroughly acclimatized, work hard, save money, and will undoubtedly in the future be the mainstay of the colony's

prosperity.

The resources of British Guiana remain almost untouched; only the coastal belt has been exploited. The magnificent forests of the interior are almost unexplored, save by the balata-bleeders. And it may be pointed out that the balata industry is yet in its infancy, and will be of ever-increasing value. The vast savannahs in the Amazon basin between the Rivers Mahu and Takutu, definitely assigned to Great Britain by the arbitral decision of the King of Italy in 1904, are specially fitted for cattle-breeding and for cattle ranches.

The difficulty hitherto has been the lack of communications. The rivers, owing to the character of the country, which rises from the sea-coast to the mountain barrier on the south, are full of rapids impeding navigation. What is wanted is a railway passing through the heart of the colony, and connecting Demerara with the savannahs around Pirara. This line has long been projected. The time is now ripe for it to be carried out as a national undertaking.

The arbitral decisions of 1899 and 1904 have definitely settled the boundaries of the colony and removed all international difficulties in regard to the

future of British Guiana.

<sup>&</sup>lt;sup>1</sup> For details of projected railways see below, p. 42.

# IV. ECONOMIC CONDITIONS

# (A) MEANS OF COMMUNICATION

(1) INTERNAL

(a) Roads

THE public roads of British Guiana are classed under two heads as coast roads and bush roads. Roads, in the ordinary sense of the term, are confined almost entirely to the first of the three zones—coast lands, forest lands, and savannahs-into which the colony is divided, for the coast lands alone possess any considerable permanent population, and in the other regions, where road- and track-making is a matter of difficulty and expense, a transient population makes shift to get on with such communications as are afforded by the numerous rivers which water the country. The chief road runs parallel with the coast from Pomeroon in the west to the Corentyne River in the east; its total length is 322 miles, the whole being connected by bridges and steam ferries; it has branches up the principal rivers and creeks, and traverses all the important sugar estates and centres of population in the occupied part of the coast. Inland there is a short road skirting the Camaria Rapids on the Cuyuni River; and there are two cart-roads, the one from above Tumatumari on the Potaro River to Minnehaha, with a bridle-path extension to the Konawaruk, and the other from Arakaka, on the Barima, to Towakaima, on There are also some 65 miles of the Barama. bridle-paths, footpaths, and tracks at other places in the interior, about 25 miles of them in the neighbourhood of the Konawaruk River. All these roads and tracks are maintained by the Government. A road made and maintained by the enterprise of an American mining company connects the Puruni River with the Cuyuni at Kartabu Point. To connect Bartika Grove with the Caburi River, a tributary of the Mazaruni, a road some 35 miles in length has been traced, but it is not used, as the river route is cheaper.

## (b) Rivers and Canals

The rivers of British Guiana, by reason of the shoals and bars which obstruct their mouths and of the rapids and falls which impede their upper courses, are somewhat defective as means of communication. are, however, very numerous; the larger ones carry good-sized vessels for appreciable distances in their lower reaches; and their upper waters afford the only means by which, though not without difficulty, danger, and expense, the gold-digger and the balata-collector can reach the goldfield and the forest, and the timbercutter and charcoal-burner can make their products available for the market. It would be approximately true to say that each of the chief river systems possesses a dominant characteristic, for the Berbice is the most readily navigable, the Demerara is commercially the most important, the Essequibo is the largest, and the Waini is in some respects the most useful, on account of the system of waterways to which it is the key.

The entrance of the *Berbice* is obstructed by a bar of sand, navigable at high water for vessels of not above 16 ft. draught, which can reach Fort Nassau, 45 miles from the mouth; vessels of 12 ft. draught can ascend for over 100 miles; and, at all events during the rainy season, small craft can go up to the first rapids at Marlissa, some 165 miles from the sea. New Amsterdam stands at the confluence of the Berbice and its tributary, the Canje, which is navigable for small craft for about 50 miles, and is connected with the

Corentyne by a creek.

The Demerara River is commercially important by reason of the comparative safety of its navigation,

and of the presence on its banks of the capital and chief port of the colony. The approach to it is obstructed by a mud flat, over which vessels of 17-19 ft. draught used to be able to enter; but the channel tends to diminish in depth through alluvial deposit, and in 1916 it was reported that there was  $2\frac{1}{2}$  ft. less water on the bar. A harbour improvement scheme, of which the deepening of the channel formed part, was in contemplation at the outbreak of war. At high water the river is navigable for vessels of 12 ft. draught for 65 miles, while smaller craft can reach the Malali Rapids, nearly 100 miles above Georgetown. Above these rapids there are reaches, between the cataracts, which are navigable for boats. On the lower river for a distance of nearly 20 miles from Georgetown the flat lands on both banks are extensively cultivated, and large supplies of timber are obtained from the forest country on the upper river.

The Essequibo, the largest river in the colony, can be entered by vessels of 15-18 ft. draught, and is navigable by vessels of 16 ft. draught for some 50 miles, and by large trading canoes for 90 miles, though above the first rapids its course is broken and dangerous. Many of its tributaries, such as the Cuyuni, Mazaruni, Potaro, and Rupununi, are themselves considerable streams; but they are broken by rapids and cataracts, which form serious impediments to navigation.

The Waini, Barama, and Barima, with their many tributary streams, are navigable for small steamers or launches for considerable distances, and give access to the agricultural districts near the coast, and the important auriferous and timber-clad regions farther inland.

"An interesting and useful feature of all the rivers in and around this district are the many waterways by which, at varying distances inwards, they are connected with one another, and by which it is both possible and practicable to journey from one to another entirely inland. Indeed, the facilities for transportation, more especially in the parts nearest the sea, . . . are so great as to render the making of roads almost unnecessary, and it is for this reason that, although comparatively recently opened up, this part of the colony has, perhaps, been the most thoroughly explored."

Of the smaller rivers of the colony the most important are the Abary, Mahaicony, Mahaica, and Pomeroon. Being navigable for small craft for considerable portions of their courses, they serve as means of communication for the Portuguese, East Indian, and other settlers who farm small holdings on their banks. The Corentyne, the boundary river of the colony, may be regarded as being Dutch; the produce of estates on the British bank is usually sent away in local craft, known as droghers, for shipment from a

British port.

Before June 1914 certain river steamer services were performed by contract, but this contract has now been terminated, and a Government steamer service is run as follows:—Parika to Suddie, 23<sup>3</sup> nautical miles, and Parika to Bartika Grove, 36 nautical miles, daily except on Sundays; Parika to Leguan, 31 miles, the Demerara River ferry (Georgetown to Vreed-en-Hoop), mile, and the Berbice River ferry (Rosignol to New Amsterdam), 13 miles, daily throughout the week. There is also, or was before the outbreak of war, steamer communication between Georgetown, the North-West District, New Amsterdam. Springlands (at the mouth of the Corentyne), and Wismar (up the Demerara). There are launch services on the upper waters of the Berbice and Essequibo and on the Cuyuni, Potaro, etc.: and Arakaka on the Barima, the centre of the gold mining area in the North-West District, can be reached by light-draught launches during a portion of the year. As a general rule, however, travelling above the termini of the steamer routes is done in canoes or keelless bateaux, propelled by paddlers. Owing to the many dangers which beset this inland travelling, stringent regulations have been framed to govern the

<sup>1</sup> J. B. Harrison, Geology of the Goldfields of British Guiana, p. 14

loading and equipment of the boats and the qualifications of the boatmen, and the shooting of certain falls is prohibited. The descent of the streams is quick, if not always safe; but mounting them against strong currents, through numerous rapids, and over long portages is slow and tedious, and adds appreciably to the difficulty and expense of all industrial enter-

prise conducted in the interior of the country.

Canals.—There are three canals on the Demerara River—two on the left bank, within 7 miles of Georgetown, each 7 miles long, and one on the right bank, within 5 miles of the town and 4 miles long; each of them is 60 ft. wide, and runs at right angles to the river. They are used for navigation, as well as for drainage, by the inland estates, on the owners of which the cost of maintenance falls, the canals on the left bank being included in a Polder scheme, to which the estates contribute in rates. Similar canals are found, one discharging into the Mahaica Creek at its mouth, another at the back of the Mahaica Estates, and a third on the east coast of Berbice County. Canals of considerable length carry water to Georgetown and New Amsterdam from the savannahs and creeks to the south. The drainage canals on the estates are also used for water transport (see p. 54).

#### (c) Railways

There are four railways in the colony with a total

length of just under a hundred miles.

The Demerara Railway, from Georgetown to Mahaica, has  $21\frac{1}{2}$  miles of line open for traffic, with a 4 ft.  $8\frac{1}{2}$  in. gauge. Its total receipts in 1916 were £38,720, and its total expenditure, excluding interest charges of £1,968, was £19,730. Its passenger mileage and tonnage in the same year were 55,965 miles and 66,331 tons, its passenger and goods receipts being respectively £17,529 and £17,295.

The Berbice Railway Extension, from Mahaica to Rosignol, on the left bank of the Berbice, opposite New Amsterdam, has a length of 39 miles open for traffic, and has also a 4 ft.  $8\frac{1}{2}$  in. gauge. Its total receipts in 1916 were £10,753, and its expenditure was £14,921. Its passenger mileage in that year was 37,578, with receipts £6,858, and its tonnage 11,544

tons, with receipts £2,436.

The West Coast Railway, from Vreed-en-Hoop, opposite Georgetown, with which it is connected by a steam ferry, to Parika, has a length open for traffic of 18½ miles, with a 3 ft. 6 in. gauge. Its total receipts in 1916 were £11,195, and its total expenditure was £9,707. The sum of £9,195 was taken in passenger receipts with a mileage of 40,867, and £1,331 in goods receipts with a tonnage of 4,751.

All these lines are operated by the Demerara Railway Company, which was established under Ordinances of 1846 and 1847. In respect of the Berbice railway extension, the company has raised £312,500 preferred capital, entitled to interest at 4 per cent., and the Government pays by way of subsidy such a sum as, together with the net earnings, will make up the

amount of this interest.

The Essequibo Railway, operated by Sprostons, Ltd., runs from Wismar, which is on the left bank of the Demerara River, some 70 miles from its mouth, to Rockstone, which is on the right bank of the Essequibo River, and above the first series of cataracts on that river. It has 18½ miles open for traffic, with a metre gauge. No particulars with regard to its receipts, etc., are available. This line has been open since 1897, and in conjunction with the steamers and launches plying on the Demerara and Essequibo rivers it affords access to the goldfields of the interior.

Tramways.—In and around Georgetown the Demerara Electric Company operates 13½ miles of electric tram-lines, worked on the trolley system, and having a 4 ft. 8½ in. gauge. In 1916 the trams carried 1,279,618 passengers, with a passenger mileage of 483,965, and the passenger receipts amounted to

£10.517.

Proposed Railways.—Various proposals for additional lines of railway have been mooted from time to time. Most of these have had for their object the development of the auriferous and forest regions of the interior, access to which is now barred by dangerous rapids. It was at one time suggested that the waste of life and of goods attending river voyages could be avoided by a light railway from Bartika Grove up the left bank of the Essequibo, until the rapids are passed, with branches to the Mazaruni and Puruni goldfields. In recent years, however, a more ambitious scheme has held the field. In 1913 the Governor, being favourably impressed by the possibilities of the southern savannah country, proposed that a trunk line of railway should be constructed from Georgetown to a point near the junction of the Ireng and Takutu rivers on the Brazilian frontier, the route being selected with a view to subsequent linking up with Manaos, and the consequent establishment of a transcontinental line in the colony. Had this project been sanctioned, a large sum would have been raised by loan for the construction of the railway, and for a general colonisation and development scheme in connection with it. The matter was, however, held up by the refusal of the Imperial Government to apply to Parliament for a loan without the production of more satisfactory proof that the railway would become self-supporting; and while the question was still under discussion the project was postponed by the outbreak of war. In July 1918, however, the Under-Secretary for the Colonies announced in Parliament that measures of development advocated by Sir W. Egerton were receiving attention; that such of them as could be carried out during the war were being proceeded with; and that, in the matter of the scheme for a railway to the interior, practical steps had already been taken by clearing a cattle track along a line which coincided with one of the proposed railway tracks. Proposals, long advocated, for a line from New Amsterdam to the mouth of the Corentyne River at Springlands have now

been entirely superseded in favour of the railway into the interior, which is thought to be of greater importance and of higher economic value.

## (d) Posts, Telegraphs, etc.

There are 71 post-offices in the colony, of which 44 are telegraph offices, 50 are savings-banks, and 5 are travelling offices. Of these post-offices 5 are in Georgetown, 27 others in Demerara County, 14 in Berbice County, and 20 in Essequibo County; whilst of the 5 travelling offices three are in the Demerara, Berbice, and Mazaruni river steamers, one is on the upper Demerara river launch, and one is in the Pomeroon mail-boat. The postal service is well organized, letters from Georgetown reaching Pomeroon in 24 hours, and the North-West District in 36 hours.

The length of telegraphic lines throughout the colony is approximately 550 miles, and there are 12 cables,

with an aggregate length of  $22\frac{1}{2}$  miles.

A public telephone exchange is attached to the post-office at Georgetown; it has 600 subscribers, at rates varying from £2 10s. to £7 10s. per annum. At New Amsterdam there is also a post-office exchange, with 92 subscribers. The post-office also maintains some 200 other telephones for the use of the Government, the police, and private individuals. The aggregate length of aerial telephone wires is 1,855½ miles, and in Georgetown there are 5½ miles of telephone cable.

