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FRENCH GUIANA



May 1919

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FRENCH GUIANA



May 1919

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I. GEOGRAPHY PHYSICAL AND POLITICAL

(1) Position and Boundaries

The colony of French Guiana is situated in the northeast of the continent of South America, between Dutch Guiana and Brazil. It lies between latitudes 1° 55′ and 5° 50′ north, and longitudes 51° 35′ and 55° 5′ west. Its greatest length is approximately 260 miles, and its greatest breadth about 200 miles.

French Guiana is bounded on the north by the Atlantic Ocean; on the south by the chain of the Tumuc Humac Mountains; on the east by the River Oyapok; and on the west by the River Marowyne and

its tributary the Awa (Itany).

The area of the colony is not exactly known, but it appears to cover over 34,000 square miles.

(2) SURFACE, COAST, ISLANDS, AND RIVER SYSTEM

Surface

Roughly speaking, the country may be divided into three zones: the savannah, the forest and mountain

area, and the cultivated land.

The savannahs are of two kinds, the "swamp savannah" and that of the "hinterland." The former lies between the maritime border and the high woodlands, and the latter behind the forests of the interior. They are arranged mainly in parallel ridges and valleys,

[285-22]

Worked out from map (Maurice Guffroy, Paris, 1902), plus award of 1905, equals 34,515 square miles; Statesman's Year Book, 1918, 32,000 square miles; New International Year Book, 1917, 34,069 square miles.

and remain entirely in a state of nature. The savannah lands cover some 15,000 square miles, and the average altitude is about 300 ft. to 400 ft. above the sea. The land is broken in places by granitic rock, blocks of conglomerate and isolated masses of quartz and clay; while clumps of trees, mostly palms, rise here and there

where the soil is capable of their support.

The Tumuc Humac is the only range of mountains of any importance. It lies as a whole in an east by south direction parallel with the coast. In the west the system divides into two distinct chains some 25 miles apart. Only in three places do peaks rise above the dense tropical vegetation, while the fog which creeps up to the highest summits, especially in winter, makes observation almost impossible. Of these three peaks, Mitaraka, in the northern chain, rises to a height of 1,900 ft., while Mount Temorairem and Mount Tiniotakem rise in the southern ridge, the latter reaching a height of 2,624 ft. and being the highest summit in the range.

Between the Tumuc Humac Mountains and the coast the ground is broken by the fluvial valleys into separate ridges of short length, such as the Montagnes Françaises on the right bank of the Marowyne, the Montagne Magnétique (715 ft.) towards the southeast, between the Inini and Mana rivers, and Mount Leblond, where the granitic hills rise to a height of 1,335 ft.

South-east of Cayenne stretch the coastal hills of Caux (now called Kaw), culminating in Mount Matoury (836 ft.) near the Tour de l'Ile river.

Coast

The shores of the colony are being continually extended owing to deposits from the rivers, and islands also are constantly formed in the same manner in the mouths of the larger streams. Apart from the mouths

¹ This mountain appears, however, to be in Brazilian territory.

of the more important of the rivers there are no

considerable indentations in the coast.

With the exception of a few rocky bluffs which stand out on the beach the coast is a flat stretch of swamps and marshes, in some cases below high-water mark, fringed with courida (the roots of which protect the shore), and subject to the wash of the sea in front as well as to the rising of the swamp-water behind. The "pripris," or more deeply submerged of the marshes, and the banks of the tidal rivers are lined with mangrove.

Islands

The principal islands are the three Iles du Salut (Iles au Diable), situated about 27 miles to the north-west of Cayenne. They comprise Ile Royale (the largest, containing a penitentiary), Ile Saint-Joseph, and Ile du Diable. The Enfant Perdu Island, about 4 miles from Cayenne, marks the entrance to the port There is deep anchorage round the islands.

Disposed in a chain parallel with the shore are Le Malingre and the five Rémire Islands, and further seaward the two Connétables face the mouth of the

Approuague.

Cayenne Island, on which is situated the capital of the colony, is separated from the mainland by the Mahury river on the south and the Tour de l'Ile and Cayenne rivers on the west and north. It is about 13 miles long, with an extreme width of some 8½ miles. Formerly gardens and plantations abounded on the island, but most of these have disappeared.

River System

Few countries in the world are better watered than French Guiana, over twenty streams of various sizes finding their way to the Atlantic. All the rivers from the Tumuc Humac Mountains flow into either the Oyapok or the Marowyne. In the highlands they are obstructed by rocks, which cause rapids, but also prevent the streams from running dry when floods recede; but in their lower reaches the smaller rivers at least

often tend to merge in the marshes or riverside lagoons. They are often connected by channels (*itabos*), which in the rainy season are much in use. The chief rivers are the Marowyne, the Mana, the Sinnamari, the Oyac,

the Approuague, and the Oyapok.

Marowyne (Maroni, Marowijne), which rises in the Tumuc Humac Mountains, is about 390 miles in length, and the area of its basin is 23,000 square miles. The upper waters of its main stream approach those of the Oyapok, and in the rainy season the two rivers are connected by a cross channel. The Marowyne is navigable by steamboats for about 50 miles from the sea, and, notwithstanding its many rapids, for about 250 miles further in canoes. Its upper course is formed by the junctions of the Awa or Itany with the Marouini on the east and with the Tapanahoni on the west. Below the Hermina Falls (50 miles from the sea) the current is still rapid, the river descending 15 ft. or 16 ft. in about half a mile; here the average difference of level between dry and rainy seasons is 23 ft. The mouth of the river, which is full of sandbanks, and contains several very fertile islands, measures at its widest nearly 4 miles. The Mana, about 155 miles in length, traverses a sparsely peopled district, taking a very circuitous course. It is navigable by small craft for about 36 miles from the mouth. The Sinnamari (Sinamary) is navigable for much the same distance as the Mana, and appears to be about the same length. The Oyac is a short but important stretch of river formed by the confluence, a few miles above Roura, of the Comté and the Counana. At Roura the Oyac divides into two branches, the eastern of which, known as the Mahury, forms the eastern boundary of the "island" of Cavenne; the western branch, called the Tour de l'Ile, requires constant dredging in this section, but it is joined, a few miles from the coast, by the Cascades and the Mont-Sinéry, and reaches the sea as the Cayenne river above the town of Cayenne.

¹ Coudreau counted over 300 waterfalls and rapids in the ascent of the Marouini.

The Approvague is about 190 miles in length; its mouth contains several fertile islands covered with luxuriant vegetation. All rivers rising south of the watershed of the Approvague are tributaries of one or

other of the two frontier rivers.

The Oyapok ("long river") rises as the Souanre in Mount Ouatagnampa. After being joined by the Ouasseyeitou it continues as the Oyapok to the sea, receiving many tributaries. It is broken by many high falls and rapids, the most important being the Trois Saints and Robinson Falls, the latter of which are 50 miles from the sea. The length of the Oyapok is approximately 300 miles, the area of its basin about 12,000.

(3) CLIMATE

The climate is not more unhealthy than that of other tropical colonies, and in some respects French Guiana

compares favourably with its sister colonies.

The normal temperature of the year may be taken at 80° or 81° F. in the inhabited zone. During the hottest part of the year (August, September, October) the temperature usually rises to 86° F., but hardly ever exceeds 88° F. In the colder season the mean is 79° F., seldom sinking so low as 70° F. There is little difference of temperature between night and day. On the Tumuc Humac Mountains the nights are much cooler than at the lower levels.

The colony lies entirely within the zone of the northeast trade winds, but comes within the influence of the prevailing south-easterlies for a part of the year. The north-east winds are strongest. During the rainy season winds keep between north and east, and during dry seasons between south and east. At Cayenne the normal wind (setting usually from the north-east) blows regularly from the beginning of December, acquiring its greatest force during January and February. At the spring equinox it abates a little, and then there follows a period of calms, interrupted by squalls; while

in July the south-easterly breezes increase. These blow

mostly at night.

The year is, as a rule, clearly divided into two wet and two dry seasons, the long wet season lasting from mid-April to mid-August, and the long dry season from early in September to about the last week in November. December and January constitute the short rainy season; February and March the short dry season. March is the most consistently dry month of the year. In May the great downpours occur, the heaviest rainfall being on the coast. The average rainfall amounts to fully 130 in. per annum, though in Cayenne 160 in. have been registered. The plains are much drier than either the coast or the mountains. The air is everywhere very moist, and there is naturally a great deal of fog.

(4) Sanitary Conditions

The coastal regions of French Guiana were formerly held to be one of the unhealthiest parts of the tropics, the transportation of a convict to certain of the penal settlements being considered practically equivalent to a sentence of death. Conditions have gradually improved, however, although the state of public health is still far from satisfactory, the colony being in this respect behind both British and Dutch Guiana. The usual tropical diseases, such as malaria, dysentery, &c., are found, but these lessen considerably as the higher regions of the interior are reached.

The town of Cayenne, though on the coast, lies fairly high, and can therefore easily be drained. Its death-

rate is the same as that of Paris.

(5) RACE AND LANGUAGE

The bulk of the population is comprised of so-called "creoles" and of the original French and English

¹ In Cayenne the term " creole" is loosely employed to denote any person—black or white—who has been born in the colony.

settlers crossed with Dutch, Germans, and North Americans. Besides these there are the aboriginal Indians, the negroes, and the refuse of the tropical settlements of France in the shape of the penal population. There are three ethnical divisions of the aboriginal Indian population, the Arawaks (the oldest independent family), the Tupis, and the Caribs. These groups, while differing greatly in speech, present many points of resemblance in their appearance, physiognomy, and customs. In his Explorations en Guyane (1887-1891) Henri Coudreau gives a list of 16 tribes with which he came into contact, and he does not claim that the list is complete.