### (2) EXTERNAL

General.—The only ports on the Guianese coast are formed by the mouths of the rivers, and for the most part local knowledge and practical experience are required for crossing the bars and shoals by which their entrances are generally obstructed; but, as no hurricanes ever occur, it is safe to anchor and await a pilot, or to make an examination by boat. Depths off the coast vary frequently, owing to deposits of mud made by the rivers. Trees and grasses torn from the river

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banks during the rainy season and thrown out on to shallow mud flats take root with astonishing celerity, and, by causing the mud to accumulate round them, change the features, and sometimes even the direction, of the coast. Off the Cayenne shore a century ago trees were found to be growing in a place where six years before there had been a depth of 15 or 16 ft. of water. There is nothing special to note with regard to tides, unless it be that they are somewhat irregular, or with regard to currents, which run normally with a velocity of 2 or 3 knots. Heavy rollers are met with on the coast from December to February.

### (a) Ports

British Guiana has five ports of entry: Georgetown on the Demerara River, New Amsterdam on the Berbice River, Springlands on the Corentyne River, and Morawhanna and Yarikita in the North-West District. Of these Georgetown alone possesses any importance from the point of view of ocean shipping. If New Amsterdam does not now merit the description which Trollope gave of it 60 years ago as a place so stagnant and inanimate that a collection of three persons in the street might be considered to constitute a crowd, yet it attracts an inconsiderable proportion of the shipping which visits the colony; and the other ports are entered only by the small coasting craft which ply between the colony and Venezuela, Surinam, and Cayenne.

Georgetown, the capital of the colony, is situated on the right bank of the Demerara River, just within the mouth. There is ample anchorage for vessels that can enter the river (see p. 38). With its broad streets, shaded by palms and fringed by canals, its electric light, electric trams, and business activity. Georgetown may be considered an attractive port of call. If meat supplies are poor, bread and vegetables are good, cheap, and plentiful, and vessels can either take in water delivered alongside at 10s. a ton or proceed up the river and obtain their supplies from a good

spring at Sandhills. About 5,000 tons of coal are kept in stock, and may be brought off in lighters, or a vessel can coal at the coal wharves, of which there are four, with depths alongside of from 9 to 22 ft. The town has commercial wharves along a frontage of some 2 miles, with low-water depths of  $3\frac{1}{2}$ -4 fathoms over mud. There is a dry dock, the Sproston, 203 ft. in length on the blocks, with a breadth of 44 ft., and a depth of  $9\frac{1}{2}$  ft. on the sill at high-water springs. There is also a patent slipway 81 ft. in length, which can be used by craft up to  $5\frac{1}{2}$  ft. draught. Two first-class machine-shops exist here, and repairs to both steam and sailing vessels can be effected, though there are no facilities for lifting heavy weights.

In 1915 a dry dock was built at the Government penal station on the Mazaruni River; it has an overall length of 160 ft., and an entrance breadth of 35 ft., with  $7\frac{1}{2}$  ft. on the sill at low-water springs. The workshop at this dock has up-to-date machinery,

foundry plant, etc.

Larger dry-dock accommodation may be had at Trinidad, Barbados, Martinique, and St. Thomas.

Shipping Statistics.—On the annual average of the period 1905 to 1914, the ports of the colony were entered by 1,954 vessels, of 452,173 tons. Of these, 810, with a tonnage of 304,432 tons, or 67 per cent. of the total tonnage, were British; 247, of 77,153 tons, or 17 per cent., were Dutch; 33, of 29,508 tons, or 6 per cent., were Norwegian; 13, of 17,500 tons, or 4 per cent., were Danish; and 30, of 13,994 tons, or 3 per cent., were French. On a comparison of the annual averages for 1905-9 and 1910-14 the total shipping showed an increase from 1,458 vessels, of 418,228 tons, on the average of the first period to 2,452 vessels, of 486,125 tons, on the average of the second; and on a comparison of the same averages, British, Dutch, Danish, and French shipping showed increases, while Norwegian and American figures declined.1

## (b) Shipping Lines

The shipping lines running to Georgetown, with the number and tonnage of their vessels entered annually on the average of the years 1906 to 1915, are as follows<sup>1</sup>:—

Company.	No.	Tons.	Per- centage.
Royal Dutch West India Mail	46	72,446	16.25
Quebec Steamship Co	27	54,244	12.17
Canadian Mail (Pickford & Black)	29	52,634	11.81
Royal Mail Steam Packet Co	35	49,673	11.14
London Direct Line	22	46,372	10.40
Glasgow Direct Line	18	34,767	7.78
East Asiatic Co., Ltd	11	17,054	3.83
Compagnie Générale Transatlantique	26	15,137	3.40
Liverpool Line	13	14,227	3.20
Norse Line	5	11,334	2.54
Dutch (Surinam) Government Service	34	7,382	1.66
Sprostons, Ltd., Surinam Service	40	5,739	1.30
All other steamers	55	64,697	14.52

All the lines mentioned ran their services regularly throughout the period with the exception of the East Asiatic Co., which made no call at Georgetown in 1915. In addition to the lines specified, the Trinidad Shipping and Trading Co. has run a service since 1911, with an annual average of 14 vessels, of 35,004 tons; and in 1915 thirteen vessels of the Seeberg Line, of 14,047 tons, called at Georgetown. In the table given above these are all classified as "other steamers," and that term also includes vessels of the Elder, Dempster Steamship Co., the Cayenne-Bolivar Line, and the Armstrong Line, which suspended their Georgetown services in 1911-12, 1912-13, and 1913-14 respectively.

In 1915 the colony found itself for the first time for many years without a subsidized service for the carriage of transatlantic mails, the Royal Mail Steam Packet Co. having notified their inability to continue the contract owing to restrictions arising from the war.

The inter-colonial service was at the same time discontinued by arrangement, and mails were carried as opportunity offered by the various lines visiting the colony.

(c) Cables and Wireless

The colony is served by the West India and Panama Telegraph Company under Government subsidy. Messages sent by the Company to Great Britain pass through the Danish island of St. Thomas, Porto Rico, and Cuba, and then over the territory of the United States from Key West to New York. It is, however, possible to send telegrams to Great Britain "via Bermuda "; these must be transferred in Jamaica to the Direct West India Cable Company, when they are transmitted over the lines of that company and of the Halifax and Bermuda Cable Company. supplies an all-British route from British Guiana to Great Britain, except for the breaks at Santa Cruz and Porto Rico.

There is a wireless station at Georgetown. Wireless telegraphy in the colony is governed by the Wireless Telegraph Ordinance No. 7 of 1910-11, which is based

on the English Wireless Telegraph Act, 1904.

## (B) INDUSTRY

#### (1) LABOUR

In British Guiana, as in most tropical countries where the white man is incapable of prolonged manual labour, the maintenance of an adequate labour supply is a matter of perennial difficulty. In the old days most of the negroes were employed as agricultural labourers; but plantation work was distasteful to them, and as soon as emancipation was carried into effect great difficulty was experienced in manning the estates. Many of the old settlers were ruined, and the sale of their plantations to the negroes, who laid them out in villages, tended to alienate the black population still more from labour on the land. The planters who remained were obliged to do what they could to supply

the deficiency from other sources; and in consequence of this process, which still continues, the negro has fallen yet further into the background as an agricultural labourer. Healthy and powerful, the black man, when he can be induced to work, is useful for the harder work of the plantation, the timber concession, and the placer, but he is lethargic and indolent, and his activity is liable to be spasmodic. Efforts have been made to fill his place with Portuguese, with Chinese, and with East Indian coolies. The Portuguese were brought in from Madeira from 1835 to 1840, but were physically unequal to the demands of tropical agriculture, and the survivors quickly deserted the estates to set up as pedlars, small traders, and shopkeepers. In those pursuits they have succeeded admirably, being by nature industrious and thrifty; and to-day they own most of the provision shops and nearly all the rum shops.

Like the Portuguese, with whom they alone are able to compete as small shopkeepers, the Chinese, 12,000 of whom were introduced between 1853 and 1867, have done well in many ways; but opinions differ as to their capacity for plantation labour, and they are disliked by

the rest of the population.

It has thus been left for the Hindu coolie, introduced from 1838 onwards under a system of indentured immigration, to become the mainstay of the labour market. Without the physical strength of the negro and his capacity for heavy work, the coolie is more willing in temper, more amenable to discipline, more regular in his habits, and generally more adaptable to the requirements of the estates, and as a source of continuous agricultural labour he has been the salvation of the colony. He, in his turn, has benefited by the arrangement; his villages are prosperous, his savings-bank deposits are increasing, he is settling down in independence to the cultivation of the soil, and it seems that he may end by creating a self-supporting agricultural peasantry, of which the country is badly in need. Regulations for immigration were

approved by the Government of India in 1844. Between 1844-48 about 12,000 Indians were brought. In the year 1848 a system of indenture under the control and supervision of the Home and Indian Governments was introduced, which came into force in 1851. From this date onwards the average number of arrivals was 3,500, of departures 1,500. Since the beginning of the present century, owing to the fact of so many East Indians having settled permanently in the colony, there has been a smaller demand for fresh supplies of coolies; and the average number of indentured arrivals between 1902 and 1916 was 1,856, while annually 1,022 persons have availed themselves of their privilege of being conveyed back to India. In December 1915 the remaining East Indian population consisted approximately of 71,454 off the estates, and 65,074 on the estates; of the latter, 5,179 males and 2,018 females were indentured, and 22,848 males and 15,563 females were unindentured, the balance consisting of children. The indentures were at first for three years, with repatriation in five years. In 1854 the term of residence was extended to ten years, the indentures being still for three years; but reindenture for two years was required, with choice of employer. The term of indenture was in 1864 extended to five years, with reindenture for periods of five years. Various changes were introduced in 1873 and 1894; and since 1875 reindenture has practically ceased. Elaborate regulations for the good housing, regular work, and wages of all indentured coolies were drawn up. The working-day was limited to seven hours; no work was to be done on Sunday; and fortnightly holidays of one day and one night were granted. The coolies, however, were bound to reside on the plantations, and never absent themselves without leave; and their holidays depended on their steady performance of their allotted task. Medical attendance was provided on the estates by the Government Medical Service; and the estates were bound to maintain their own hospitals for their labourers, and to pay the fees for those taken to Government hospitals. Surgeon-Major D. W. D. Comins, sent by the Indian Government to British Guiana to report on the working of the system in 1893, reported:—

"British Guiana, in consequence of the long-continued efforts of legislators and planters, has brought its system for the beneficial control of indentured labour more perfect than any other colony."

A very favourable report was likewise made in 1910 by the Committee of Enquiry presided over by Lord Sanderson. The term of indenture for a man was five years; for a woman, three years. A Government official, the immigration agent, is charged with the duty of seeing that all regulations are properly carried out.

In accordance with a scheme recently drawn up by an Inter-Departmental Conference in London, indentures in British Guiana have now been abolished. Negotiations are still in progress with a view to the establishment of the proposed system of assisted emigration. Opinions may differ as wisdom of encouraging emigration from and as to the benefit thereby conferred upon the emigrant, but there can be no question about the matter from the Guianese point of view. It would be a grave blow to the colony, and the climax of a long series of illmerited misfortunes, if, just as activity in the sugar industry is reviving and enterprise generally in the country is being quickened, the new scheme proved less successful than the old. East Indian immigration into British Guiana has been hitherto successful than the old. East Indian immigration Mr. Rodway, writing in 1912, declares: "The East Indian will certainly be the man of the future in Guiana if the immigration system is continued." Among other things, he has come to the front as a ricegrower. Formerly very large quantities of rice were imported; now the exports of rice reach a considerable figure.

<sup>&</sup>lt;sup>1</sup> Guiana: British, Dutch, and French, by James Rodway, p. 192.

## (2) AGRICULTURE

General.—British Guiana is a country in which agriculture enjoys many advantages. The cultivated portions of the colony run along the sea-coast for a distance of 200 miles or more, as well as up some of the chief rivers for a distance of 10 or 12 miles. In addition to the fringe of coast, several islands are partly cultivated, while scattered villages or single homesteads are occasionally found on the river banks for a considerable distance inland. The fertility of the coast lands, with their fluvio-marine deposit, is almost unparalleled; they will produce the same crops year after year with little or no assistance in the way of fertilisers, and with little or no diminution in the yield; and vegetation grows with a luxuriance which is remarkable even in the tropics. The climate is both hot and wet, without excessive fluctuation or disastrous caprice droughts are rare, prolonged rains are unusual, hurricanes are unknown; and, as a rule, the planter need have few apprehensions save on the score of his labour supply. Sugar is still, as it has been for a century past, the chief product of the country; but the cultivation of rice has made rapid strides in recent years; coconuts, coffee, and limes are also progressive branches of the agricultural industry; and cacao and rubber are grown. Of the entire exports of the colony 72 per cent. consists of the produce of the plantations.

## (a) Products of Commercial Value

(i) Sugar.—Though sugar has preserved its preeminence more or less intact, it has encountered varying fortunes and has undergone alarming vicissitudes. Nearly ruined by the emancipation of the slaves, which deprived it of its labour supply, the industry then had to face a progressive decline in the price of its product; and by the competition of the bounty-fed beet sugars of the Continent this decline was accelerated to a point at which it threatened total

extinction. That the industry has weathered the storm is due to the assistance given by the Government and to the resource of the planter. Indentured immigra-tion, the abolition of bounties as a result of the Brussels Convention, Canadian tariff preference, the measures taken to evolve disease-resisting varieties of cane, and the adoption on the plantations of an intelligent policy of retrenchment and reform, have effected radical changes in the condition of the industry, which has emerged from its period of ordeal revitalised and hopeful. In 1916 there were 39 sugar plantations, which occupied 42 per cent. of the cultivated land, and during the years 1902-16 sugar alone furnished nearly 60 per cent., and sugar and its byproducts (rum, molasses, and molascuit, or cattle-food) together furnished nearly 70 per cent. of the exports of the colony. Over 100,000 tons are produced annually. In the year 1916, which the high price of the commodity rendered the most profitable experienced by the industry for some time past, the export of sugar was valued at over £2,000,000, and that of sugar and its by-products together amounted to about £2,750,000.