The Carib division has representatives in every part of the Guianas, some of the tribes even bearing the general name of the whole family. The Galibis, of pure Carib stock, are the most civilised of the tribes in the colony, and are known to have occupied the coast zone west of Cayenne for several centuries. At the present day many of their villages are scattered along the Sinnamari and Iracoubo rivers, as well as on the coast and along the right bank of the Marowyne; they have, however, left that part of the Marowyne where the Bush negroes dwell. The Galibi is usually of

inferior physique to the Arawak.

Certain words of the creole patois have been adopted by the Galibi, and in Cayenne this tongue has become

a sort of lingua franca.

The negroes and half-castes have in many places supplanted the aborigines. At present the negroes of French Guiana fall into two groups: the descendants of the slaves, who have always remained in contact with the white settlers on the coast, and the independent blacks, who live in the interior of the country and are the descendants of the Maroons or runaway slaves. The latter are known as Bush negroes, or Bonis.

Some few words of African (Bantu) dialects are said to have been preserved in the language of the Maroons, which has an English basis but also a very large Portuguese element. Dutch and French words

have also found their way into the language.

There is a considerable white population, including Portuguese from Madeira and the Azores, and an infusion of English, Dutch, and German settlers, besides half-castes, Brazilians, Chinese, Annamites, and Javanese.

French is spoken by the élite of the capital, but the creole patois predominates throughout the colony. It contains many of the old French words of the original settlers, together with many English words. The primitive jargon of the Maroons is gradually yielding to cultured languages—English, French, and Portuguese.

(6) POPULATION

Distribution

The territory of French Guiana is one of the most sparsely peopled countries in the world. The French, although political masters of the land, have remained practically aliens in the midst of a cosmopolitan population in which the half-caste elements are steadily increasing. One-quarter of the total population is foreign.

Population according to the latest available census (1911):—

Population of the 14 communes ¹	26,325
Troops, customs officers, convict guards, sailors, &c Diggers on goldfields, estimated	677
at	12,000
Bush negroes and Indian tribes ²	3,542
Convicts	6,465
Total	49,009

¹ See footnote to p. 9 for names of communes.

² The number of Indians is probably under-estimated. Bush negroes number only a few hundreds (in 1898, 500).

Penal population, 1915 :-

Transported	0.00	tagit 90		4,297
Under seclusion				12
Rélégués			1119	2,877
Freed				1,382
T . 4 - 1:				0 500
Total				8,568

Of the population of the communes more than half reside in the town of Cayenne. These are mostly negroes, descendants of the freedmen who flocked in after the emancipation of 1848.

Towns and Villages

French Guiana is divided into 14 communes, exclusive of the Marowyne district. These communes comprise scarcely the eighth part of the entire territory, and are confined almost entirely to the littoral and alluvial districts. The unsettled inland region remains undivided.

Cayenne is situated at the north-western extremity of the island of Cayenne. It was one of the earliest settlements in Guiana, and became the permanent

capital in 1877.

The basin of the River Marowyne is inhabited in its upper and middle courses only by a few scattered groups of Indians, negroes, and gold-hunters. The first white settlements are some 38 miles above the estuary, and these are nearly all occupied by convicts. Free colonisation in this district is represented only by a few plantations which were granted to some Algerian Arabs after their discharge from detention.

The chief towns of this district are Saint-Jean, which lies farthest up the river, and Saint-Laurent, the capital of the penal colony, which is situated about

¹ The communes are Cayenne, Oyapok, Approuague, Kaw, Rémire, Matoury, Roura, Tonnégrande, Mont-Sinéry, Macouria, Kourou, Sinnamari, Iracoubo, and Mana.

15 miles from the mouth of the Marowyne river, and

is the starting-place for the goldfields.

Mana, on the river of the same name, is regarded as one of the healthiest settlements in the colony, and Sinnamari (Sinamary), near the mouth of the Sinna-

mari river, was originally a Dutch settlement.

Kourou, on the sea-coast, is a mere dependency of the three Salut Islands (Iles au Diable), belonging to the neighbouring penal establishment. Of these St. Joseph and Ile Royale form the convict station proper, while the little island of La Mère, in the Rémire group, is reserved for the aged and infirm and for convalescents.

The port of Oyupok is situated near the mouth of

the river of the same name.

Movement

Except in certain favourable years the mortality is always higher than the birth-rate, although the deathrate amongst Europeans does not appear to be unduly high. The birth-rate is highest amongst the blacks; but as infant mortality is highest amongst them also, the death-rate exceeds the birth-rate, and everywhere the negroes are decreasing in numbers. The native (Indian) population is also declining, and although the survivors are more numerous than is commonly supposed, more than half of the groups mentioned by the old writers have already disappeared. Infant mortality is not high amongst the Indians, but the birthrate is low and is exceeded by the death-rate. mortality among the total population during the years 1889-1901 averaged 34·1 per 1,000.

No really spontaneous stream of immigration has ever been directed from France to Guiana. All who have come have been either colonial officials, soldiers,

hired labourers, or criminals.

II. POLITICAL HISTORY

CHRONOLOGICAL SUMMARY

1667 Peace of Breda.

1676 Cayenne taken by Dutch and retaken by French.

1678 Peace of Nymegen. 1713 Peace of Utrecht.

1763 Choiseul's colonial enterprise.
1777 Malouet becomes Governor.

1777 Malouet becomes Governor. 1794 Freedom granted to slaves.

1798 Political exiles sent to Cayenne. 1800 Victor Hugues becomes Governor.

1808 Cayenne attacked by Anglo-Portuguese force.

1809 The colony handed over to the Portuguese (Brazilians).

1814 The colony restored to France. 1817 End of Portuguese occupation.

1853 Gold discovered.

1854 Cayenne becomes a penal colony. 1891 Arbitration of Tsar Alexander III.

1897 Treaty of Arbitration (France and Brazil).

1899 Decision of Swiss Federal Council under the foregoing.

(1) 1667-1817

The Peace of Breda was signed on July 21, 1667; but it was arranged, in accordance with the custom of the seventeenth century, that it should not come into force in the two Indies for ten weeks. Admiral Harmon arrived in June at Barbados with a British squadron with the object of recovering the colony of Surinam (which had been captured earlier in the year by the Dutch Admiral Crynssen) and re-establishing the British power in the Antilles. Cayenne had served as a base for Crynssen; and on August 19 Harmon attacked the French settlement on that island. Governor De Lezy had no means to resist successfully, and fled to Surinam. Taking such plunder as he could find, Harmon now sailed to Surinam, which in its turn had to

surrender. These successes came, however, too late to be of any avail. Peace had already been concluded, and Cayenne was restored to its former owners. The misfortunes of Governor De Lezy were, however, not yet over. In March 1676 a Dutch fleet, under Admiral Binckes, arrived before Cayenne; and De Lezy, compelled to capitulate, was taken as a prisoner to Holland. In October Cayenne was retaken by the French, and from this time until 1808 the colony remained undisturbed by any hostile attack.

A number of filibusters, who in the course of these maritime wars had been gathering spoils in the Caribbean Sea, settled in Cayenne after the Peace of Nymegen (1678), with the intention of investing their gains in planting. With the fresh outbreak of war in 1689, these men were quite ready to revert to their former lucrative occupation, and followed the corsair, Du Casse, as related elsewhere, in his raid upon Surinam and Berbice. Few, if any, of them returned. "La colonie," says Raynal, "ne se releva jamais de cette perte. Bien loin de pouvoir s'étendre dans la Guyane, elle ne fit que languir à Cayenne même." The French colonist was never attracted to this tropical possession, and when he did come he had neither the patience nor the industry of the Dutch in empoldering the rich but marshy alluvial belt along the sea-coast. The French had before them the example set in Surinam, Berbice, and Essequibo, but they never followed it. Not even the island of Cayenne was properly drained or furnished with means of communication; and the town itself, the only town worthy of the name that has ever existed in French Guiana, was situated in a low-lying plain, at this time surrounded by fever-breeding marshes. Towards the middle of the eighteenth century some real progress had been made, and the colony attained to a state of prosperity which seemed to promise better things.

¹ See Handbook No. 136, Dutch Guiana, p. 11.

² Histoire . . . des deux Indes, Geneva, 1781, vii, p. 31.

The Seven Years' War, by cutting off the sea communications between Cayenne and the mother-country, effectually checked the growing export trade, and spelt disaster to French colonial enterprise. Canada and India were lost, and the French expelled from the Mis-French Guiana remained; and in 1763 Choiseul, Minister of Louis XV, conceived the idea of creating a great French colony there for his own profit. He obtained a grant from the King; and, with liberal State aid, more than 12,000 persons were induced, by the promise of free grants of land and deceptive descriptions of the richness of the country, to go out as colonists to the valley of the River Kourou. preparations were made for their reception. were landed in the midst of the rainy season on a desolate shore half submerged in water. Of the whole number only 918 persons, enfeebled by malaria, fever, and other diseases, returned to France. A few settled the Sinnamari. The rest perished miserably (1764-65). It was a terrible catastrophe, due to the criminal ignorance of those who organised this costly and ambitious but ill-advised effort.

The old settlement on the island of Cavenne still continued during the following decades to make fair In 1775 there were 1,300 whites and 8.000 negroes; and in 1790 the exports were valued at 700,000 This increase of production was largely due to the good work done by M. Malouet, who was sent out as Governor in 1777, under the auspices of Turgot and Malouet had had experience of the Dutch methods of empoldering the littoral belt, and by building dykes and constructing canals he converted a long stretch of the shore into rich, cultivable land for plan-The outbreak of the French Revolution. however, wrecked once more the advance of this unfortunate colony. In 1794 the slaves were presented with freedom. When the result was found to be that they were idle and insubordinate, compulsion was used to induce them to work, and practically they were reenslaved. The next step of the Revolutionary Government was to deport to a spot which ever since the disaster of 1765 had acquired an evil name for insalubrity political prisoners, including Billaud-Varennes, Collot d'Herbois, and Pichegru, the conqueror of Holland. In 1798 no fewer than 500 were thus deported to almost certain death. Though cut off, as British naval supremacy asserted itself, from communication with France, Cayenne was not captured at the same time as the Dutch Guiana colonies; indeed, for some years it served as a base for privateering Hugues, who was appointed Governor in 1800, was a capable administrator; and when, in December 1808, Cavenne was attacked by a joint Anglo-Portuguese naval force he made a vigorous defence. On January 14, 1809, the colony surrendered, and was handed over by the British to the Portuguese (Brazilians). It was restored to France by the Treaty of Paris in 1814; but the Portuguese continued their occupation until 1817.²

(2) 1817-1914

The history of French Guiana after its restoration by the Portuguese-Brazilian Government in 1817 is one of continued neglect and depression. The memory of the disastrous fate of the attempted Kourou settlement, and the more recent experiences of the unhappy political prisoners sent out in 1797 and 1798 to suffer unspeakable privations or to perish miserably in the tropical swamps and forests, made the very name of Cayenne detested in France. No French settlers could be induced to go out. Plantations fell into decay, and the area of land under cultivation became less and less. In these circumstances Napoleon III in 1854 determined to make Cavenne a penal colony. The law of May 30, 1854, directed (Article II) that the transported criminals should be employed "aux travaux les plus pénibles et à tous autres travaux d'utilité publique"; and (Article

See Appendix, Extracts from Treaties, No. III.
 See Appendix, Extracts from Treaties, No. IV.

XI) that they should obtain, when proved worthy of indulgence by their good behaviour—

(1) "L'autorisation de travailler aux conditions déterminées par l'administration, soit pour les habitants de la colonie, soit pour les administrations locales.

Une concession de terrains et la faculté de la cultiver

pour leur compte."

Unfortunately, these regulations remained almost a dead letter, or were carried out injudiciously. The convicts were imprisoned in the Iles du Salut, where close confinement is practically fatal to white men unused to a tropical climate, or were set to work under conditions equally deadly. How great a failure this law of 1854 was is shown by the fact that after a few years' trial the transportation of French criminals was discontinued, and only Algerians, Arabs, Senegalese, and Annamese were sent to Cayenne. The system of transporting French convicts to Guiana, however, was revived in 1884, and since that date the sentence of penal servitude in Cayenne has been passed upon habitual criminals; it is regarded as practically a sentence of death, and has served to increase the bad repute of the Guiana colony with the French public.

In 1853 gold was discovered in the basin of the Approuague; and since that date placer-mining has

formed the chief industry of French Guiana

There have been two boundary arbitrations. The question as to which of the higher branches of the River Marowyne was the true source of the river and should form the boundary between French and Dutch Guiana was referred to the Tsar Alexander III, who in 1891 in his arbitral decision named the River Awa (Lawa) as the frontier stream. (2) The much larger question as to the boundary between French Guiana and Brazil was referred to the Swiss Federal Council. The dispute was of long date, anteceding the Treaty of Utrecht of 1713 between France and Portugal. Article

¹ A further and final settlement was made in September 1915. See Handbook No. 136, Dutch Guiana,

VIII of this treaty fixed the river "de Japoc ou de Vincent-Pinson" as the frontier; but this did not settle the matter, as the French claimed that the River Vincent-Pinson was the Aragouary; the Portuguese and their successors, the Brazilians, that it was the Oyapok (Dutch Jacopo). The French also, on the ground of exploration, claimed a large area, extending to the south of Dutch Guiana, and reaching even to the Rio Branco; and they relied upon the support given to their claims by the Treaty of Madrid (September 29. 1801),2 and its confirmation by the Treaty of Amiens (March 25, 1802). A Treaty submitting the question to the Swiss Government for arbitration was signed in 1897; and the Swiss Federal Council decided (1899) in favour of the Brazilian contention. France obtaining only 8,000 square kilometres of the 400,000 to which she laid claim. The River Oyapek is now the boundary.

¹ See Appendix, Extracts from Treaties, No. I.

See Appendix, Extracts from Treaties, No. II.
 See Appendix, Extracts from Treaties, No. V.

III. SOCIAL AND POLITICAL CONDITIONS.

(1) Religious

This colony has been for two centuries and a half continuously French; and for the greater part of that time Catholic missions, with the active support of the State, have carried on successful work. At the present time a number of devoted men are continuing that work in the gold-mining districts and among the natives of the far interior. The religion of French Guiana is overwhelmingly Roman Catholic.

(2) Political

The power of the Governor was almost absolute for the period between the restoration of the colony to France in 1817 and the year 1870. No provincial or municipal representation of any kind existed in the colony under the Restoration and the July Monarchy. An elective Colonial Council was summoned to advise the Governor, but had no executive, administrative, or financial power. The Republic of 1848 gave the colony the right of representation in the Legislative Assembly at Paris, and it was proposed to create Conseils généraux in Guiana. Napoleon III suppressed these privileges; and in place of a Colonial Council the Governor was now assisted by a Privy Council, composed mainly of functionaries, but with a certain number of colonists in addition nominated by the There was, therefore; no semblance of popular representation or control.

"Par un privilège qui n'a pas de précédent dans la législation contemporaine ou passée d'aucun pays, le Gouverneur de la Guyane est investi depuis 1854 du droit de fixer à son gré la nature et l'assiette des impôts, d'en régler seul la quotité, la perception, l'emploi. Du jour au lendemain il peut les improviser à son gré."

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¹ Jules Duval, Les Colonies . . . de la France, Paris, 1864, p. 288.

There was no press, and the right of petition was forbidden. Under such a system no good result could be expected, unless the Governors had been exceptional men of long experience and well acquainted with the character of the country and its resources. As a matter of fact the average term of office of the men sent out to rule French Guiana during the period from 1817 to 1863 was two years. Waste and maladministration were inevitable. Officialdom increased while cultivation diminished, and a very large part of the revenue of the colony was expended in the salaries of a host of functionaries, about one inhabitant in twenty being an official of some sort.

In 1870 some reforms were introduced; and a colonial assembly called the Chamber of Agriculture, Commerce, and Industry, was set up. This Chamber consisted of fifteen members, elected by an assembly of a hundred men of substance. Its functions were, how-

ever, purely consultative.

In 1878 the Government of the Republic determined to establish a Conseil général in Guiana, consisting of sixteen members, and to confer upon it the powers of local administration which were usual in the case of such Councils, and the special right of supervising the exchange, acquisition, or alienation of colonial properties not appropriated to the service of the State. In 1882 the Conseil général was empowered to elect from among its members a smaller body of three to perform the duties of a Colonial Commission.

In 1879 the colony had recovered the privilege of sending a deputy to represent its interests in the Legislative Assembly at Paris. In the same year French Guiana was divided into ten communes; but, with the exception of the town of Cayenne itself, it was not until 1898 that the communes obtained the right to elect their Municipal Councils. The number of communes is now fourteen (see p. 9, footnote).

The Penal Settlement has its own administration.

(3) EDUCATIONAL

The organisation of primary education throughout the colony was created by a decree dated October 30, 1889. Secondary education was regulated by a decree of January 4, 1894. Instruction is gratuitous. In 1914 there were in French Guiana twenty-two primary schools with 2,351 pupils, and four Congregational schools with 445 pupils. The College of Cayenne is the centre of secondary and higher education in the colony.

GENERAL OBSERVATIONS

Cayenne has such a bad name in France as a land of disaster and of insalubrity that it is doubtful whether it would ever attract French immigrants or capital, even were it to cease to be a penal settlement. So long as it remains a penal settlement its prospects as a

colony can only go from bad to worse.

Gold-mining is the only productive industry. Auriferous deposits seem, indeed, to be widely distributed throughout the colony, as also in other parts of Guiana. The gold-seekers in Cayenne have, however, contented themselves with the primitive and imperfect method of alluvial washings; there has been no serious attempt at quartz-crushing. The return, nevertheless, has been quite considerable.

Were it not for the gold industry, nothing could be more hopeless than the condition of the colony. Its exports, other than gold, are almost negligible. Cultivation is neglected, and the country, which in the middle of the eighteenth century produced large quantities of sugar, cotton. coffee, and cacao, has fallen

so low that, to quote a French authority:-

"Elle ne produit même pas assez pour l'alimentation de ses habitants, et tous les objets de consommation, même la viande de boucherie, viennent du dehors; c'est là un affligeant spectacle pour le voyageur."²

¹ See below, pp. 40-45.

² M. Petit, Les Colonies françaises (Petite Encyclopédie coloniale), p. 650.

Another authority writes:

"Les cultures, le commerce et la population sont représentés par des chiffres dérisoires, si l'on tient compte de l'énormité des espaces et de l'antiquité de la possession."

The boundary arbitration decisions of 1891 and 1899 and the treaty of 1915 determined the territorial limits of French Guiana, and settled the only questions in which other countries are interested.

¹ Paul Leroy-Beaulieu, De la Colonisation chez les Peuples modernes, II, p. 21.

IV. ECONOMIC CONDITIONS

(A) MEANS OF COMMUNICATION

(1) INTERNAL

(a) Roads

In French Guiana, as in the neighbouring colonies, the rivers are the natural highways of the country, and roads are few in number and indifferent in quality. Passable carriage roads extend only for some 25 miles in the neighbourhood of Cayenne and for some 20 miles in that of Saint-Laurent. Officially roads are classified as "colonial roads," "public utility roads," and "parochial roads." Two roads are included in the first class. One of these, the "route coloniale No. 1," starts from Macouria Point, opposite Cavenne, and runs for about 62 miles through Tonate, Kourou, and Malmanouri towards the Marowyne; it is a properly macadamised carriage foad as far only as Tonate, that is, for about 12 miles. The other, or "route coloniale No. 2," crosses the Ile de Cavenne from the capital to the Dégrad des Cannes, and serves Rémire.