The Plantations.—These always face the seashore or a river bank, where the front dam is situated, behind which comes the public road. The plantation is oblong shaped, the original grants having been of areas from a quarter to half a mile wide by nearly two miles deep, with a right to further concessions behind them; but some of the estates have absorbed several of the original grants, and one plantation in Demerara County is half a mile wide by five and a half miles deep. As the coastal lands are below the level of the sea at high water, a belt of courida or mangrove, which forms a natural dyke, is allowed to grow along the sea front, and inside it a dam of earth is thrown up to form a further barrier against the inroads of the sea and to carry off, in the excavation alongside of it, any water that may come over at high tide. Behind the front dam come grass lands, which are used for pasturing the horses and cattle belonging

to the estate, and are skirted or intersected by the public road and the railway. With its two canals on either side the road forms a second line of defence. Near the railway the draining engine of the estate will be found in proximity to the kokers, or sluices, of the canefields. About a mile further back come the plantation buildings—the sugar factory, manager's house, hospital, school-house, shops, and labourers' dwellings, the whole forming on a big plantation a self-contained village of some size. Around the village are the canefields, which extend from the front sluices to the point where the back dam protects the estate from the attacks of floods in rear.

Drainage and Irrigation.—In a region where the land is low and flat, the soil retentive, and the rainfall usually heavy and occasionally excessive, while droughts are rare, drainage is more important than irrigation. Droughts, it is true, are not unknown—the plantations suffered severely from the last visitation in the years 1911 and 1912—and provision has to be made for them in the conservation of water supplies and the construction of facilities for its use. The existing conservancy system not being particularly efficient, the Government in 1915 began surveying for an extensive irrigation scheme, on the representations of several firms owning plantations. These firms thought it

"evident . . . that with a proper system of irrigation . . . the crops of the sugar estates, villages, and farms . . . would be largely insured against drought, and might in consequence be expected to be more bountiful. . . Sufficient water for the purpose, the proprietors thought, could be obtained by a system of barrages, pumps, and canals."

Ordinarily, however, it is the removal rather than the introduction of water that demands the planter's attention. The fact that an estate of a total area of under 2,000 acres may have no less than 200 acres, or a tenth of its surface, devoted to parapets, dams, and trenches shows how vital a part is played by the drain-

<sup>&</sup>lt;sup>1</sup> Administration Report, 1915.

age question in the economy of a plantation. Apart altogether from the risk of destructive floods, sugar cane would suffer rapid deterioration, or even death, if left to stand in swampy ground. Each bed of cane, therefore, has its ditch; each field has its trench; and the trenches are connected with canals, by which the surplus water is run off through sluices at low water, or from which in heavy weather it is pumped out by the draining engine.

The presence of an elaborate system of canals on the one hand and the rarity of roads on the other have naturally led to the employment of water-carriage on the estates, and the principal drainage trenches serve also as navigable canals. Along them the canes are drawn in punts from the fields to the factory, while the finished product is carried by the same means either to the railway or to the shipping trench, whence it is

despatched to port.

Methods of Cultivation.—The cultivation of sugar is carried on almost entirely by manual labour, for the intersection of the fields by innumerable drains leaves no surface where the plough can be employed, so that digging must be done with the spade; nor has any mechanical means more efficient than hand-cutting been discovered for harvesting the ripe cane. When the digging is completed, the canes are planted about a foot apart, and in rows three or four feet distant from one another. As soon as the plants reach a height of some two feet, soil is thrown upon the roots with a shovel or fork, the process being known as ploughing. In about 15 months the canes are ready for cutting, when the stumps, which are called ratoons, are left in the earth. These ratoons spring up again, and in the course of another year they, too, are ready for the harvest. A field of ripe cane forms an impenetrable jungle of growth from 8 to 10 or 12 ft. high, and, as the richest juice is found in the lowest joints, the canes have to be cut as close as possible to the ground. They are then ready to be conveyed in mule-drawn punts to the factory.

Methods of Manufacture.—To meet the troubles of the past the Guianese planter has aimed incessantly at reducing the cost of production by a drastic policy of centralisation, simplification, and progress. Forty estates now produce as much sugar as came from thrice that number 50 years ago, and rapid as has been the fall in the price of the commodity the cost of manufacture has fallen almost as swiftly. Most of the plantations are provided with the latest improvements in sugar-making machinery, and are in constant touch with the chemist and the engineer. Under the old system, by which muscovado or common process sugar was made, weeks or even months elapsed between the first boiling of the canes and the final despatch of the finished article; but now, with the "vacuum pan" and the "centrifugal," canes can be ground, the juice expressed, boiled, and crystallised, and the finished product shipped within a few hours. When the canes reach the factory they are placed in a crushing machine, which consists of two powerful rollers, and in this from 65 to 75 lbs. of juice are expressed from every 100 lbs. of cane. The juice then passes through various processes for the elimination of impurities, after which it is ready for the vacuum pan, a large cylindrical copper pan from 9 to 12 ft. in diameter, which is heated to about 150° F. The juice is then whirled about and crystals begin to form, the resultant. liquid being known as molasses or treacle.

As Demerara crystals enjoy no mean reputation in the sugar markets of the world, it is worth mentioning that the Bourbon cane, from which they were derived, has developed so marked a tendency to disease that it is rapidly passing out of cultivation. New varieties have been discovered or evolved, but they do not approach the Bourbon in the production of a sugar with the colour, flavour, and aroma of true Demerara

crystals.

Sugar By-Products.—The process of manufacturing sugar gives rise to certain residual substances from which rum, molasses, and molascuit are derived. The

output of the last two of these articles is usually in inverse ratio to that of the first, since they are not remunerative when rum commands a good price. British Guiana the production of rum has been the subject of investigation on scientific lines for many years, and in many distilleries it has been brought to perfection. Rum is produced in the course of a rapid fermentation, extending from 36 to 48 hours, by the setting up of a wash of molasses diluted with water. The distilleries are of two types, using respectively pot stills and continuous rectifying stills. In 1914 there were 27 distilleries of the first type and 9 of the second. From 130,000 to 200,000 gallons of home-made rum are cleared annually for domestic consumption, and from

3 to  $3\frac{1}{2}$  million gallons are exported.

Future Possibilities of Sugar.—The present output of sugar gives no indication of the potentialities of the country; for existing plantations might be extended, and entirely new areas might be brought into cultivation. Altogether a great potential sugar-bearing area exists, and the extent to which it may be made available for production depends upon the supply of labour, the provision of capital, and the price of sugar. For the labour difficulty immigration in one form or another could provide a remedy. In recent years indents for labour have been small, and unindentured labour has sought other employment on the balata forests, the goldfields, and the farms. The opening up of the interior by a railway would probably have the effect of attracting population, and upon this population the coast estates could draw in times of pressure. regards capital, it seems likely that plenty of money would be available if there were a reasonable certainty that the price of sugar would remain remunerative: and to achieve such a certainty many of those who are interested in the welfare of the colony advocate a policy of preference, pointing as an example to the case of Cuba, which received preferential treatment from the United States in 1903, and now exports three times as much sugar as was ever reaped under free trade.

In British Guiana rather less than one half of the total empoldered area is actually under sugar cultivation, and, as some 85 per cent. only of the cultivated land is reaped every year, not more than 38 per cent. of the empoldered area contributes to the yearly production. In normal years the average production is about 1.8 tons an acre, though under favourable conditions some well-administered plantations yield 2.10 tons or more. The whole empoldered area, so far as it is capable of economic cultivation, might, perhaps, yield some 150,000 tons a year. In addition, between the Pomeroon and the Corentyne there are some 467,000 acres not occupied by other crops and available for the extension of sugar-growing; and to the west of the Pomeroon, where the sugar-cane has never yet been planted but where the land is of marked fertility, there are nearly a million acres more. The present output, though it looms large in Guianese economy to-day, would be reduced to proportions of insignificance if the greatest possible amount of suitable land were utilised with the maximum of capital, labour, and enterprise. In view of the sugar situation created by the closing of Continental markets on the outbreak of war the West India Committee approached the Governments and planters of the sugarproducing portions of the Empire to ascertain how much each would be capable of turning out, should an attempt be made to render the Empire self-supporting, and should prices be guaranteed. For British Guiana it was replied that her maximum output might be fixed at about 2,500,000 tons yearly.1 According to the returns furnished to the Committee this is incomparably the greatest expansion of which the industry is capable in any part of the British Empire, and it

¹ The maximum sugar output of the colony was estimated at four million tons in a telegram published in the *Times*, August 17, 1918, the estimate being based upon a yield of two tons an acre from an area of two million acres. The telegram said that the denunciation of the Brussels Convention is regarded in British Guiana as the precursor of a preferential tariff for colonial cane

would amount to a considerable proportion of the Empire's highest possible yield. Nor would it fall much below the world's total production of cane sugar

at the present time.

(ii) Rice.—Of recent years the cultivation of rice has made rapid strides, and this crop now occupies 30 per cent. of the cultivated area. In 1873 there were imported 32,000,000 lbs. of rice; in 1902-3, when there were 16,628 acres under rice, a small export, chiefly to the British West Indies, began; and in 1916 rice occupied 57,000 acres, and the export of it reached nearly 30,000,000 lbs., worth £217,000. Of the acreage under this crop more than 4,000 acres yielded two crops in the last-mentioned year. The increase in the cultivated area has been particularly marked in the Mahaica, Mahaicony, and Abary River districts, and has been due in a measure to the operations of the Abary Rice Company, which empoldered several thousand acres of virgin savannah for the purpose of producing rice by mechanical tillage. In the matter of rice-growing, too, the East Indian immigrants, of whom there are considerable numbers, are "to the manner born."

On the Abary Rice Company's estates, a plantation under American management, the experiment has been tried of employing tillage machinery precisely similar to that which is used in Canada and the States for the cultivation of wheat. It is claimed that with this machinery 250 men can do as much work as would be done by 2,000 East Indians with their primitive hand appliances. The irrigation and drainage difficulty has been surmounted by making a few long trenches instead of a network of small ones, and the manager of the estate has expressed the opinion that sugar-planters might successfully adopt

sugar, and that the confidence of the proprietors is being shown by their considerable importations of sugar-making machinery. Sea defence works, it added, were being undertaken, to assist the industry; £200,000 had already been spent, and a further £100,000 had been voted by the Legislature. The labour scarcity was thought to be the only disquieting feature in the situation.

the same course and thereby effect important economies in labour. There are several large and many small rice-mills scattered throughout the rice districts; they number 103 in all, of which more than half are in Demerara County. The crop does best on the front portion of the coast-lands, where rice of an excellent quality is produced; and very large areas exist which are eminently suitable for its cultivation. The Director of Science and Agriculture is convinced that British Guiana might "become the granary for the West Indian Islands, if ever the cultivation of Sea Island cotton attains the great development which is said to

be in store for it in those islands."1

(iii) Coconuts.—Twenty thousand acres, or about 11 per cent. of the cultivated area, are under coconuts, which grow on the coastal lands, the acreage having doubled since 1910. As the palm takes from 7 to 10 years to come to maturity, much of the recently planted land has not yet reached productivity, and in a few years' time the yield will increase materially, even should no further expansion take place. The colony possesses six oil or oil and fibre mills, and a considerable portion of the crop is consumed locally or employed in domestic manufacture; but the export of coconuts, copra, and oil, which scarcely existed ten years ago, amounted in value to nearly £12,000 in 1916. The colony contains a wide area of land suitable for the cultivation of the palm.

(iv) Coffee.—This was one of the principal exports of the colony in the first half of the last century, Berbice River coffee having a great reputation among connoisseurs; and in 1830 nearly 10,000,000 lbs. were sent abroad. But coffee shared in the misfortunes which overtook other branches of agriculture after the emancipation of the slaves; and for some 50 years such coffee as continued to be grown was consumed locally. Early in the present century, however, the industry was to some extent revitalised, and it is now making progress. Occupying less than 1,000 acres in 1902, it covered 2,000 acres in 1910; 3,000 in 1913; and 4,600 in 1916. Exports have risen from £1,500 to over £10,000 in 9 years. The plant grows well on the lower rivers, and about half the area now under the crop is situated in the Canal Polder area. Coffea robusta, a Congo variety grown largely in Java, appears to do well in British Guiana, and it may be grown as a catch crop between rubber trees.

(v) Cacao is grown, but makes little progress. Some 2,000 acres were devoted to this product 10 years ago, and the present figures show no increase. There are six factories in the colony, and a large proportion of the yield is used locally in the preparation of chocolate and confectionery, the export being insignificant. Like coffee, cacao grows well on the lower river lands; there is an extensive belt of land suited to its cultivation;

and its growth is not extending as it ought.

(vi) Rubber.—A wild rubber, indigenous to the country, is found in the forests, but it is of poor quality and little value. Para rubber, the first seeds of which were imported in 1895, grows well on the river lands provided they are sheltered and well drained; it will also flourish on the slightly elevated tract immediately behind the coastal region; and it has done satisfactorily on valley lands in the interior, for example, near Rockstone. Tapping is at present on a small scale, as most of the trees are young; but initial operations seem to show that the yield will compare favourably with that obtained in the Straits Settlements, in the Malay Archipelago, or in Ceylon, and that the quality of the product is excellent. Yet the cultivation of rubber shows little signs of increase; the acreage under it has remained stationary at about 4,000 acres since 1913. and the export is negligible.