These roads are repaired by convict labour, and on the first of them the reconstruction of the bridges in reinforced concrete has lately been put in hand. Theoretically the maintenance of all the other public roads of the country is a charge upon the funds of the various local authorities, but in fact it falls for the most part upon the colonial budget, and is performed by convict labour. The carriage road by the Marowyne belongs to the Penal Establishment, the headquarters of which it connects with the factory at Saint-Maurice and with the farms. Some privately made roads are found on the goldfields, and there is a certain number of tracks impassable in the wet season and of limited utility in the dry. A heavy rainfall and exuberant vegetation render the maintenance and repair of roads a costly process. Points of settlement being mostly on or near the sea, access to them is obtained by means of small steamers and schooners, which ply along the coast; and the goldfields and balata-concessions of the interior are reached by river.

(b) Rivers and Canals

The colony has many rivers—more than 15 are counted between the Marowyne and the Oyapok, most of them with many affluents—but, as with all Guianese rivers, their utility is lessened by the numerous rapids and falls which interrupt their courses. The streams in the coastal region being often separated only by a narrow strip of low-lying land, porterage from one to another is often possible, and many are connected with each other by natural or artificial channels. whole, however, they are considerably less useful as means of communication than the rivers of British and Dutch Guiana, because, as the land begins to rise nearer the coast in Cayenne, the distances inland for which the rivers are easily navigable are considerably shorter. Like the Surinam rivers, too, they suffer from great variations in the level of water from season to season; sudden and dangerous rises, rendering the rapids impassable, are not uncommon in times of rain; and during droughts many rivers shrink to insignificant proportions, necessitating numerous porterages.

In these circumstances the canoe is the only available craft, and despite the extraordinary skill of the Bush negro it is a tedious, costly, uncertain, and even dangerous method of locomotion. On some of the more broken streams the traveller may expend as much as three weeks or a month in reaching his destination, and such industries as are carried on in the interior are

greatly hampered by the difficulty of communication and the cost of transport. Some improvement, it is true, has been effected lately by the adoption of motor power in some of the canoes, and an extension of this method of propulsion would seem likely to effect economies in freights; but the Cayenne rivers will never be really useful as means of communication until the great obstacles presented by their rapids are circumvented either by a system of canals and locks or by the provision on land in the vicinity of the rapids of light railways or of some other means of facilitating porterage. Even in present conditions the river and coastal services might be made better than they are, and such improvement is much to be desired.

The most important rivers of the colony are the Marowyne, the Mana, the Sinnamari, the Cayenne, the

Approuague, and the Oyapok.

The Marowyne (Maroni) is the boundary on the side of Dutch Guiana. Its entrance is three miles wide, but it is obstructed by sandbanks joined together by a bar, and vessels of 11 ft. draught are the largest that enter. Small river steamers or large canoes can ascend almost as far as Hermina Rapid, which is more than 50 miles from the mouth. Above this point rapids are numerous, and there is difficulty in reaching the rich auriferous region of the upper river and its tributaries, the Awa and Inini.

In the entrance of the Mana there is a depth of no more than $4\frac{1}{2}$ ft. on the bar at low water, but spring tides rise 9 ft., and small craft can reach the town of Mana six miles above the mouth, where they moor abreast the town in $3\frac{1}{2}$ fathoms, and they can proceed up stream for some 30 miles above this point. A tributary which joins the main stream half a mile above the town can also be navigated by small craft for some eight miles. On the Middle and Upper Mana, where the river is winding and is joined by many creeks, there are auriferous regions, and amongst the well-known placers here are those called Souvenir, Union et Triomphe, Enfin, and Elysée.

The Sinnamari is over a quarter of a mile wide atthe bar, which is nearly dry at low tide, but has a depth of 9 ft. at high-water springs. Small steamers can ascend the river to the point of its confluence with the Courcibo, about 18 hours from the coast. Above that point numerous falls and rapids impede navigation. Canoes can use the Tigre creek when the water is high. The Sinnamari is frequented by small coasting craft, which can moor off the town of Sinnamari in three fathoms over a sandy bottom. Like some of the other rivers of the colony, the Sinnamari is not easily accessible by sea during the bad months. On the upper river are some well-known placers, such as the Placers Saint-Élie, Dieu-Merci, Bonne Aventure, Adieu-Vat, and Sursaut.

The Cayenne, a name given to the lower course of the Oyac (see p. 4), is important chiefly because the capital of the colony stands at its mouth. Two of its tributaries, the Tonnégrande and Cascades rivers, can be navigated by light craft, the former for about two miles and the latter for about ten miles. The regions watered by this system of rivers, notably the valleys of the Orapu and the Comté, are auriferous, and these goldfields enjoy a decided advantage in their proximity.

to Cavenne.

The Approvague, the basin of which is the cradle of the gold-mining industry in French Guiana, has 11 ft. of water on its bar at high-water neaps, and vessels of moderate draught can ascend it for several miles. The first rapid, the Saut Tourépée, is impracticable at low water, but its rocks are completely covered when the tide is high, and vessels can then be towed through it to the Saut Mapaou, which can thus be reached by ships large enough to carry mining machinery from Europe. Above this rapid as far as the Saut Canory navigation is difficult, but above the latter point flat-bottomed steamboats can again be used.

In the funnel-shaped bight of the *Oyapok*, which is 12 miles wide at its outer extreme, navigation is somewhat difficult by reason of the absence of marks. The

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entrance channel has 7 ft. of water at low tide and 19 ft. at high. Small vessels can ascend as far as Saint-Georges, which is about 30 miles up, but the channel is very narrow. At Saint-Georges there is anchorage in a depth of 10 ft., and there is a wharf. Throughout the rest of the length of this long river navigation is very difficult, and canoes manned by negro experts are the only craft which venture to confront its perils.

Other rivers, such as the Kourou, Iracoubo, Organabo, and Mahury (a name given to the most easterly branch of the Oyac), are navigable for short distances only by coasting craft, and many of them are not accessible at

certain seasons of the year.

Of the canals once possessed by the colony most are now silted up and neglected, and two only are of practical use at the present time. Of these the more important is the Laussat Canal, which skirts the town of Cayenne on the south, and empties into the port. It serves both for drainage and for navigation. The other, called the Fouillée Creek Canal, about 6 miles long, provides a connection between the port of Cayenne and the mouth of the Mahury river which vessels find useful as a means of communication with the communes of the Quartier du Vent.

(c) Proposed Railway

Various projects for the construction of railways have been mooted at intervals during the past 30 years, but they have not yet led to any concrete result. first scheme, propounded in 1887 by the President of the Conseil Général, contemplated a coast line from Cavenne to Saint-Laurent viâ Macouria, Kourou, Sinnamari, and Mana, with "lines of penetration" running at intervals at right angles to the main track. It was, perhaps, fortunate that this scheme was abandoned, for it was open to many serious objections. The line would have traversed a low-lying, muchwatered country, where many bridges would have been required, and frequent repairs would have been necessary; it would have been of benefit primarily to an agricultural industry which is almost extinct, and only incidentally, if at all, to the goldfields and the forests; most of the objects it might have accomplished are already achieved with tolerable efficiency by existing roads and coastal services; and unless it had promoted a great agricultural revival it could never have paid

its way.

The next project was that of M. David Levat, a mining engineer, which was approved by the Conseil Général in 1900. M. Levat's idea was to construct a line from Cayenne by way of the valley of the Comté to the goldfields of the Upper Approuague, whence two branches were to run, the one to the Awa by the valley of the Inini, the other to the Oyapok frontier. The cost of this railway would have been very considerable; upon official reconsideration it was deemed to be too ambitious a scheme for an impoverished country; and before its author had succeeded in raising the necessary funds for making a beginning the sanction which he had obtained was annulled.

The Government has since decided that any railway which may be built must be a State undertaking, and has talked of a line with the railhead at the Saut Tourépée on the Approuague, which can be reached by steamer from Cayenne. The last recorded step in the matter of proposed construction was taken in December 1913, when the Conseil Général authorised the local administration to submit a scheme for a narrow-gauge economic railway from the Dégrad Cacao, where the Comté river ceases to be navigable, to the valley of the Inini. The length of this line would be about 100 miles.

The realisation of some adequate scheme of penetration is of vital importance for the economic development of the country, for without it the existing gold-fields cannot be fully worked, new ones are less likely to be created, and the exploitation of the forest and other wealth scattered over the country is difficult or impossible. As a Governor of the colony has said: "It is to the construction of economic lines, linking up the

goldfields with navigable streams, . . . to an improved service of steam launches and motor boats, and to the consequent elimination of slow and costly transport by canoe and porter, that the mining industry must look for a reduction in its general expenses and for a

prospect of real progress."

The Penal Establishment has a light railway of its own between Saint-Laurent and Saint-Jean, serving the factory at Saint-Maurice and the agricultural concessions. This line, built in 1897, is open to general traffic by virtue of decrees of 1898 and 1900, but it will serve no important general purposes so long as its terminus at Saint-Jean retains an exclusively penal character. Other light railways exist here and there on the gold-fields, as, for example, the line from the Hermina Rapid on the Marowyne to the Elysée concession, and the little Decauville rail for the transport of goods along a part of the Lézard Creek which is sometimes rendered impracticable by drought.