(vii) Limes, on the other hand, must be reckoned among the progressive products of the agricultural industry. Their economic importance is of quite recent origin—they first appear in the acreage returns in 1911 -but they now cover about 1,000 acres, and in 1916 there was an export of 446 cwt. of citrate of lime, 8,600 galls. of lime-juice, and 290 galls. of oil of limes. The Government lately undertook to build a small factory at Onderneeming for the preparation of concentrated lime-juice; and the erection on two plantations on the Berbice and Essequibo rivers of machinery for the production of concentrated juice and citrate of lime has helped to encourage this infant industry. The colony is exceptionally well suited to the growth of limes, and there seems no reason why it should not become one of the most important producers of limes

and lime products in the world.

(viii) Cotton.—The growing of cotton used to form one of the staple industries of the country; but it ceased about the middle of the nineteenth century, and but for a brief revival during the American Civil War has never prospered since. Efforts have been made to resuscitate the industry, but the results have not been encouraging. The soil of the coast-lands, a heavy clay, is unsuited to the growth of Sea Island cotton; and, even if a suitable variety were to be discovered, the labour problem would remain to be faced. In the first place, the cost of labour is higher in Guiana than in the West Indian Islands. Secondly, climatic conditions require that cotton should be planted so as to ripen between the end of August and the end of November, and it is precisely in this season that the bulk of the sugar and rice crops is harvested and that the demand for labour is most insistent.

(ix) Other Crops.—The rest of the cultivated area consists for the most part of small farms and of holdings on which ground provisions are produced. The farms contribute in a modest way to the sugar output; for, although the métayer system does not exist as such, canes are being purchased by the estates from village farmers or from farmers who are growing canes on the estates lands. Provision grounds are found at the back of the plantations, on the lands of the coastal

villages, and on the lower rivers. Indian corn, cassava, yams, and sweet potatoes ripen all the year round, and are easily grown except for the risk of an occasional drought; plantains, bananas, and mangoes are used as food; and fruits such as oranges, guavas, pineapples, grenadillas, and avocado pears grow in abundance and are usually to be obtained in the markets. The plantain is the staff of life to the negro, and, as it is by him that it is for the most part grown, it tends to rise in price with the occurrence of any event which produces an exodus of negro labour to the goldfields. The best market-gardeners are found among the Portuguese, who are conspicuous for their energy and ability in every trade; the Chinese are also successful in the production of ground provisions.

Much fruit is wasted every year because it is so abundant that it does not pay to send it into market. But with a little enterprise and a little capital the whole crop might be utilised in making jams and jellies. Preserves made of guava, mango, the Barbados cherry, and other fruits of the country would greatly excel the jams which are now imported; and if only a regular supply could be guaranteed, an export trade in

them might be set on foot.

The question of attempting to establish an export trade in bananas has often been considered, especially in consequence of the action of the Dutch authorities, who, in 1906, contracted with the United Fruit Company for the creation of a subsidized banana industry For the purpose in question only two sorts of banana are of any value—the dwarf or Chinese variety for the markets of Europe, and the Gros Michel or Jamaican banana for the markets of North America. The dwarf variety, which ripens irregularly, is thin skinned, and gets easily bruised; it would require to be packed in crates and shipped in cold storage; and it would have to face the competition of the products of the Canaries and other regions nearer home. The Gros Michel market is entirely controlled by the United Fruit Company, whose requirements rule out the small

grower without attracting the capitalist. Their terms involve cultivation on a large scale, in proximity to a port of shipment, with a central organization to handle shipments, and an ample labour supply. In view of these requirements and of the fact that the Surinam banana estates have been ravaged by disease, it is not surprising that the Commission which was sent from British Guiana to investigate the Surinam experiment should have reported adversely to the adoption of a

similar scheme in their own colony.

(x) Live-stock.—Cattle-raising is carried on upon the flat portions of the coastal region and upon the savannahs inland. In 1916 the Abary Cattle Ranch Company held 10 square miles of land of the former sort, on which they had rather over 2,000 head of cattle; and on the Rupununi and Takutu savannahs at the same date there were 12 concessions, held by 11 different ranchers, which covered nearly 600 square miles. The head of cattle in that year was estimated at 100,500, but it is certain that the estimate fell far short of the actual number. Horses were returned at 1,010; sheep at 22,800; goats at the same number; swine at 12,500; and donkeys at 6,500. In its great savannahs the colony contains large areas suitable for stock-raising, and there is room for much greater activity than at present exists, though before any great expansion could occur steps would have to be taken to guard against swamping in wet seasons and to provide drinking water in times of drought. The export of pastoral products is stationary at about £8,000 a year, while the colony imports considerable quantities of meat, butter, milk, and cheese. In 1916 there were four tanneries and leather factories, and seven dairies.

# (b) Forestry

The forest industry is of some importance, and its exports consist of balata to the annual value of £100,000; of timber to the value of £30,000; and of about £8,000 worth of charcoal, the whole amounting

to 6 per cent. of the total exports of the colony. Balata, a gum obtained by bleeding the balata or bullet tree, is a good substitute for gutta-percha, and the increasing scarcity of that article during recent years has promoted the growth of the balata industry, the export having trebled in value between 1902 and 1916, according to the quinquennial averages. Tapping, which is the subject of strict Government regulation, is done by incision on a feather-stitch pattern up the trunk of the tree.

As regards timber, hundreds of woods are found in the colony in all varieties of weight and texture, from woods that are light and soft to the heaviest and hardest in the world, and in all varieties of colour from nearly black through crimson and brown to almost pure white. Greenheart will last for a hundred years or more; a dense, close-grained wood, almost free from knots, it is excellent for shipbuilding and for dock-gates, piles, wharves, or any purpose which involves prolonged immersion in water. It is procurable in logs from 60 to 80 ft. long, and up to 2 ft. in diameter. Mora, though not so durable as greenheart, is a good timber, and is considered to be superior to oak. Wallaba is another useful wood which is widely employed in the colony; being easily split, it is convenient for shingles, palings, and vat staves, whilst its logs are used for posts and joists. Vats made of this wood prove excellent for the storage of water, and its shingles are less inflammable than those made of cedar. Many of the darker and heavier woods are used for furniture-making, and crabwood is a good substitute for mahogany, possessing the merit of being more easily worked. The most singular of the ornamental woods is letterwood, so called from the dark markings across the grain which resemble irregularly formed letters. Being obtained from the heart of the tree, it rarely exceeds 6 in. in diameter. It has been an article of export for many years, and good pieces command high prices. The import of cheap white wood, pitch pine, and American lumber for building

and other purposes is attributable to their greater ease of working; but native woods with their capacity for resisting dry rot, moisture, and ants are undoubtedly superior; and the use of them would probably prove an economy in the long run. In 1916 there were in the colony eleven steam saw-mills, one water-power mill on the Demerara for cutting scantling and plank, and one steam wood-working factory in Georgetown.

Amongst the by-products of the forest industry cordwood and charcoal are the most important. As a general rule charcoal is burnt in hollows made in the sand, but the Chinese woodcutter, with the patient ingenuity of his race, is wont to erect a proper domeshaped kiln of clay, from which he is able to turn out a very superior article. Charcoal is used in "Dutch stoves" throughout the colony, and wood is one of the

principal fuels of the sugar factories.

Very little of the forest region is in private ownership, and on Crown lands timber and balata are got under licences issued by the Department of Lands and Mines. The grant is an oblong area, usually 2 miles in length by half-a-mile wide, and except in the vicinity of the up-country railway its base abuts upon the lower stretch of a river or creek, for the haulage of heavy logs overland is difficult and costly, and the numerous cataracts and rapids of the upper rivers render water transport impossible. As many Guiana trees are of a specific gravity greater than that of water, their carriage by water as an inside cargo would require a vessel of inconveniently great draught. The practice is therefore to brace them with lianes or bush ropes to the outside of large punts, suspended upon which they are floated downstream to market. The Indian who steers the punt makes of it a home for his family. It also serves the subsidiary purpose of conveying the labourers who have been working on the grant.

The resources of the forest are almost inexhaustible. The Crown forests are estimated to cover nearly 80,000 square miles, of which 11,000 are available for timber-cutting, though even in this great area the parts

abutting upon suitable rivers will get worked out in time. Besides timber and balata

"several forest products of considerable importance remain to be utilised, notably, tonka beans, used in perfumery, mangrove and other tanning barks, medicinal barks and seeds, India rubber, hyawa gum, used for incense, oils from crabwood nuts, and a number of palms, . . . nuts, basts, and fibres. Some of these are already well known, while others will no doubt be found of considerable importance in the future."

It may be added that the forests abound in soft woods suitable for paper pulp, of which no use is made at present.

# (c) Land Tenure

Excluding wood-cutting and balata-collecting licences, which are temporary, and give no rights in the soil, 255,177 English acres were held under lease and licence on December 31, 1916; the number of acres held under grant was 740,157; and the number of acres remaining unalienated was 56,271,539. Freeholds, or the equivalent of them, have their origin in grants made under the old Dutch regime or in concessions of Crown lands under the British. Some of the old grants were subject to conditions as to cultivation, road maintenance, and so on, or to quit-rents. Crown lands are not now being sold, except in very small parcels for homesteads, but are leased for periods not exceeding 99 years. Leases for the cultivation of rubber, coconuts, limes, and other permanent agricultural products are for terms of 99 years, free of rent for the first 5 years but subject to improvement conditions. Licences to cut wood and to collect balata are usually for short terms, from 1 to 5 years being the usual periods, but may be renewed on application. The tracts licensed are not surveyed, but must be defined by natural boundaries, such as two creeks. The holders of the licences are subject to regulations regarding the employment of aboriginal Indians, the size of the trees to be cut or tapped, the removal of the

<sup>1</sup> J. Rodway, Handbook of British Guiana, p. 50.

products, which must be under permit, and the payment of royalties. In the Appendix are given statistics of grants, leases, and licences (Appendix B, Table I), and of agricultural distribution (Appendix B, Table II). Of the cultivated area  $57\frac{1}{2}$  per cent. is in Demerara County,  $26\frac{1}{2}$  per cent. in Berbice County, and 16 per cent. in Essequibo County.

(d) State Aid to Agriculture

A Board of Agriculture was established in 1910-11 for the purpose of assisting and improving agriculture in the colony. It is entrusted with powers for dealing with the diseases of animals and plants, and for maintaining botanical gardens in Georgetown and experimental stations in various parts of the country. It is also empowered to collect and publish statistics and information useful to persons engaged in agriculture, and to promote technical instruction. British Guiana being essentially an agricultural country, sound agricultural training is of an importance for its growth which can hardly be over-estimated. A good many of the primary schools have gardens attached to them; a system of model gardens has been revived; and an agricultural school has been established on the same lines and principles as those on which such schools have been set up by the Imperial Department of Agriculture in other West Indian possessions. training in agriculture is given to most of the inmates of the Government Industrial School at Onderneeming. which is worked as a farm school, and has a considerable acreage under coffee, cacao, rubber, limes, fruit trees, etc.

The Royal Agricultural and Commercial Society. instituted in 1844, publishes a journal, keeps up a technical library, and takes in the more important

periodical literature.

# (3) FISHERIES

The fisheries of the colony are not of much importance. Three schooners are sent out from Georgetown for deep-sea fishing outside, the fish chiefly caught being the red snapper, which attains a weight of 30 or 40 lbs. and the grouper, with an occasional so-called dolphin (coryphoena). A fair supply of sea fish is generally kept at the ice depot in Georgetown, but ice is not widely used. Boats, owned mainly by Portuguese, fish off shore for gilbacker, the flesh of which, not unlike sturgeon in taste and quality, commands a good price among the Creoles, whilst its sounds are sold as isinglass. During 1916 isinglass to the value of £1,107 (17,991 lbs.) was exported. The fish on sale in the Georgetown market are mostly rather coarse, though a few, such as the mullet and the butterfish, are more delicate. Fish and prawns, or "shrimps," caught in large quantities by dipping with handnets or baskets in the trenches and canals, form a considerable portion of the animal food of the poorer classes on the estates and in the villages. The fish of the interior are an important article in the dietary of the native Indian.

There is abundance of fish in the waters of the colony, but fishing is comparatively neglected as an industrial pursuit, and there is room for development in several directions, especially in sea-fishing, curing with the aid of ice, smoking, and canning. Salt cod, herrings, and mackerel are imported in considerable quantities, but no fish of the colony are cured.