(d) Posts, Telegraphs, and Telephones

Regular postal communication is maintained between the capital and the different communes. With Mana and the Marowyne there is a weekly connection by a subsidised vessel belonging to the Société de Navigation Clanis et Tanon et Compagnie. With the Approuague and Oyapok centres on the one hand, and with the Salut Islands, Kourou, and Sinnamari on the other, there is fortnightly connection by a similar subsidised service. In the case of Tonnégrande, Mont-Sinéry, and Roura, where the connection is weekly, and in the case of Kaw. where it is fortnightly, the service is performed by a contractor. A sailing boat makes fortnightly visits to Ouanary. In addition to the regular services mail bags are despatched by every boat leaving Cayenne for any of the communes. Cayenne is also connected by a service of rural postmen twice weekly with Macouria,

Governor Picanon, cited by A. Dangoise, Autres Notes et Nouvelles Études, p. 222.

Kourou, Roches, Sinnamari, Iracoubo, Matoury, Montjoly, and Rémire. At Cayenne, Mana, and Saint-Laurent there are two deliveries of letters daily. In the other communes letters are delivered by rural postmen after the arrival of each mail.

A telegraph line, maintained and operated by the Penal Establishment, runs from Cayenne to the Marowyne by way of Macouria, Roches, Sinnamari,

and Mana.

There are telephone exchanges at Cayenne, at Saint-Laurent, and at some other centres. The subscribers number about 100, many of these being official connections, and only about one-half being members of the public. The telephone system has lately been undergoing a process of reconstruction and extension which has for the time being impaired its popularity. Four suburban lines, about 14 miles in length, were erected in 1914, connecting Montjoly, Rémire, Le Rorota, and Fouillée Creek with the capital, and the construction of a line, about 25 miles long, to Matoury, Stoupan, and Roura was carried out in the following year.

(2) External

(a) Ports

Cayenne and Saint-Laurent were the only ports open to external commerce until the year 1901, when Saint-Georges-de-l'Oyapok was added. Saint-Laurent is tending to grow in importance by reason of the discoveries of rich gold deposits on the Awa and Inini, affluents of the Marowyne, and by the establishment in the town of branches of the business houses of Cayenne; but the shipping entered there is at present small in comparison with the Cayenne figures, while that which makes use of Saint-Georges is insignificant.

In the entrance to Cayenne harbour there is a bar which used to have over it a depth of 13 ft. of water at high-water springs, but the whole port has a marked tendency to silt up, and the greatest depth is now so

much reduced that not even a moderate-sized ship can enter laden, the mailboat and other steamers being obliged to lie off at five or six miles from the town and discharge by lighters. A lack of buoys and beacons without and of adequate facilities within also deters ships from attempting to enter. The channel deepens within the point on which the town is built, but at the town itself the depth of water, which varies, is never considerable. Here small vessels moor near the mole, which has a crosshead, and alongside which they can lie at high water; and a wooden jetty 250 ft. in length, which was built in 1914, enables lighters to discharge at practically all states of the tide. A small stock of coal is kept, and ordinary supplies may be obtained. There are facilities for executing minor repairs to small vessels.

At Saint-Laurent (Saint-Laurent-du-Maroni) there are two wharves. One of these is reserved for the use of the Penal Establishment, but the other is available for general commercial purposes, and all vessels that

can enter can lie alongside it.

The harbour accommodation of the colony is thus suitable only for light craft; for vessels of larger size the only anchorage available in the season of the onshore winds is under the Salut Islands, at a distance of some 30 miles from Cavenne; and want of accommodation for shipping is an obstacle to economic develop-A considerable expenditure would have to be incurred before Cayenne could meet the requirements of a commercial revival, and it has even been proposed that the harbour there should be abandoned in favour of some other port, as, for example, Saint-Laurent; but, in fact, no other place has been much more favoured by nature, whilst the shipping centre of the colony could not be displaced without great dislocation of its economic life. It is therefore in the direction of improvement at Cavenne that salvation seems to lie. has been officially estimated that it would cost £250,000 or more to convert Cavenne harbour into a really good

port, but immediate requirements could be met adequately with a much smaller outlay, and it is of the first importance to the commercial interests of the colony that some amelioration should be effected.

(b) Shipping Lines

In normal circumstances Cayenne has a monthly connection by a subsidiary service to Fort-de-France with the main service of the Compagnie Générale Transatlantique from Saint-Nazaire to Martinique and Colon, and cargo boats of the same company call at the port from Bordeaux. The colony is visited by French lines of sailing ships from Saint-Nazaire, Nantes, Le Havre, Bordeaux, and Marseilles. There is also a monthly steamer service to the Antilles. sidiary French mailboat service gives a connection with Surinam, British Guiana, Trinidad, and St. Lucia; an inter-colonial service is run by the Surinam Government; and a service between Cavenne and Paramaribo has lately been inaugurated by a local French house. The connections with Paramaribo and Georgetownespecially the latter—offer opportunities of access to various European and American ports, but they involve trans-shipment, and a direct connection with the United States would probably stimulate trade.

Shipping Statistics.—On the annual average of the years 1905-14¹ the number of vessels entering the ports of the colony was 284, with a tonnage of 54,700 tons. Of these, 69, of 31,707 tons, or 58 per cent. of the total tonnage, flew the French flag; 17, of 7,734 tons, or 14 per cent., flew the Norwegian; 36, of 5,155 tons, or 9 per cent., were British; 113, of 2,444 tons, or 5 per cent., were Dutch; 4, of 2,475 tons, or 5 per cent., were Italian; and 45, of 5,185 tons, or 9 per cent., belonged to other countries. On a comparison of the annual averages for 1905-9 and 1910-14¹ the total shipping shows an increase from 225 vessels of 50,114 tons in the first

¹ Omitting 1911, for which year the returns in the Statistiques de la Navigation dans les Colonies Françaises are only fragmentary.

period to 321 vessels of 60,433 tons in the second. On a comparison of the same periods Norwegian shipping has remained stationary at 14 per cent. of the total tonnage, and the shipping under all other flags has declined, with the exception of the French, which has increased from 47 per cent. in the first period to 69 per cent. in the second.

(c) Cables

Submarine cables owned by the Compagnie Française des Câbles Télégraphiques connect Cayenne with Para to the eastward and with Paramaribo to the westward, and thence either way with Europe. The cables are subject to frequent breakage, and the absence of a cable ship delays repairs.

(B) INDUSTRY

(1) Labour

Among the causes which have most effectively arrested development in Cayenne have been the inadequacy of the labour supply, the lack of an efficient recruiting system, and the defective arrangements which prevail with regard to the organisation and employment of such labour as exists. The economic crisis provoked by the emancipation of the slaves has persisted in varying degrees of intensity for the past 70 years, and there is no present indication that the end is at hand. Slavery was abolished in French Guiana by a decree of April 27, 1848, without the smallest regard to the consequences of the enactment or the least provision for future needs. Fourteen thousand five hundred slaves were suddenly freed, to the great prejudice not only of their owners but of the colony as a whole, which was instantly deprived of labour, the slaves being enabled by the bounty of nature to subsist with little exertion on their own part, and freedom presenting itself to their imagination as an elysium of idleness relieved by anarchy. From that day to this the chief need of the country has been the replenishment of the labour market and the creation of an agricultural population, but the devices by which a similar need has been more or less relieved in the neighbouring colonies have failed here, and the failure has been intensified by the gold fever which has been epidemic in the country for over half a century, and has diverted to the placers what little remained of capital, labour, and enterprise.

Existing sources of supply are the aboriginal Indians; the bush negroes ("négres marrons," Boschs, or Bonis), the descendants of the runaway slaves of the eighteenth century; the descendants of the slaves liberated in 1848; the creoles or mixed population; the immigrant population; and the convicts of the Penal Establishment. Unfortunately, the number of these sources is more imposing than their collective economic

value.

The Indian will make a good beatman and a fair forester, when he can be induced to work; but in his natural state he is timid and loves liberty, and the few Indians who have been in contact with civilisation have been found to be changeable and devoid of applica-The economic value of the aboriginal is thus small. The bush negroes, with their magnificent physique and marvellous skill in watermanship, are admirable woodmen and ideal boatmen, and the exploitation of forests and the maintenance of communications on the upper rivers both depend mainly upon their exertions; they also cultivate the land round their villages and supply some rice to the rest of the population; but they are as tenacious of their independence as the aboriginals, and hold aloof from the economic life of the colony too much to exercise a helpful influence upon it. The other negro group, composed of the descendants of the freed slaves, is much more important numerically, forming as it does the greater part of the population of the colony; and by an uninterrupted contact with civilisation these negroes are better fitted for industrial activity than are their

brethren of the bush. They have, however, inherited from their fathers an aversion to labour on the land, which they regard as incompatible with the dignity of a free man and a citizen; and although with the passage of time they have learnt to harbour some desires which only money can gratify, the possibility of a return to agriculture among them has unhappily been extinguished by the lure of the goldfields, and such labour as the small holdings and surviving plantations draw from the black population is recruited exclusively among the old men, women, and children. Similar conditions govern the supply of labour from

the creole population.