# (4) MINERALS

Gold.—From 1879, when gold was first discovered in British Guiana, until December 31, 1916, the colony produced 2,523,817 ounces of the metal, of the value of £9,181,105. Mining on a serious scale began in 1886 with an output of 6,518 ounces, worth £23,763, and from then the industry underwent rapid

expansion until 1893-94, in which year production amounted to 138,527 ounces of a value of over £500,000. In the next year, however, a gradual decline set in, which has been almost consistently progressive ever since; over 100,000 ounces were still produced until 1902-3, but the output was down to below 70,000 ounces in 1907-8, and was not much above 50,000 ounces in the years from 1910 to 1913. The year 1913-14 saw a recovery to 82,706 ounces, but 1915 and 1916 have been the leanest years since 1889-90, and that not entirely owing to causes attributable to the war. It is true that the increase in the price of necessaries and the rise in wages in other industries occasioned by the war have reacted adversely upon the goldfields; but the effect of other circumstances has been still more potent. The alluvial workings from which the bulk of the gold is won are showing symptoms of exhaustion; under the improved conditions brought about by the action of local administrative bodies the villagers, who used to go to the goldfields, are tending to take up agriculture around their own homes; and no sensational "finds" have occurred of late. For some years past the industry has also suffered by the gradual withdrawal of the support formerly accorded by the small local capitalist in the way of fitting out little expeditions—a withdrawal due in part to loss of money through the incompetence or dishonesty of those to whom the ventures were entrusted, and in part to increasing desertions on the part of the labourers engaged. The inaccessibility of the fields, the difficulties and delays of navigation, the high price of necessaries, and the virtual impossibility of transporting machinery to the more distant areas are obstacles to success. There is no scope for the peripatetic digger on the Australian or Californian model in a country where the prospector must hire a boat and crew, spend many days in reaching his objective, and after locating his claim return to Georgetown for labourers, rations, and plant before paying operations can be begun. The weather, too, is the small man's enemy, since for weeks together it may be so dry that he cannot get water for washing operations or so wet that his diggings are flooded out, in either of which events his takings vanish while his expenses undergo

no sensible diminution.

Such new life as has been infused into the industry during the last fifteen years has been due for the most part to foreign enterprise, notably to a German syndicate operating at Omai on the Essequibo, an English company dredging on the Konawaruk, and an American company working the Peters Mine on the Puruni. The German company closed down a good many years ago; the Americans suspended their operations in 1910; and their mine remains closed after a brief attempt at resuscitation by other hands. Gold undoubtedly exists over large areas in the colony, and it is possible that the richest deposits have not yet been found; for prospecting in dense forests is a matter of extreme difficulty, and

"for every square mile of gold-bearing country in the colony that has been exploited it may be said there are fifty that have never been trodden by the foot of the prospector."

It is therefore possible that the future may have its surprises, and prophecy is perilous; but it does not seem likely that the gold-mining industry of the colony will ever revive to any marked extent. It may, indeed, be thought remarkable that, despite crude methods and the lack of systematic prospecting, the output should have maintained the comparative stability which it has shown over a long series of years.

By far the largest proportion of the gold won is obtained from alluvial washing on the placers by the "sluice" and "tom" methods, but dredging, quartz-milling, and hydraulicing are also practised. Dredging has been conducted on the Essequibo, Konawaruk, and Potaro rivers, and down to 1915 has yielded 77,715 ounces. A slightly smaller quantity, namely, 68,327 ounces, has been derived from quartz-milling, to

<sup>&</sup>lt;sup>1</sup> Annual Report, 1907-8.

which the Peters Mine on the Puruni, the Barima Mine, and the Aremu Mine on the Cuyuni have been the chief contributors. Hydraulicing has yielded 38,367 ounces, produced by the Omai Gold Mining Company and by the Tassawini Mine on the Barama River. As regards the alluvial deposits, gold is generally found in the channels of present or of former streams, the "pay-dirt" being usually a yellow clay lying under layers of pebbies and gravel. As a rule the gold is scattered and is often in the form of fine dust, but lumps of rich quartz and nuggets are discovered occasionally, the record "find" being a nugget of 334 ounces, which was almost pure gold. The "pay-dirt" is puddled in long or short wooden boxes, known as sluices and toms respectively, where the stones are picked out, the gold and fine dirt being washed through perforated plates into troughs lined with quicksilver; the gold is captured by the quicksilver and is recovered by distilling. The yields from a sluice vary greatly, five or six pounds being recovered on a good day and a few ounces only on a bad one. Mining is carried on entirely upon Crown lands and under licence from the Government, which imposes regulations and exacts royalties.

The chief producing areas since 1898 have been the valleys of the following rivers: the Potaro, with 347,493 ounces; the Cuyuni, with 298,191 ounces; the Barima, with 246,673 ounces; and the Essequibo, with 222,394 ounces. Then come the Puruni, with 140,958 ounces; the Barama, with 108,733 ounces; and the Mazaruni, with 91,308 ounces. Groete Creek, and the Waini, Wenamu, and Demerara districts have pro-

duced together 43,483 ounces.

Precious Stones.—Diamonds and other precious stones have been found in the course of searching for gold. The output in 1916 was 93,782 diamonds, weighing 16,408½ carats and having an estimated value of £34,184. Nearly all of these came from the alluvial workings of the Mazaruni River district. On the average of the years 1902-16 the annual export

has been 7,325 carats of the value of £12,591. Though the stones found have been small, they have been of good water; but the industry has suffered from the cost of transport to the fields.

Quarries.—Granite, quartz, and basalt, with small quantities of metal in them, are quarried. None has ever formed an article of export. No royalty is now

levied on stone quarried on Crown lands.

Mineral Oil.—Indications of the existence of mineral oil have been discovered. On December 31, 1916, there were in existence 9 licences to explore for mineral oil, all affecting areas in the North-West District. Under two of the licences the holders were entitled to prospect by drilling. No results had been recorded up to the end of the year; but mineralogists believe that conditions similar to those met with in Trinidad exist in the colony, and interest in the possibilities of an oil industry has recently been revived by an application for a large concession on the part of an

important British firm.

Bauxite.—Prospecting for this mineral began in 1914-15, when deposits were located on the Upper Demerara River, and quarrying titles were applied for. Rich deposits have also been located in the neighbourhood of Yarikita. In the following year negotiations were opened by the Imperial Government on behalf of the colony for leasing Crown and colony lands on the Demerara River to a large company, which also acquired from private individuals the freehold of, or mining rights over, a further 20,000 acres in the same district. A considerable number of applications for bauxite leases were filed in 1916, and 400 further applications during 1917-18. The applications embrace an area of 652,940 acres. No concessions will be made at present, as the policy of the Government is to reserve the whole question for consideration after the war in connection with the general policy of Imperial trade and defence. The Demerara Bauxite Company is reported to have shipped over 2,000 tons during 1917-18.

Manganese, etc.—According to a recent telegram, prospecting similar to that which led to the foundation of the bauxite industry has furnished further evidence of the mineral wealth of the colony. Samples of manganese ore and mica have been brought back from the interior; valuable deposits are believed to exist; and many applications for licences have been filed. The authorities have offered special terms to miners, prospectors, and mining companies who are willing to place at the disposal of the British Government such minerals as it may require.

China clay, or kaolin, of pure quality exists in large quantities on the Corentyne and Berbice rivers, and it is also found on the Demerara River. Its accessibility for shipping purposes is an advantageous feature, and a large output would apparently be

practicable.

# (5) MANUFACTURES

Over and above the sugar and cacao factories, rice and oil mills, saw mills, and tanneries (which have already been mentioned), the colony cannot boast of much in the way of industrial undertakings. Georgetown is lit by electric light, manufactured by the company that runs the tramway service. In New Amsterdam the electric light undertaking is in the hands of the municipality. There are besides two boot and shoe factories, a steam bakery, a biscuit factory, two match factories, and three cigar factories. The two boot and shoe factories are well equipped, and are capable of producing, the larger from 2,000 to 3,000, and the smaller 500, pairs a week. In each case the product is good and cheap, and finds a ready sale.

# (6) WATER POWER

In the Kaieteur Falls, which are five times as high as Niagara, and have a width varying from 350 to 400 ft., the colony possesses a valuable asset in potentialities for power-production, and the time may come when power generated by the Falls will be used to work the sugar mills, to drive the mining machinery, and to propel the railway trains of the country. For the present, however, the small number of established industries requiring power, the small population of the colony, and the remoteness of the Falls, which are eleven days' journey from Georgetown, render the utilization of their resources commercially impracticable.

# (C) COMMERCE

# (1) Domestic

Domestic commerce calls for no remark beyond what has already been said in connection with industries or will be said under the heading of imports below. Georgetown is the principal, and for practical purposes may almost be regarded as the only, centre of commercial activity. There is a Chamber of Commerce there incorporated under an Ordinance of 1890, its objects being the protection and promotion of the local, inter-colonial, and foreign trade and of the manufactures and industries of the colony.

# (2) Foreign

# (a) Exports

(i) Quantities and Values.—During the period 1902-16 the exports of the colony show a considerable, though not a steady, expansion. Of the value of £1,829,743 in the first of those years, they reached £3,758,066 in the last (see Appendix B, Table III); and from £1,893,666 on the average of the first five years they have risen to £2,741,837 on the average of the last five. They exceed the imports in value.

The principal articles exported are sugar, which accounts for 60 per cent. of the total exports on the average of the period 1902-16; gold, 11½ per cent.; rum,

8½ per cent.; balata, 4½ per cent.; and rice, 2 per cent. Of these sugar, rum, balata, and rice are increasing, while gold is decreasing. Among the less important exports increases have occurred in coconuts, coffee, copra and coconut oil, rubber, and citrate of lime; while molascuit, molasses, and flour show decreases, and timber, diamonds, charcoal, cattle, leather, cacao, and isinglass are stationary or fluctuating. Sugar and its by-products together account for nearly 70 per cent. of the total exports; all agricultural products together account for 7½ per cent.; mining products for 12 per cent.; and forest products for 6 per cent. The quantities and values of the principal exports will be found

in Appendix B, Table IV.

(ii) Countries of Destination.—The United Kingdom, which has taken 43 per cent. of the export trade on the average of the years 1902-16, is the colony's largest customer; British possessions take 38 per cent.; and foreign countries take 19 per cent. (see Appendix B, Tables VI and VII). Exports to the United Kingdom have increased from £772,911 on the average of the years 1902-6 to £1,154,001 on the average of the years 1912-16. Among British possessions Canada takes the lion's share, and exports to her have doubled from the first to the third quinquennial period. The increase was particularly marked in the years 1915 and 1916, and was mainly due to the Canada-West Indies Tariff Agreement, which came into effect in 1913 (see below, p. 78), but may also have been assisted by the abnormal conditions brought about by the war. The British West Indies have a small, but growing, share in the trade. Among foreign countries the chief customer is the United States, with 13 per cent. Exports to America, however, are falling rapidly, and the decrease would have been still more marked but for a sudden expansion, due to the war, in 1916. Once a large buyer of the colony's sugar, the United States have practically closed their markets to it through the more favourable terms given to sugar from Cuba and the Philippines; and this fact, coupled with Canada's preference in favour of West Indian sugar and her taxation of the German product, has diverted the Guiana sugar trade to Canadian channels. France took exports to a considerable value in 1915 and 1916, but normally her custom is insignificant. Exports to Dutch and French Guiana are increasing; to the Dutch West Indies and Portuguese Possessions are decreasing; and to Holland, Germany, and Venezuela are stationary or fluctuating. British Guiana has also a considerable trans-shipment trade; for owing to her geographical position and to her shipping services she acts as a receiving and distributing centre for her French and Dutch neighbours.

# (b) Imports

(i) Quantities and Values.—During the period 1902-16 imports have tended upon the whole to increase, though not to the same extent as exports. Of the value of £1,444,084 in the first of those years, they reached £2,471,944 in the last (see Appendix B, Table III); and from £1,598,142 on the average of the first five years they have risen to £1,920,752 on the average of the last five.

Imports do not call for much detailed comment. There is no dominance of any one article, as of sugar in the case of exports. The chief articles imported (see Appendix B, Table V) are cotton, linen, and woollen manufactures, with a mean percentage of 10; flour, 10 per cent.; manures, 8 per cent.; and machinery, 41 per cent. All of these except the last show a slight tendency to increase. Meat, oils, fish, and bullion and specie, each with a mean percentage of about 3, come next. Oils, bullion and specie, tobacco, butter, boots, and grain show small increases. The great decrease in the import of rice, to which allusion has already been made, is, perhaps, the most striking feature of the imports; whereas nearly 16,000,000 lbs., of the value of £71,513, were imported on the average of the first quinquennial period, only 34,000 lbs., of the value of £320, were imported on the average of the third.

(ii) Countries of Origin.—The colony buys most from the United Kingdom, which has supplied £869,251, or 52 per cent., of the imports on the average of the period 1902-16; British possessions have supplied 14 per cent. and foreign countries 34 per cent. (see Appendix B, Table VI). Amongst British possessions Canada provides 9 per cent. of the imports; the British East Indies 3 per cent.; and the British West Indies 2 per cent. Comparison of the periods 1902-6 and 1912-16 shows that Canada has doubled her trade, and the British East Indies have nearly doubled theirs. As regards Canada, the increase is attributable mainly to the Preferential Tariff Agreement (see below, p. 78). Amongst foreign countries the trade with the United States, which supplies 28 per cent of the imports, is stationary; that with French Guiana and Dutch Guiana is increasing; and that with France, Holland, Venezuela, Portuguese Possessions, and Germany is fluctuating, with a tendency to diminish. The abnormal conditions in 1915 and 1916 brought about by the war have benefited the United States and the adjoining Guianese colonies. Cotton and woollen manufactures, wearing apparel, and silks used to be supplied in large quantities by Germany and Austria through the United Kingdom, and there was also a trade with Belgium and Holland in haberdashery, millinery, and paper manufactures.

# (c) Tariffs

From the point of view of the Customs dues leviable in the colony imports fall into three classes; articles charged with specific duties, articles charged with ad valorem duties, and articles exempted from duty. Specific duties may be further distinguished according as they are levied on a general rate alone or levied partly on a general and partly on a preferential rate under the Preferential Tariff Agreement. In almost every instance the preference under

the agreement has been effected by means of a reduction of the existing rate of duty to form the preferential rate, the former thereby becoming the general rate. In the case of flour the preference has been fixed at 25 cents a barrel of 196 lbs.; in nearly every other case the preferential rate is four-fifths of the general rate, that is to say, it is equivalent to a preference of 20 per cent. Duty is levied at a general rate without preference upon a list of articles which includes beer, ale, cider, etc.; tobacco, cigars, pipes, matches, etc.; guns, pistols, and gunpowder; salt; tea, cocoa, coffee, rice, jams and pickles, and butter substitutes; and oils, petrol, and benzine. Horses, cows, sheep, and swine; staves and headings; lumber; biscuits, butter, lard. condensed milk, cheese, tinned fish, dried fruits, pickled meats, and preserved vegetables; wheat, corn, beans, and farinaceous preparations; hay and chaff; common soap; paints; and bituminous coal are chargeable with duties on a general and on a preferential rate. Ad valorem duties are levied on brooms and brushes, boots, shoes, and slippers, glass, furniture, plated ware, wire fencing and metal gates, etc. The list of exemptions includes agricultural implements; chemicals for water purification and gold mining; launches and steamers; railway plant; machinery for agriculture, electric light, railways, mining, sawmills, foundries, etc; manures and agricultural washes; seeds, plants, and bulbs; steam boilers, diggers, and dredgers; telegraph and telephone materials; and tools for artisans, miners, and gold diggers.

Preferential Tariff Agreement.—On June 21, 1913, there came into operation a reciprocal trading agreement between the Governments of Canada on the one hand and of certain of the British West Indian possessions, including British Guiana, on the other. Under the terms of this agreement, which is to last for 10 years, the customs duties on certain goods, which are produced or manufactured in Canada, imported by parties to the agreement, are not to be charged with more than four-fifths of the duties ordinarily in force,

except that the preference in favour of Canadian flour is to be not less than 12 cents (6d.) per 100 lbs. The duties on certain goods, the produce or manufacture of the contracting colonies, imported into Canada, are likewise to pay not more than four-fifths of the duties ordinarily in force, except that there are special provisions for sugar and molasses, whilst cacao beans, limes, and lime-juice are entitled to free entry. British Guiana has also admitted the United Kingdom and Newfoundland to the benefit of this arrangement. It is mainly in consequence of this agreement that Canada is increasing her hold on the export and import trade of the colony, and the United States are losing theirs (see Tables VII and VIII, Appendix B). In the matter of flour, for instance, Canada was already making headway in the local market, and the progress has been much accelerated. Canadian flour represented 29 per cent. of the total flour imports in 1912, 51½ per cent. in 1913, and 75 per cent. in 1914, the figures of the United States for the same years being respectively 68 per cent., 48 per cent., and 24½ per cent. Similarly with sugar—British Guiana's export of sugar to Canada was worth £467,181 in 1906-7, and £1,129,159 in 1915, the figures of the United States for those years being respectively £351,115 and £37,835.

# (D) FINANCE

# (1) Public Finance

The public finance of the colony is sound. In the years since 1888-89 there have been deficits on only five occasions, and the sum total of these has been largely exceeded by the surplus of revenue over expenditure in other years. The revenue is derived mainly from customs duties and excise dues, which produce 80 per cent. of the receipts. The judicial administration (including police and prisons), the medical department (including hospitals), and public works are the chief items in the expenditure. On the annual average of

the years from 1904-5 to 1910-111 the budget was as follows:-

#### Revenue (1)

		£
Customs		 325,948
Excise		 104,676
Judicial fees, etc.		 19,479
Posts and telegrap	hs	 17,232
Gold industry		 15,403
Government lands,	etc.	 14,446
Crown lands		 11,512
Repayment of loans	S	 7,193
Miscellaneous		 21,672
Total		 £537,561

(2) Expenditure	
	£
Justice, police and prisons	91,409
Medical departments, hospitals,	
etc	68,823
Public Works	51,128
Municipal and other subventions	43,709
Public Debt	41,603
Pensions	39,354
Education	35,149
Receiver-General, Government	
Secretariat, etc	26,262
Post Office	22,881
Ministers of religion	19,960
Lands and mines	15,989
Customs and excise	14,845
Poor	13,154
Science and agriculture	8,306

<sup>&</sup>lt;sup>1</sup> Annual Reports. The period selected for purposes of illus tration seems to be the most convenient for the following reasons: a customs surtax of 5 per cent. was abandoned at the end of 1903-4, considerably reducing the revenue; an extensive rearrangement of the system of accounts was carried out in 1911-12, and the financial year was changed in 1915.

...£525,732

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Immigration department		7,140
Harbours and pilotage		3,492
Miscellaneous		22,528
	_	

Total

On December 31, 1916, the colony had a surplus balance of assets over liabilities amounting to £110,697. The public debt at that date was £879,990. Full provision is made each year for sinking fund and interest in respect of loans, for which the revenues of the colony are directly pledged, and at the date mentioned the sum of £202,820 stood to the credit of the

Sinking Fund account.

Of the moneys raised by loan for public purposes a considerable part has been advanced to corporations and public bodies. At the close of 1916 the funded debt of Georgetown was £69,378; that of New Amsterdam was £6,937. Georgetown has a revenue and expenditure each of about £60,000 a year, the former somewhat exceeding the latter, and being raised by town taxes, market fees, water rates, etc. The budget of New Amsterdam balances at about £10,000.

# (2) Currency

Accounts are kept in dollars and cents, the dollar being taken as equivalent to 4s. 2d.; but, with the exception of notes issued by the local banks, the currency consists mainly of British gold, silver, and bronze, with some foreign gold and local silver. The United States eagle has a legal value of \$10 or £2 1s., and so in proportion with the double, half, and quarter eagles. The British Guiana and West Indies fourpenny piece or groat was authorized and coined in 1891 on an urgent demand from the colony that the British fourpenny piece, which had gone out of circulation, should be replaced. This coin has a special utility in the colony as being the equivalent of the "bit" or quarter guilder, which used to be the favourite coin in British Guiana, and was the basis of the popular mode of reckoning.

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British and foreign gold is held by the banks, but there is little in circulation. Notes are issued in denominations of \$5, \$10, and \$20, by the Colonial Bank and the Royal Bank of Canada. On December 31, 1916, there were in circulation notes issued by the former bank to the value of £114,531, and by the latter to the value of £88,977.

# (3) Banking

The Colonial Bank and the Royal Bank of Canada have establishments in Georgetown, with branches at New Amsterdam. The latter bank is the successor of the British Guiana Bank, the assets of which it has purchased. An Ordinance of 1914-15, which provided a general banking law for the colony, preserved the right of the Government to issue notes, and regulated their issue by companies and corporations, the right of issuing being confined to existing banks authorised by the Ordinance and to such companies and corporations as may deposit security at par value for the amount issued.

On December 31, 1915, there were 50 post-office savings banks conducted by the Government. During the year 28,856 depositors invested £142,458, and withdrew £133,319, and at the close of the year the total amount to the credit of depositors was £214,525. East Indians owned £85,708 of the amount, Portuguese £18,619, and Chinese £3,340. Interest at 3½ per cent. is allowed on deposits up to \$2,500.

With a view to the promotion of thrift and of united action among the agricultural population and the furtherance of agricultural prosperity, a Co-operative Credit Banks Ordinance was passed in 1914-15, providing for the granting of State aid to such banks and for their supervision by a central committee. So far as can be judged at present, the banks seem likely to prove a success.

"An encouraging start," says the Annual Report for 1916, has been made in establishing co-operative credit banks in the colony. On December 31, 1916, thirteen banks had been

registered, with a working capital of £2,035. The loans have been made on a basis of one dollar for every dollar subscribed by shareholders to the capital of the borrowing banks. The year's work has done much to familiarise the masses of the colony with the aims, objects, and utility of co-operative credit institutions, and it is pleasing to note that the banks are receiving the support of all classes in the districts in which they exist. Without exception all the banks have fulfilled their obligations in respect of the repayment of advances made to them, and in like manner the people who have obtained loans from them have met theirs with equal punctuality. Still more encouraging is the fact that the banks are in a position to set aside four per cent. of their income as the nucleus of a reserve fund. The outlook of their development is, therefore, decidedly encouraging."

#### NOTE.

The present condition and future prospects of British Guiana are further discussed in *Introduction* to the Guiana Colonies, No. 134 of this series, pp. 17-21.

# APPENDIX

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# (A) EXTRACTS FROM TREATIES, ETC.

# I.—CONVENTION BETWEEN GREAT BRITAIN AND THE NETHERLANDS

Signed at London, 13th August, 1814

#### ARTICLE I

His Britannic Majesty engages to restore to the Prince Sovereign of the United Netherlands, within the term that shall be hereafter fixed, the colonies, factories, and establishments which were possessed by Holland at the commencement of the late war, viz., on the 1st January, 1803, in the seas and on the Continents of America, Africa, and Asia, with the exception of the Cape of Good Hope and the Settlements of Demerara, Essequibo, and Berbice, of which possessions the High Contracting Parties reserve to themselves the right to dispose by a Supplementary Convention, hereafter to be negotiated according to their mutual interests; and especially with reference to Articles VI and IX of the Treaty of Peace signed between His Britannic Majesty and His Most Christian Majesty on the 30th May, 1814.

Here follow other VIII Articles.

#### First Additional Article.

In order the better to provide for the defence and incorporation of the Belgic Provinces with Holland, and also to provide, in conformity to Article IX of the Treaty of Paris, a suitable compensation for the rights ceded by His Swedish Majesty under the said Article, which compensation it is understood, in the event of the above union, Holland should be liable to furnish in pursuance of the above stipulations; it is hereby agreed between the High Contracting Parties that His Britannic Majesty shall take upon himself and engage to defray the following charges:—

Section 1.—The payment of £1,000,000 sterling (24,000,000 francs) to Sweden, in satisfaction of the claims aforesaid, and in

pursuance of a covenant this day executed with His Swedish Majesty's Plenipotentiary, a copy of which Convention is attached to these additional Articles.

Section 2.—The advance of £2,000,000 sterling, to be applied in concert with the Prince Sovereign of the Netherlands, and in aid of an equal sum to be furnished by him towards augmenting

and improving the defences of the Low Countries.

Section 3.—To bear equally with Holland such further charges as may be agreed upon between the High Contracting Parties and their Allies towards the final and satisfactory settlement of the Low Countries in union with Holland and under the dominion of the House of Orange, not exceeding in the whole the sum of £3,000,000, to be defrayed by Great Britain.

In consideration and in satisfaction of the above engagements as taken by His Britannic Majesty, the Prince Sovereign of the Netherlands agrees to cede in full sovereignty to His Britannic Majesty the Cape of Good Hope and the Settlements of Demerara, Essequibo, and Berbice, upon the condition, nevertheless, that the subjects of the said Sovereign Prince, being proprietors in the said colonies or settlements, shall be at liberty (under such regulations as may hereafter be agreed upon in a Supplementary Convention¹) to carry on trade between the said settlements and the territories in Europe of the said Sovereign Prince.

# II.—TREATY BETWEEN GREAT BRITAIN AND VENEZUELA

Signed at Washington, 2nd February, 1897

#### ARTICLE I

An Arbitral Tribunal shall be immediately appointed to determine the boundary line between the Colony of British Guiana and the United States of Venezuela.

#### ARTICLE II

The Tribunal shall consist of five jurists: two on the part of Great Britain, nominated by the members of the Judicial Committee of Her Majesty's Privy Council . . . ; two on the part of Venezuela, nominated, one by the President of the United States of Venezuela . . . and one nominated by the Justices of the Supreme Court of the United States of America . . . ; and of a fifth jurist to be selected by the four persons so nominated; or in the event of their failure to agree within three months

<sup>&</sup>lt;sup>1</sup> This convention was signed at London, August 12, 1815.

from the date of the exchange of ratifications of the present Treaty, to be selected by His Majesty the King of Sweden and Norway. The jurist so selected shall be President of the Tribunal. . . . .

#### ARTICLE III

The Tribunal shall investigate and ascertain the extent of the territories belonging to, or that might lawfully be claimed by, the United Netherlands or by the Kingdom of Spain respectively at the time of the acquisition by Great Britain of the Colony of British Guiana, and shall determine the boundary line between the Colony of British Guiana and the United States of Venezuela.

#### ARTICLE V

The Arbitrators<sup>1</sup> shall meet at Paris within sixty days after the delivery of the printed arguments mentioned in Article VIII.

. . . All questions considered by the Tribunal, including the final decision, shall be determined by a majority of all the Arbitrators. . . .

#### III.—TREATY BETWEEN GREAT BRITAIN AND BRAZIL

Signed at London, 6th November, 1901

His Majesty the King of the United Kingdom of Great Britain and Ireland, Emperor of India, and the President of the United States of Brazil, being desirous to provide for an amicable settlement of the question which has arisen between their respective Governments concerning the boundary between the Colony of British Guiana and the United States of Brazil, have resolved to submit to arbitration the question involved. . . .

#### ARTICLE I

His Majesty the King of the United Kingdom . . . and the President of the United States of Brazil agree to invite His Majesty the King of Italy to decide as Arbitrator the question as to the above-mentioned boundary.<sup>2</sup>

<sup>&</sup>lt;sup>1</sup> The Arbitrators were Lord Russell of Killowen, Lord Chief Justice of England; Sir R. Henn Collins, a Justice of Her Britannic Majesty's Supreme Court of Judicature; the Hon. Melville Weston Fuller, Chief Justice of the United States of America; the Hon. David J. Brewer, a Justice of the Supreme Court of the United States of America; and His Excellency Frederic de Martens, Permanent Member of the Ministry of Foreign Affairs in Russia. The arbitral decision was unanimous.