In the matter of imported labour the colony has undergone the same vicissitudes as its British and Dutch neighbours, but a much smaller degree of success has attended its efforts, chiefly in consequence of the failure of Hindoo immigration and of the mismanagement which provoked the denunciation by Great Britain of the convention which had sanctioned the recruitment by the French of indentured labour in her East Indian dominions. Other sources tapped in Cayenne have failed for much the same reasons as in the adjoining colonies, and the Portuguese, Chinese, and Javanese who have been introduced have either gone home again or have deserted the land for small trading, peddling, and similar avocations. An attempt to continue the supply of imported negroes had to be stopped by the French Government because of the abuses to which it gave rise in Africa, and the object of an importation of Annamites for agricultural labour was frustrated by the masterly inactivity of the imported, who have ever since lived in a village on the coast, where they devote to the capture of fish such time as they are constrained to snatch from the consumption of opium. Of the few Hindoo survivors of the former immigration some are employed on the goldfields, and others are engaged in market-gardening on small holdings near Cayenne; whilst the West Africans have founded a small agricultural colony near Rémire,

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where they grow manioc, rice, sweet potatoes, and bananas. Forest and mineral exploitation attracts a certain immigration from the neighbouring colonies and from the British and French West Indies, but this population, which is of a floating character, makes no contribution to colonisation, and no great success has attended the efforts of the Cayenne Government to attract for permanent settlement the inhabitants of Martinique rendered homeless by the Mont Pelée disaster of 1902.

The convicts of the Penal Establishment, who are employed upon public works and make some contribution to agricultural and forest development on the Penal concessions, may also be hired to work for private employers, but, drawn as they are from the dregs of the criminal population of the French Empire, they are both disliked and rated low as labourers, and the limited amount of good which has come of attempts to utilise penal labour for general purposes is largely outweighed by the ill effects of the stigma which the presence of convicts casts upon the colony.

Labour conditions are thus unsatisfactory. Everywhere, except upon the goldfields, the supply of labour is deficient in quantity and indifferent in quality, while even upon the goldfields labour is none too plentiful, and what there is of it is expensive in ordinary times and very costly in periods of excitement. To make matters worse, labourers of all classes have lately taken to playing a sort of confidence trick upon employers, taking service with several at the same time and

getting advances of wages from each of them.

A speedy and satisfactory solution of the labour problem is a vital matter for Cayenne. With such supplies as the colony can now command, it cannot hope to restore its agricultural industry, to turn its mineral and forest wealth to the best account, or to effect the improvements in harbour works, internal communications, and land reclamation which are the conditions that must precede an economic expansion.

The desired result could almost certainly be attained, if Cayenne could achieve a fusion of the successful immigration methods of British Guiana with the active colonisation policy of Surinam. Failing this, an increase will, perhaps, slowly result from the process of gradual infiltration which is steadily drawing to the goldfields a considerable portion of the indigenous population of the Antilles. As soon as a sufficiency of labour on the placers reduces the level of the miner's pay to that of the agricultural wage, the workman will no longer have any motive for preferring a task which is arduous in itself and is performed in conditions of isolation and discomfort. The difficulty of supplying the goldfields with food from the coast might then produce an extension of agricultural activity to new spheres, and thereby a solution might be achieved of the economic crisis which for too long has harassed the country.

(2) AGRICULTURE

(a) Products of Commercial Value

Vegetable Products.—From the description of labour conditions given above, the state of agriculture may be inferred. It is deplorable, and scarcely a trace remains of the former agricultural prosperity of the country. On the average of the years 1905-14 only one strictly agricultural export, namely, cacao, exceeded £100 in annual value; nor did that one amount to more than £629 (see Appendix, Table III). Yet with its fertile soil and ideal climatic conditions the colony can grow to perfection almost every sort of tropical crop, and it has been said that "no other colony, no other country in the world, possesses in a more marked degree the conditions essential to great agricultural production." The collapse of agriculture is due to the emancipation of the slaves, which deprived it of labour, and to the

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¹ E. Bassières, Notice sur la Guyane, quoted by A. Dangoise, Autres Notes et Nouvelles Etudes.

discovery of gold, which diverted capital to the placers. Valuable crops of sugar, cacao, coffee, dyes, and spices used to be grown, and might be produced again. In 1836 the export of agricultural products amounted in value to about £133,000; nearly 4,000 acres were devoted to sugar-cane, over 1,000 acres were under coffee, and considerable areas were planted with cacao, dyes, and spices. Of these crops cacao alone has preserved a semblance of its former greatness; the other crops have practically gone out of cultivation; there is no export, or none worth mentioning, of sugar, coffee, spices, or rum; the raw material of such rum as is manufactured is mostly imported from British Guiana, Surinam, or the West Indian Islands; and a few small holdings of trifling extent, worked by feeble hands, barely contrive to produce enough ground provisions and fruits to meet the slender demands of a scanty population. Manioc and rice are the principal crops grown; maize, yams, arrowroot, bananas, and breadalso obtainable; and market-gardens near Cavenne produce indigenous vegetables and a few European ones acclimatised in the colony. circumstances the outlook for agriculture does not seem to be other than gloomy, but the author of the official report for 1914 thought that he could discern some modest indications of a renewed interest in the land.

There are botanical gardens and an experimental nursery in the colony, and a Chamber of Agriculture

was established in 1888.

Live Stock.—Stock-raising and dairy-farming are in no better case. The colony does not lack good pastoral lands; cattle, horses, and pigs can do well on the extensive savannahs; and the few persons who are interested in the industry have earned good returns. Yet, generally speaking, the industry is completely neglected, and nearly the whole of the live stock, meat, milk, butter, and cheese consumed in the colony is derived from importation. In existing conditions, the want of capital and labour and the defective communications between the prairies of the interior and the chief

places of settlement on or near the coast are obstacles to the development of the pastoral industry; but in its great natural resources the country has potentialities

for the creation of a new source of wealth.

The communes of Macouria, Kourou, Sinnamari, and Iracoubo pay some attention to stock-raising, and their contributions to Cavenne's meat market show a tendency to increase. The herds of the colony were seriously depleted by an epidemic of fever in 1904-05, but more than 200 animals were introduced from British Guiana in 1906, and their influence upon breeding has been beneficial. Such dairy-farming as exists is carried on chiefly in Cayenne Island, but the high price of milk in the capital is a sure indication of its scarcity. The country is practically without sheep or goats, but there are a good many swine in the Malmanouri district and in one or two other localities. Though no pains are taken in breeding them, the local horses are sturdy and strong, and are capable of performing useful service under the saddle and in the shafts.

(b) Forestry

Though it cannot be said that the exploitation of forests is in any sense proportionate to the possibilities of the situation, yet it occasions a greater activity than anything to be found in the agricultural and pastoral spheres. After declining for years under the adverse influences of insufficient capital, lack of labour, and defective communications, the forest industry has achieved a partial revival during recent times under the stimulus of modern commercial demands, and forest exports increased in value from £9,142 on the annual average of the period 1905-09 to £56,065 on the annual average of the next quinquennial period. These exports consist of rosewood essence, balata, and timber, with mean values respectively of £21,949, £8,075, and £2,580 for the period 1905-14.

Though the trees from which rosewood essence is obtained—classified botanically as Licaria quianensis—

are scattered all over the colony, the systematic utilisation of their resources is of recent occurrence, and may be said to have begun in 1900, when a Grasse house erected at Sinnamari a factory which has since been transferred to Cayenne. There are now five firms with factories in full work, and their output, which had already been quadrupled in a few years, doubled again from 1910 to 1913. There seems to be no valid reason why the industry should not achieve a continued expansion, provided that it can attract European capital. Not only are the trees common, but the wood can, without undue difficulty, be transported in small craft to factories established on the navigable parts of the rivers; and since a ton of wood, costing about £3 in Cayenne, yields about 22 lbs. of essence, worth £11 in France, there is an ample margin of reward for the

activities of the manufacturer.

Balata, a gum obtained by bleeding the balata or bullet tree, has acquired importance by reason of the growing scarcity of gutta-percha, for which it is an excellent substitute in all the commercial uses to which that article is applied. Long exported from British and Dutch Guiana, balata has attracted attention in Cayenne only since the beginning of the present century. If tardy, however, the progress of balata-collection has been rapid, and the export, which amounted to £2,154 as the annual average of the period 1905-09, rose to £13,995 as the annual average of the next five years. This result is due in the main to the impetus given to the industry by the discovery of large quantities of balata trees on the Penal concessions on the Lower Marowyne and to their exploitation by convict labour. The operations were remunerative, the example was quickly followed, and concessions multiplied apace. Some regions, especially the Mana, Marowyne, Sinnamari, and Iracoubo districts, are full of balata trees, and this industry also seems to be capable of extension. Owing to the scattered growth of the trees, however, the difficulty and expense of collection and transport are considerable.

It is owing to these difficulties and to the scarcity of capital that not much use is yet made of the other forest resources, beyond the felling of small quantities of the rarer ornamental woods. In Cayenne, however, as in the rest of the Guianese region, those resources are practically unlimited, and an interminable list might be made of timbers-some of great rarity and value—exhibiting every colour from white through crimson and brown to black, and every quality of hardness and suppleness, of resistance and elasticity; of woods suitable for ship-building and for lock and wharf work, for house-building, wheelwright's work, carpentry, and cabinet-making; of tanning, dyeing, textile, and medicinal materials; of scents, resins, and gums; and of edible, illuminant, soap-making, and grease-making oils. But no rational exploitation of this great wealth is possible in the prevailing conditions of labour, capital, and means of communication, and the forests will yield their treasures only when they are attacked by companies commanding large resources, employing mechanical inventions, and able to draw upon considerable labour reserves.

The lands upon which forest industries are conducted are the domain of the State, and the exploitation is governed by a decree of July 2, 1914, which fixes the areas of concessions, the rents payable for

them, and so on.

Three steam sawmills are worked by the Penal Establishment, and there are two in private ownership.

(c) Land Tenure

All unoccupied lands in the colony and all other lands to which private persons are unable to establish a title are deemed to be the domain of the State. Private property in land, so far as it exists, is governed in the main by the prescriptions of the Code Civil. The domain is governed by a decree of December 11, 1908, which regulates the various methods of alienating it, which may be by sale or lease, by public auction or private contract, and in small or large parcels. Free

grants of small holdings, subject to improvement conditions, are made to intending settlers, who may acquire a further area up to a maximum of 250 acres upon payment either of a purchase price by instalments or of an annual rent. Such land may not be alienated without permission, may be resumed for the purpose of public works, and carries no rights in the subjacent minerals. Mining and forest exploitation is carried on under a system of concessions.