<sup>&</sup>lt;sup>2</sup> The decision of the King of Italy was given on June 15, 1904.

#### ARTICLE II

The territory in dispute between the Colony of British Guiana and the United States of Brazil shall be taken to be the territory lying between the Takutu and the Cotinga and a line drawn from the source of the Cotinga eastward, following the watershed to a point near Mount Ayuncanna; thence in a south-easterly direction, still following the general direction of the watershed as far as the hill called Annai; thence by the nearest tributary to the Rupununi, up that river to its source, and from that point crossing to the source of the Takutu.

#### ARTICLE III

The arbitrator shall be requested to investigate and ascertain the extent of the territory which, whether the whole or a part of the zone described in the preceding Article, may lawfully be claimed by either of the High Contracting Parties, and to determine the boundary line between the Colony of British Guiana and the United States of Brazil.

[3933]

(B) STATISTICS

TABLE I.-GRANTS, LEASES, AND LICENCES.1

-			Wood	
lear.	No.	Grants, etc.	cutting Licences.	Remarks.
		Rhynland Acres		The Rhynland acre=300 sq. roods, the Rhynland rood being about
Annual Average 1886–1901	80	6,899.31	29	In 1898 the acreage rose from about 5,000 to 15,437 through a
				reduction in the price of Crown lands under new Regulations.
-2	184	57,600.10	21	The large increase in 1901-2 was caused by the proprietors of
-3	202	7,706.80	9	estates securing the second depths of their plantations before
-4	400	18,844.50	52	the abolition of their exclusive rights in them under the
-2	318	19,153.10	99	Ordinance of 1900 and by the fact that opportunity was taken
9-	215	18,455.88	48	to amalgamate all grants, etc., in one title.
1906-7	186	17,117.44	37	The decrease in 1902-03 was due to the reduction from 100 acres
2	277	15,118 .86	46	to 25 acres of the maximum granted to one individual.
6-	268	15,064.47	36	
-10	166	10,298.78	20	
- 1	256	41,394.88	-	The 1910-11 acreage includes leases for cattle grazing and wood-
-12	186	30,159.70	193	cutting, and the increase in the number of licences arose from
- 1	310	13,424.67	239	the fact that licences, instead of mere permissions, were required
-14	383	12,072.21	260	under new Regulations.
		English Acres		
4-15	118	2,111.14	196	Under Ordinance No. 20 of 1914 English was substituted for
AprDec.	59	2,963.49	208	Rhynland measure.
	550	50,512.09	128	A reduction was made in 1914-15 in the area granted under a lease.
	١			2000

1 Blue Book, 1916.

TABLE III. - AGRICULTURAL DISTRIBUTION, 1916.

		Canes.	Rice.	Coconuts.	Rubber.	Coffee.	Cacao.	Limes.	Plantains, ground provisions, etc.	Total.
Demerara—		Acres	Acres	Acres	Acres	Acres	Acres	Acres	Acres	Acres
Abary	: :	12,400	15.279	4.283	Te	23	33	.14	802	28,721
West Coast	:	10,233	4,470	2,230	439	152	113	16	1,205	18,858
West Bank	:	6,322	580	787	469	2,023	450	14	3,155	13,800
Kast Bank	:	10,335	1,949	442	195	20	300	27	360	13,658
Upper Demerara River	::	428.7	1,224	2,021	1,134	27.1	863	22 4	2,248	5,952
Total	:	49,282	28,998	11,292	2,320	2,531	1,764	86	10,779	107,064
o River	:	2,308	4,072	1,530	1,108	9	27	358	411	9,820
Esseguibo	:	2,678	2,541	1,984	100	20	00	00	296	7,625
South Essequibo Coast	:	2,199	1,925	202	37	42	102	116	287	5,210
	:	:	272	1,456	7.1	1,336	132	7	1,271	4,545
North-West District	:	:	31	85	594	633	16	:	1,350	2,715
Total	:	7,185	8,841	5,557	1,910	2,043	280	484	3,615	29,915
Corentyne Coast	1:	10,223	9,481	1,703			40	:	958	22,405
Canje River	:	3,583	5,597	776	563	10	:	325	2,237	13,091
West Coast	: :	1,685	3,647	553	10		31	104	198	6,096
Total for Colony	: :	21,879	19,183	3,262	614	25	777	432	4,034	49,506

1 Blue Book, 1916.

TABLE III 1.—IMPORTS, EXPORTS, AND TOTAL VOLUME OF TRADE.

-	1902-3	1903-4	1904-5	1905-6	. 1906-7
	£	£	£	£	£
Imports Exports	1,444,084 1,829,743	1,656,024 1,810,038	1,537,591 1,991,048	1,662,205 1,994,394	1,690,804 1,843,107
Total	3,273,827	3,466,062	3,528,639	3,656,599	3,533,911
-	1907-8	1908-9	1909–10	1910–11	1911–12
	£	£	£	£	£
Imports Exports	1,765,358 1,711,543	1,838,947 2,104,176	1,774,457 1,985,337	1,749,766 1,820,198	1,811,180 2,172,766
Total	3,476,901	3,943,123	3,759,794	3,569,964	3,983,946
-	1912–13	1913–14	1914-15	1915	1916
	£	£	£	£	£
Imports	1,703,355 1,798,597	1,694,155 2,193,120	1,766,094 2,623,064	1,968,214 3,336,338	2,471,944 3,758,066
Total	3,501,952	3,887,275	4,389,158	5,304,552	6,230,010

### Annual Averages.

-	1902-6.	1907–11.	1912–16.	1902–16
Imports Exports	 £ 1,598,142 1,893,666	£ 1,787,942 1,958,804	£ 1,920,752 2,741,837	£ 1,768,945 2,198,102
Total	 3,491,808	3,746,746	4,662,589	3,967,047

<sup>1</sup> Compiled from the Administration Reports and 1916 Blue Book.

TABLE IV 1.—PRINCIPAL ARTICLES OF EXPORT.

		H	Exports.		
	Annual Average 1902-6.	Annual Average 1907-11.	Annual Average 1912-16.	Mean.	Percentage of Total Exports.
g (ton	119,579	104,961	98,049	107,529	
Sugar {£	1,173,076	1,177,615	1,571,270	1,307,320	59 .93
[079	00 000	61,948	56,386	70,668	
Gold £	344,747	225,605	205,517	258,625	11 77
Rum { proof gallon	3,554,669	2,854,115	3,643,992	3,350,925	
£ £	107,069	128,587	333,641	189,766	8.63
Balata { lb		1,080,549	1,191,900	941,392	
[ #		111,477	138,169	97,514	4:44
Rice { lb		8,546,880	17,748,033	8,795,953	2 .17
( *	The state of the s	49,065 27,974	119,771 32,683	57,562 29,500	1 .34
[ ton		8,488	3,527	6,412	1 09
Molascuit {		20,301	13,298	19,932	-91
Conrat		4,601	9,279	7,325	
Diamonds	13,470	7,766	16,536	12,591	*58
Charcoal	2 7.716	8,361	7,326	7,801	.37
Malana [gallon	8 336,093	176,228	75,589	195,970	
E E	11,189	7,898	3,395	7,494	*34
	4,945	6,301	5,704	5,650	*26
Flour { barrel		3,001	2,094	4,397	1 .16
( 2	7,118	2,911	4,048	3,692	17
Coconuts { No	The second secon	728,451	1,505,941	795,894 2,715	13
Hides and Leather	ε 455 2,030	2,604 2,342	5,088 2,917	2,429	111
Cowt	70.000	710	2,047	919	1
Coffee { £	"	1,610	5,089	2,233	10
Cewta	731	637	459	609	1
Cacao {£	2,261	2,034	1,203	1,833	.08
Copra and Oil :	€ _	439	3,562	1,333	.06
Teingless Sll		16,967	15,142	15,716	
Isinglass {		1,165	1,114	1,124	.05
Rubber { ll		4,725	8,621	4,957	200
[ ]		633	523	452	02
	E — 117,941	174 020	970 314	187 498	8 . 53
Other Exports	€ 117,941	174,029	270,314	187,428	0 00
Total Exports :	£ 1,893,666	1,958,804	2,741,837	2,198,102	100.0

<sup>&</sup>lt;sup>1</sup> This Table is compiled from the Administration Reports, 1916 Blue Book and Statistical Abstract.

TABLE VI.—PRINCIPAL ARTICLES OF IMPORT.

		1	mports.			
	Annual Average 1902-6.	Annual Average 1907-11.	Annual Average 1912-16.	Mean.	Percentage of Total Imports.	
Cotton, Linen, and Woollen	100 015	107 000	100 105	100 001	10.00	
Manufactures £	169,817	191,829	188,137	183,261	10.36	
Flour { barrels	185,702	180,798	175,885	180,795	10.00	
l ±	166,754	191,519	189,758	182,677	10 .32	
Manures £	133,939	152,237	148,072	144,749	8.17	
Machinery £	84,443	76,380	77,780	79,534	4.50	
Meat { barrels	100000000000000000000000000000000000000	17,517	15,139	17,715	0 00	
l z	62,381	62,185	54,827	59,798	3.38	
Oils { gallons	The second control of	816,280	1,008,666	828,408		
l ±	38,820	54,457	66,081	53,119	3.00	
Fish { cwts.	THE CANADAS AND ASSESSED TO	43,819	42,155	45,459	THE CASE OF	
l £	53,910	47,232	50 196	50,446	2:85	
Bullion and Specie £	28,317	55,904	65,603	49 941	2 .83	
Haberdashery £	34,321	56,655	29,315	40,097	2.26	
Coal, Coke, etc. { tons	30,290	32,962	31,669	31,640	Constitution of the last	
£	29,006	33,453	41,005	34,448	1.95	
Lumber { feet	5,326,638	3,924,314	3,651,716	4,300,889		
( 2	31,565	29,775	24,276	28,535	1 .61	
Tobacco £	22,007	28,024	30,972	27,001	1 .2	
Rice { lb.	15,958,488	965,963	34,091	5,652,847	1	
Mice [£	71,513	3,970	320	25,934	1 .47	
Hardware £	22,705	33,402	21,172	25,760	1 .46	
Beer £	20,254	27,753	27,798	25,318	1.43	
Postton [1b.	478,635	494,998	497,039	490,224	1	
Butter {£	20,486	23,906	26,913	23,768	1.34	
Boots £	21,203	22,025	26,402	23,210	1 .31	
Grain £	15,056	22,577	24,301	20,645	1.16	
Spirits   Spirits	20,184	25,217	22,044	22,482		
Spirits { ganons	11,556	15,043	13,036	13,212	.75	
Onium [1b.	2,566	1,482	4,781	2,943		
Opium $\begin{cases} 10. \\ \pounds \end{cases}$	1,856	1,314	3,821	2,330	.13	
Other Imports £	558,235	658,304	810,819	675,786	38 - 20	
					- 3	
Total Imports £	1,598,142	1,787,942	1,920,752	1,768,945	100.00	

<sup>&</sup>lt;sup>1</sup> This Table is compiled from the Administration Reports, 1916 Blue Book, and Statistical Abstract.

TABLE VI1.-TRADE 2 WITH THE PRINCIPAL COUNTRIES.

EXPORTS.
Average, Average, Average,
1907-11.
772,911 771,351 1,154,001 899,421
478,899* 747,731 947,529 724,720 23,787 70,020 136,375 76,728 2,108 3,439 4,173 3,240
215,743 144,839 154,839 15,600
8,845 6,401 33,700 47,179 1,870 947
3,612 1,264 18 1,631 1,276* 128 782 729 7,540* 7,318 6,023 6,960
1,829,028 1,882,799 2,593,549 2,101,792
772,911 771,351 1,154,001 899,421 504,801 821,190 1,088,156 804,716 551,316 290,258 351,392 397,655
1,829,028 1,882,799 2,593,549 2,101,792

This Table is compiled from the Statistical Abstract, Administration Reports, and 1916 Blue Book.
 Excluding Trans-shipment Trade.
 These figures are approximate.

TABLE VIII-EXPORT TRADE WITH THE UNITED KINGDOM, CANADA, AND THE UNITED STATES.

	1	906-7	1915	Annual Average 1906/7-10/11	Annual Average 1911-15
UNITED KINGDOM.					
Chilled Hindboan		£	£	£	£
Sugar and Molasses .	. 2	17,163	526,223	264,928	401,302
D.		98,884	436,387	108,559	209,294
D., 111: 0.11	1000	75,535	178,433	240,938	213,350
Dalata		39,320	141,060	82,178	117,019
Diamondo		5,898	10,702	6,339	13,166
Cattle Books		39,520	10,397	25,668	14,391
Window and Lumber	100	10,061	9,251	12,865	14,551
Other Persons		85,783	15,967	47,629	44,332
Total Exports .	. 8	02,164	1,328,420	789,104	1,027,405
CANADA.	1				1
Sugar and Molasses .	. 4	67,181	1,129,159	658,928	808,537
D		3,227	11,175	6,041	9,700
Other Francis		4,354	757	2,786	2,326
Total Exports	4	74,762	1,141,091	667,755	820,563
United States.	1				
Sugar and Molasses	3	51,115	37,835	190,169	119,430
Dalata		16,785	18,542	18,601	17,705
Other Francis		46,937	22,930	17,497	14,800
Total Exports	4	14,837	79,307	226,267	151,935

<sup>1</sup> This Table is founded upon the Administration Reports.

TABLE VIII.1-IMPORT TRADE WITH THE UNITED KINGDOM, CANADA, AND THE UNITED STATES.

	1906-7	1915	Annual Average 1906/7-10/11	Annual Average 1911-15
UNITED KINGDOM.	12011	ole/H		
ONITED RINGDOM.	£	£	£	£
Linen, Cotton, etc. Goods	THE CO. LANSING	169,089	151,085	170,707
Manures	138,489	151,122	138,349	124,735
Haberdashery	44,861	22,596	44,881	31,116
Tobacco	11,148	20,634	13,437	17,261
Soap	16,029	19,891	14,306	18,894
Beer, etc	22,438	19,027	24,275	25,660
Hardware	19,863	14,666	15,799	17,507
Coal and Coke	29,628	14,648	27,706	21,552
TP 1	4,813	11,884	5,993	28,032
Other Imports	473,735	439,387	461,951	426,470
Total Imports	921,684	882,944	897,782	881,934
CANADA.	ra inur			
Flour and Grain	28,520	178,781	50,589	104,990
Fish	51,484	38,593	50,091	25,221
Vegetables	14,622	16,780	15,518	11,798
Wood, Timber, etc	4,507	17,314	5,852	11,366
Cheese	848	4,799	1,172	2,375
Other Imports	14,026	20,620	8,475	14,043
Total Imports	114,007	276,887	131,687	169,793
UNITED STATES.				SILSE IN
Flour and Grain	160,305	46,579	167,535	96,571
Meat	66,223	61,306	70,095	66,907
Oil	36,594	45,645	39,314	43,086
Wood, Timber, etc	PERSONAL PROPERTY AND ADDRESS OF THE PERSON NAMED IN COLUMN TWO IS NOT THE PERSON NAMED IN COLUMN TO THE PERSON NAMED IN COLUM	67,849	38,018	39,028
Linen, Cotton, etc. Goods	25,070	38,291	17,597	18,667
Coal and Coke	4,484	25,020	21,978	15,508
Tobacco	10,242	9,358		11,085
Other Imports	153,040	164,611	118,366	127,395
Total Imports	479,277	458,639	484,405	418,247

<sup>1</sup> This Table is founded upon the Administration Reports.

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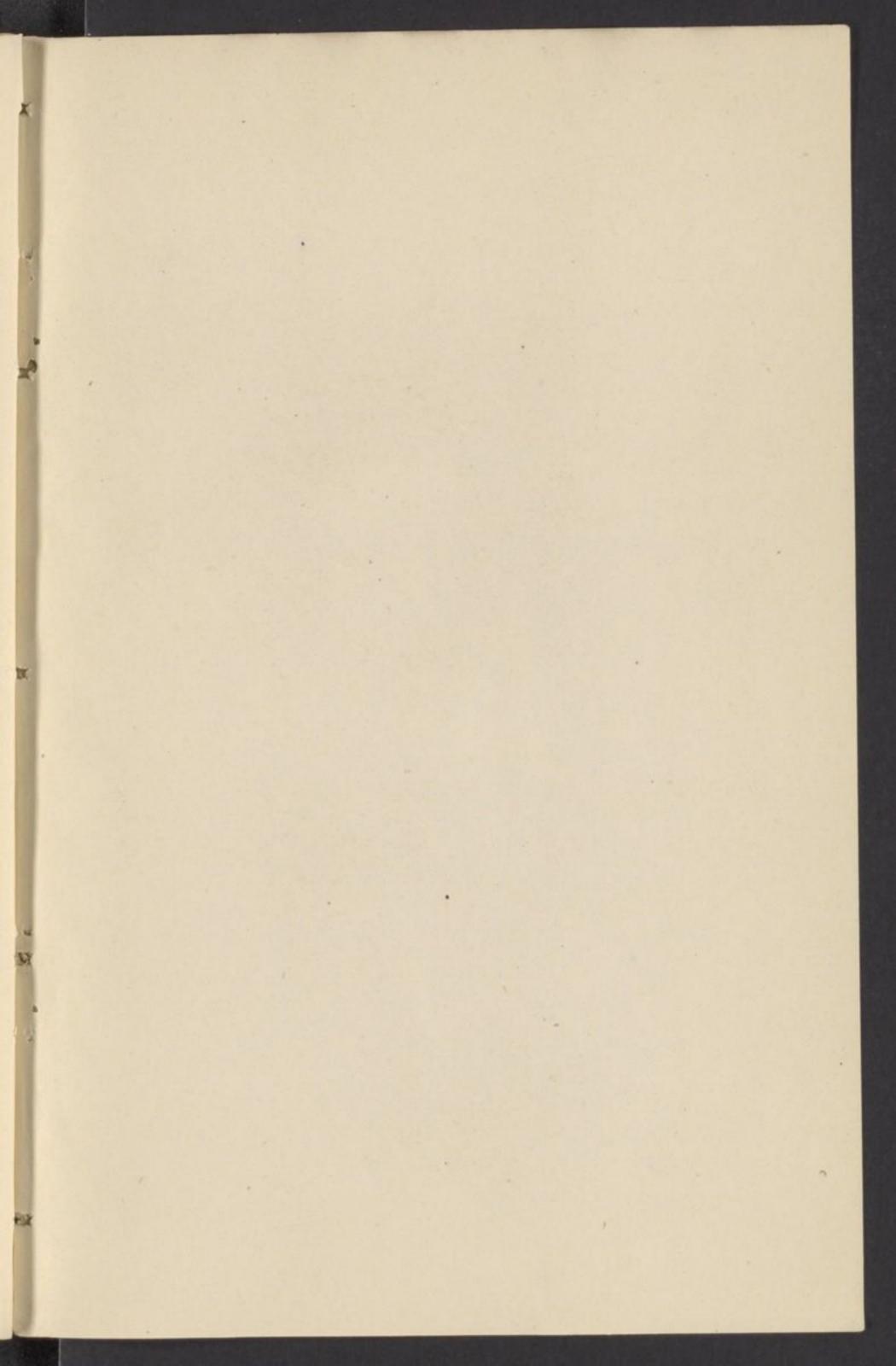
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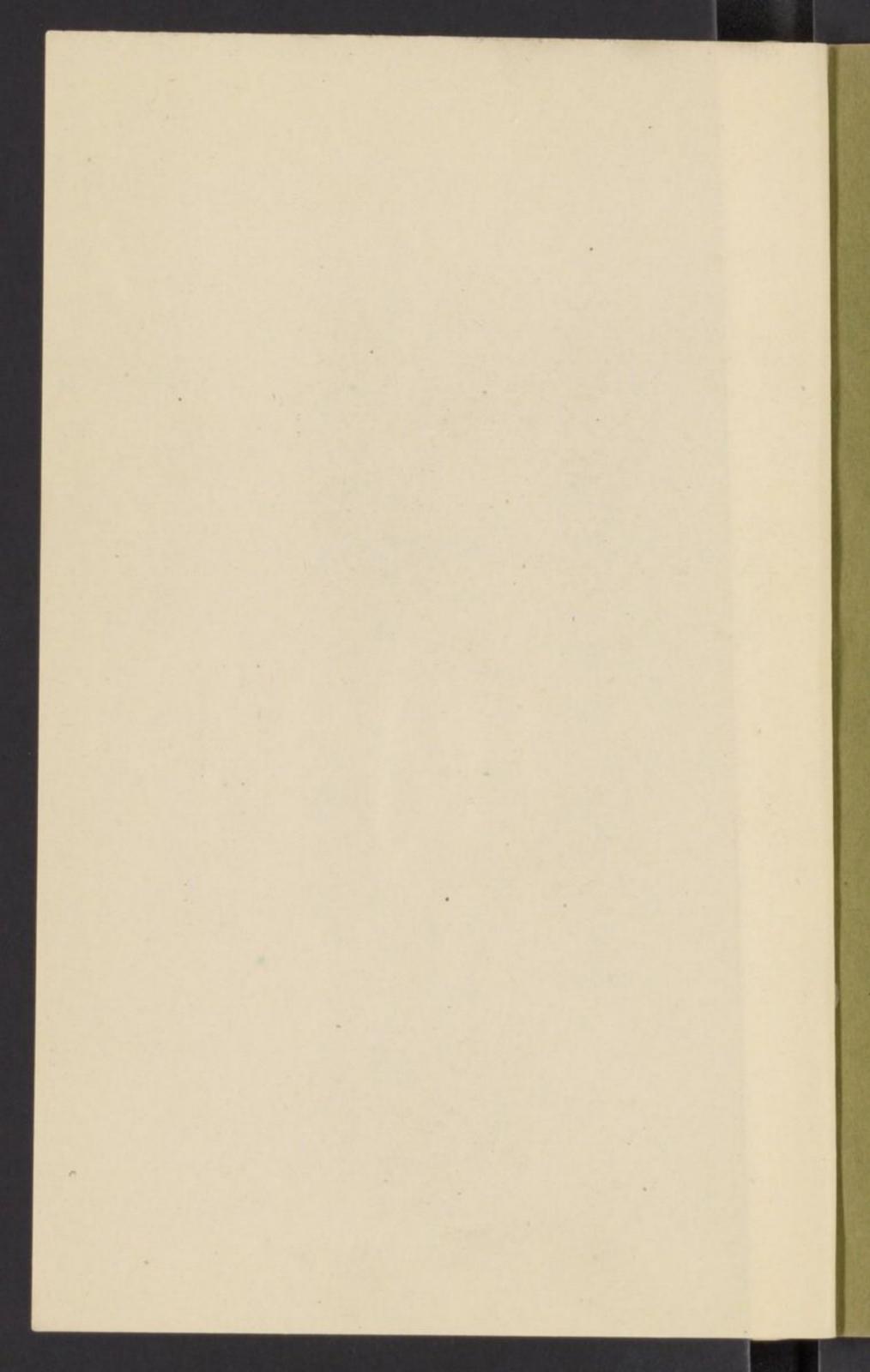
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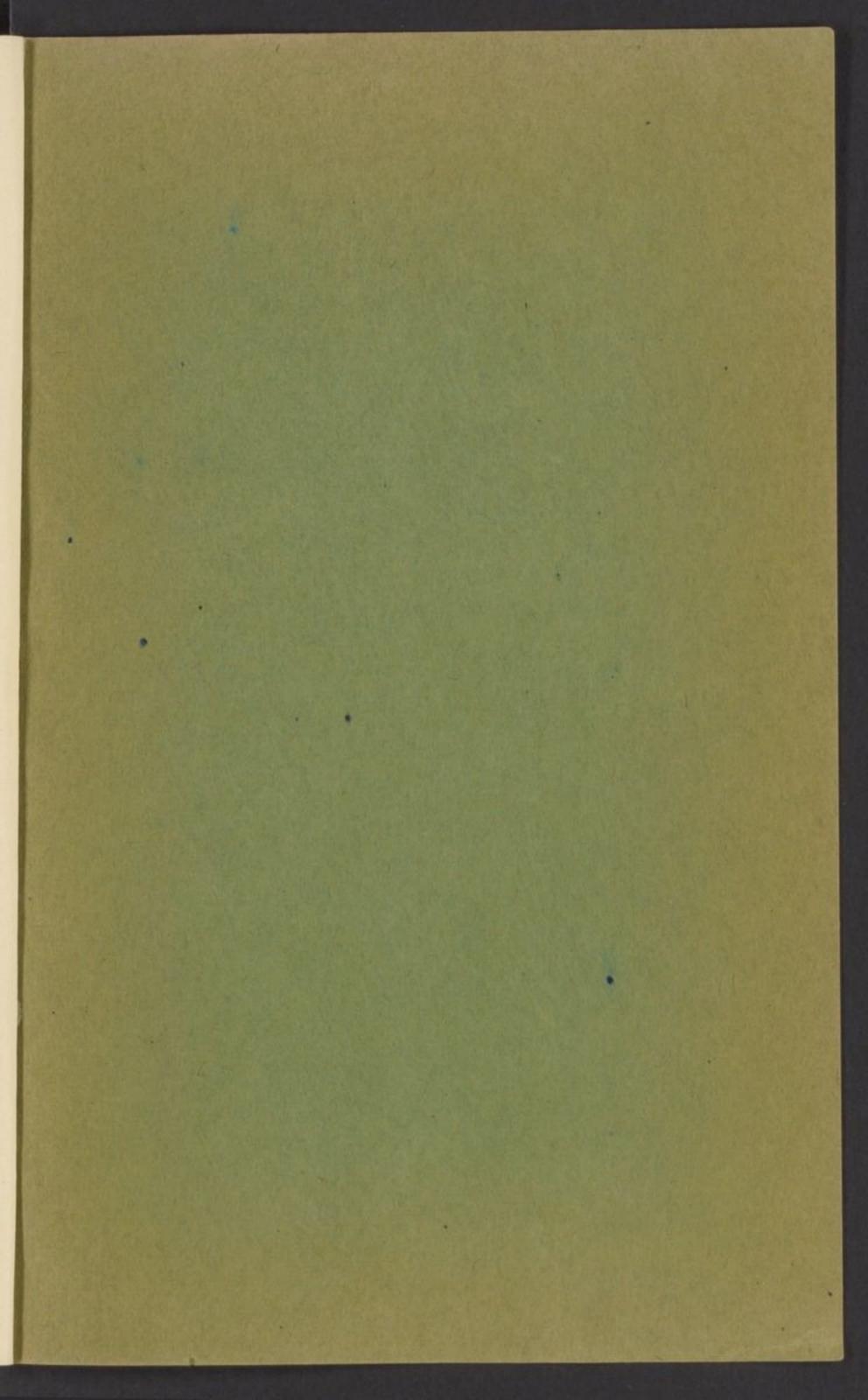
# MAP

British Guiana is covered by the War Office Map British Guiana (G.S.G.S. 2384), on the scale 1:1,584,000. 1908.

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