(3) FISHERIES

Fish are plentiful and varied in the sea, the rivers, and the lakes of the country, but fishing is not turned to full account, and the Cayenne markets would be without fish if it were not for the spasmodic activities of the Annamites at the mouth of the Laussat Canal. In the interior fresh-water fish form an important item in the dietary of the people, the Bush negroes being particularly adroit fishermen. Isinglass is exported to an annual value of about £400. There is a considerable import of salt fish, owing to the climatic difficulties in curing fish caught locally, the impossibility of supplying the interior with fresh sea-fish, and the prevailing scarcity of labour.

(4) MINERALS

Gold, phosphates, silver, copper, lead, tin, mercury, iron, china clay, the chalcedony, the topaz, the amethyst, and garnets are found, and geologists infer from the structure of the country that diamonds must exist in the colony as they do in British Guiana; but no diamonds have yet been discovered, and of the minerals mentioned only the two first are worked.

(a) Gold

Discovery and Output.—Gold was first discovered in the valley of the Approuague in 1853, and for upwards of half a century gold-mining has not only been by far

the most important industry of the colony, but has completely dominated its economic life. The discovery occurred just at the moment when the agricultural plantations had been ruined by the abolition of slavery and by the fall in the prices of colonial products under the stress of foreign competition, and it resulted in the diversion to mineral exploitation of the whole economic force of the colony. A gold fever seized upon and held the population, as discoveries of the precious metal were made in one district after another—in the valleys of the Orapu and Comté, of the Sinnamari and Mana (1878 and 1879), of the Marowyne (1889), at Carsewene in the territory disputed with Brazil (1893), and finally in the basin of the Inini (1902). Under the influence of the discoveries production rapidly increased, and the export of gold, beginning with a modest 250 oz. in 1856, rose from 2,900 oz. in 1860 to 6,600 oz. in 1864, 46,000 oz. in 1874, about 63,000 oz. in 1884, and over 155,000 oz. in 1894. Then production (see Appendix, Table I) began to decline, and although once again stimulated by the discovery of the exceptionally rich Inini deposits, export is not now on the level of former years. On the average of the period 1905-09, the annual export of gold was 125,784 oz., of the value of £422,530, and for the succeeding period 117,276 oz., of the value of £393,753. The mean annual export (1905-14) was 121,530 oz., valued at £408,142, at which figure it accounts for nearly 90 per cent. of the total export trade of the colony (see Appendix, Table III). The total production from 1853 to 1915 has been estimated at about 3.750,000 oz... worth approximately £13,300,000.

Methods of Extraction.—Methods of extraction from the alluvial deposits are primitive in character. The prospector first tests the deposit à la batée (panning) that is, he washes samples of soil in a shallow round dish about 20 inches in diameter, expelling the earth by a circular motion of the hands, and capturing the gold contents in the bottom of the dish. No ground is considered worthy of further attention which may not be

classified as of the value of "deux sous à la batée," or possessing a gold content of about 11s. per cubic yard, and then only when the area of this richness is proved to be of considerable extent. When the site has been decided upon, huts for the workmen are built, the ground is cleared by felling and firing the timber, the barren soil which covers the payable strata is removed, the creeks are dammed for the purpose of draining the workings, water for the washing apparatus is brought in by a small canal, and a sluice is constructed. The sluice resembles a primitive aqueduct. It is made of wooden troughs which fit into one another and are suspended from stakes or carried on trestles, its inclination varying with the nature of the material which is to be passed through it. Through this apparatus the ore-bearing soil is washed, stones being picked out as they pass along, lumps of clay broken up, and the whole mass stirred with rakes to assist decomposition. As the material passes, the gold is deposited by virtue of its weight in recesses formed by the transverse and longitudinal bars or gratings with which the bottoms of the troughs are lined, and which are primed with quicksilver to facilitate the capture of the gold. At the end of the day the sluice is carefully cleaned out, the deposit sifted, the mercury rendered volatile by the application of heat, and the gold recovered.

The merits of this method of extraction are that it requires only small capital support, does not demand a large labour force, and reduces to a minimum the supply of those essential appliances which are so difficult to transport to the interior. It can be undertaken equally well by a rich company operating over a large area and by a handful of associated workmen with the most slender equipment. Many of the placers are, in fact, worked by a class known as "marauders," who correspond to the "pork-knockers" of British Guiana and have also their counterpart in Surinam. The "marauder" sometimes works on a concession under license from, and tribute to, its lawful owner, but, as often as not, his method of procedure is to furnish him-

self with a permit for a specified area and then to work outside it on any unoccupied land that promises good results. It must be recorded to his credit that he has thus been the means of discovering some of the richest fields. His worst feature is that he invariably contrives, if working for pay, to swindle his employer, and, if working on his own account, to smuggle his winnings out of the country without declaring them for the payment of dues, in either case damaging the industry by making capital timid and by keeping dues at a level which need not be maintained if the whole output of the fields were declared. Nor are his frauds always prompted by the comparatively venial motive of fiscal evasion. A recent official report has coupled the illegalities of the marauder with "the supreme interest of the Germans and their agents in buying up gold and balata for despatch to Germany. To achieve this result they leave no stone unturned. They send emissaries to the centres of production to offer high prices. They even go so far as to supply the producer with his necessaries at low prices. Accordingly some producers, foreigners or 'marauders,' are tempted by the prospect of pecuniary and material advantage to accept their offers and dispose of their products abroad. These are mercilessly hunted down by the Custom House officials."1

The salient defect in the prevalent method of extraction by sluice-washing is that only the richest ground can be worked, and that by reason of the speed at which he proceeds, coupled with the imperfection of his appliances, the digger almost certainly fails to recover a certain amount of gold from the soil which he handles, and not improbably misses altogether some of the richest ground. Imperfect though it may be, however, the sluice method has accounted for by far the larger part of the gold won in French Guiana. The great hopes formerly entertained of dredging and reefmining have been fulfilled imperfectly in the one case and scarcely at all in the other. Much larger quan-

¹ Rapport Annuel, 1915.

tities of soil, and therefore soil of a poorer quality, can be handled in the dredging machine than in the sluice, and its operating expenses are low, since it requires but a small staff and can be fed with fuel which may be got for nothing in unlimited quantities in the bush. The dredge can operate in the large rivers as well as in the small creeks. Several attempts to establish dredging in the colony have, however, been attended by misfortune, and it is only within recent years that some success has been achieved in dredging operations undertaken in the middle Sinnamari and Oyapok valleys, and others initiated on the upper Mana by the Mana Syndicate and by the Société Minière et de Dragages de la Guyane (Place Elysée). Quartz reefs have also been found disappointing, though rich ones are known to exist, and the one company which was still engaged in this form of enterprise in 1913 has since closed down. Yet it has been said, and probably with truth, that the mining industry will witness expansion only when machinery can take the place of the human hand in liberating the accumulated riches of the soil.

Since the placers attract the entire able-bodied population of the country, as well as a certain number of workmen from neighbouring lands, scarcity of labour is less pronounced in the goldfields than in other spheres; but labour is not superabundant, is never cheap, and in times of excitement consequent upon a new discovery is exceedingly dear. A much more serious obstacle to the success of the industry is the difficulty of communications. The placers are for the most part far distant from the coast; they can be reached only by rivers barred by numerous and dangerous rapids; the journey to them may occupy three weeks or even a month; machinery can scarcely be got to them; and the freight of ordinary supplies stands at an exorbitant level. In these circumstances the execution of one of the projected schemes for constructing a railway to the interior is much to be desired in the interests of the mining industry, the fortunes of which it might

profoundly affect. "At present," said a Governor of the colony some years ago, "gold is worked in a very small part of Guiana. A map of the placers is a series of dots scattered over, and lost to sight in the midst of, a huge white background representing the country as yet untouched. Yet, according to the experts, our deposits are among the richest in South America. If it be remembered, too, that gold has so far only been worked by the most rudimentary processes, it may be asked to what the revenues of the colony would amount, should success be achieved in stimulating production and generally in developing this industry, for which

nothing has yet been done."

Mining Laws.—The mining law is contained in a decree of March 10, 1906, which consolidated and amended existing legislation. Framed when the small digger was unknown, that legislation had ceased to be in harmony with prevailing conditions; it allowed a latitude of which the "marauder" shamelessly availed himself. This defect is now remedied, so far as a remedy can be applied, by legislative enactments which the Government is not in a position adequately to enforce. Every individual, and every company constituted under the French laws, may search for and work minerals under concession from the State. principal companies are the Société de Saint-Elie, the Société Minière et de Dragages de la Guyane, the Compagnie Coloniale de Dragages, the Compagnie Française des Mines d'Or du Maroni, and the Mana Syndicate. All are French, and all the placers of the colony are in French hands, though employing some foreign labour, chiefly from British colonies, but in one case including a personnel of mechanics, &c., from Italy. Gold pays 10 francs a kilogramme (about 3d. an ounce) on declaration at Cayenne and an export due of 8 per cent. ad valorem. The imposition of lighter dues in Dutch Guiana, coupled with imperfect supervision and the difficulty of policing a neutral frontier river, encouraged the fraudulent evasions which have already been noticed, and which, in the opinion of some writers. have been so considerable as to deprive of all relation to reality the official estimates of production. An arrangement for the supervision of the Marowyne was effected by a convention between France and Holland signed in 1905.

In 1901 a consultative Committee was established, to assist the Government in mining matters. It is composed of official, technical, commercial, and

elective elements.

(b) Phosphates

On Grand-Connétable Island there are deposits of phosphatic rock, which have been worked for many years by an American company. The mean annual value of the output during the years 1905–14 was £10,930, but the deposit appears to be nearing exhaustion, and production in the second half of the period was not much above one-half what it had been in the first.

(5) Manufacture

The extraction of rosewood essence, already described (see above, p. 38), is the most important manufacture of the colony. Next to it comes the manufacture of The chief distillery belongs to the Penal Administration, and is situated on their domain at Saint-Maurice. Its product, which was valued at £2,400 in 1914, has a great local reputation, and a French house has lately offered to take the whole of it for shipment to Europe. At Mana a small distillery is worked by the Sœurs de Saint-Joseph de Cluny, the raw material being derived exclusively from their own cane fields, but those fields are less than 20 acres in extent, and the output of this distillery is insignificant. The five distilleries in private ownership in Cayenne are obliged to obtain their raw material from abroad, mostly from British Guiana and the French West Indies; their labour is dear, their machinery is indifferent, their manufacturing methods are defective, and their product is inferior. Local

demands are largely met by importation from outside. There are three ice factories, two at Cayenne and one at Saint-Laurent. The Government of the colony owns four brickfields; one has lately been started by the Penal Administration near Saint-Maurice; and there are two, privately owned, in the suburbs of Cayenne. The raw materials of this industry are found throughout the colony, and bricks sell at remunerative prices. A little earthenware pottery, some baskets, and the hats peculiar to the women of the country are or were produced by local effort.

(6) Power

The innumerable falls in the rivers of the country provide opportunities for generating electric power, and such power might apparently be utilised with advantage in supplying the motive force for railways, sawmills, mining machinery, &c.

(C) COMMERCE

(1) Domestic

The import houses and retail shops of the colony deal in varied collections of goods, and there is little or no specialisation. Import and export trade are carried on through agents, who as a rule are themselves merchants. In return for a commission they undertake sales and purchases on account of their Guianese correspondents, arrange their freights, and so on. The usual commission is 5 per cent, on imports from Paris and 3 or 4 per cent. on those from Bordeaux, Nantes, and Marseilles, and in the case of exports $\frac{1}{4}$ per cent. on gold and 3 per cent. on rosewood essence, isinglass, and most other articles. Imports are paid for either in gold from the placers, or in bills of the Banque de la Guyane, or to a limited extent by the shipment of colonial produce. Cavenne is the centre of the colony's commercial life, but Saint-Laurent has been growing in importance, mainly by reason of the rich goldfields discovered on the upper river, and many Cayenne

houses have opened branches there.

There is a Chamber of Commerce at Cayenne, instituted in 1881 and composed of elected members. Its attributes are of two kinds: those which pertain to it as the official organ of commerce—it advises the Government in all commercial matters—and those belonging to it as the trustee of commercial interests.

(2) Foreign

(a) Exports

Quantities and Values.—Exports amounted to £440,731 as the annual average of the period 1900-14 (see Appendix, Table II), during which period they exhibited a small tendency to increase. Though slightly exceeding the imports on the average of the years 1910-14, they are, on the whole, inferior to them in value.

Amongst the exports gold predominates, and accounts for nearly 90 per cent. of the total export trade. Other exports are rosewood essence, about 5 per cent. of the total exports; phosphate and balata, respectively a little over and under 2 per cent.; plumes and skins, about 1 per cent.; and timber, about ½ per cent. The export of cacao, isinglass, coffee, and rum attains merely to insignificant proportions. Exports of rosewood essence, balata, and timber show increases on a comparison of the annual average for 1905-09 with that for 1910-14; the movement of the gold export is retrograde; and the exports of phosphate rock and of plumes and skins show sharp declines. The quantities and values of the principal exports will be found in the Appendix, Table III.

Countries of Destination.—France is the largest purchaser of the colony's products, and took about 66 per cent. of the exports on the average of the period 1904-14 (see Appendix, Table V); Switzerland took 30 per cent.; British Possessions took 2 per cent.; and the United States took 1 per cent. On a comparison of the

annual average for 1905-09 with that for 1910-14, it will be seen that the trade with Switzerland and that with British Possessions showed considerable increases, while that with France showed a great decline. Gold is exported to Switzerland, and phosphates to the United States and Great Britain. Some of the exports credited to British Possessions in the official statistics are really destined for the United States by trans-shipment in a British colony.

(b) Imports

Quantities and Values.—Imports were of the value of £463,491 on the annual average of the period 1900-14 (see Appendix, Table II). They exhibit

fluctuations, with a tendency to increase.

The principal articles imported (see Appendix, Table IV) are farinaceous substances, which account for 16 per cent. of the import trade; liquors constitute 14 per cent.; textiles, 11 per cent.; colonial produce, machinery and metals, and meat, each about 7 per cent.; live stock, $5\frac{1}{2}$ per cent.; leather goods and milk, cheese and butter, both over 3 per cent.; and vegetable oils and essences, and salt fish, both rather under 3 per cent. None shows any marked tendency to increase. Decreases have occurred in liquors, textiles, machinery and metals, and live stock.

Countries of Origin.—France and her colonies furnished 70 per cent. of the imports on the average of the period 1905-14 (see Appendix, Table V), the United Kingdom and British Possessions furnished 17 per cent., and the United States furnished 7 per cent. No marked changes seem to be taking place in the relative values of the imports from these countries, of which further particulars will be found in the Appendix, Table VI. As in the case of exports, the share of the United States in the trade is larger than would appear from the official statistics, many of the imports there attributed to British colonies being really goods of American origin, which cannot be shipped direct for want of through communications.

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Thus in 1914, when imports of salt meat to the value of £350 only and of flour to the value of £1,200 were credited to the United States, her trade under those headings really amounted to over £25,000.

(c) Customs

The tariff system in force was created by decrees of January 11, 1893, and March 29, 1910. According to it, goods of foreign origin pay the same duties as in France, but there are certain specified exceptions. Unless specifically exempted, all goods that enter, whether liable to import dues or not, pay droits de consommation, and also the droits d'octroi de mer which are levied for the benefit of the communes; and there are tonnage and pilotage dues, &c., in addition.

Salt meat, fish, flour, maize, rice, common woods, petrol, and some other articles are exempt from customs dues, and arms and ammunition, ice and ice-making machinery, agricultural and mining machinery and tools, and some other imports are exempt from

droits de consommation.

Gold, as already mentioned, pays a duty of 8 per cent., ad valorem, on exportation from the colony.

(D) FINANCE

(1) Public Finance

Expenditure tends to exceed revenue, and in order that the colonial budget may balance, recourse is had either to subventions from the home Government or to withdrawals from the colonial reserve fund, or partly to one source and partly to the other. During the period 1900-07 the average annual revenue and expenditure were as follows:—

(a) Revenue

proper enitainte fai din ella		£
Direct taxation	10	7,499
Droits de consommation	6	22,764
Customs dues	1	12,277

				£
Other indirect	taxa	tion	014	61,609
Domain revenu			Stolley.	9,217
Withdrawals f			0.41	6,174
CV 1				3,125
Miscellaneous		7 7 17 3 JA		14,383
miscentineous				11,000
Total	٠	1000	££	137,048
(b)	Ex	penditu	re	
				£
Public works				24,418
Justice, police,	&c.		0.00	15,946
Education			4	10,348
Relief				10,240
Government, tr			100.7	9,812
α .				9,413
Post Office				3,78)
Miscellaneous,			pay-	0,103
ments to res		rading	Pary	47,195
menus to res	CIVE			11,190
Total		1.75	£	131,161

As regards the communes, to which the *droits* d'octroi de mer are allocated, it cannot be said that their financial position is one of stability, for with the exception of Cayenne and Sinnamari, which have accumulated reserves with which to encounter bad times, none of them is able to meet its expenditure when anything untoward occurs to reduce its revenue.

(2) Currency

Cayenne was one of the first colonies to make use of the metric system, the Revolutionary laws by which that system was constituted being applied to the colony by an ordinance of 1820. The monetary system of France is thus in force in Cayenne, and French money alone is legal tender with the exception of the notes of the Banque de la Guyane and of a local 10 centime piece called the sou marqué blanc. The money in

circulation consists of gold pieces of 20 francs and 10 francs; 5 franc pieces in silver; silver small change, mostly French, but some of it Belgian, Greek, and Swiss; French 10 and 5 centime pieces in base metal; the sou marqué with a conventional value of 10 centimes; and notes of the local bank.

Bank notes circulate freely, and constitute the principal medium of exchange. Before the outbreak of war the note issue was limited to 2,500,000 francs. From August 1914, however, a larger note issue had to be authorised by reason of considerable advances made by the bank on the security of raw gold, balata, and rosewood essence, and of the fact that almost the whole coinage was accumulated in the reserves of the bank and the local Treasury; and by September 1915, the note circulation had been raised by successive increases to 3,000,000 francs.

Gold and silver coins tend to become more and more scarce, in spite of a rigorous prohibition of export, but in consequence, it is believed, of the taxes and charges which affect money orders and drafts. There is in circulation a sum of £6,000 in sous marqués, which resemble the "bit" of British Guiana in that they are the favourite coin of the proletariat and the only standard of value in which its members can readily reckon. Officially, however, it is considered that the withdrawal of this little coin would be a measure of progress, and that nothing can justify the retention in circulation of a coin with so few advantages and so many drawbacks. In the first place, the sou marqué enjoys the anomalous privilege of being legal tender up to 1,000 francs, whilst French copper need not be received to an amount over 5 francs. Secondly, it represents the monetary unit in small transactions, to the exclusion of the real sou or 5 centime piece, and thus contributes to make living expensive. Lastly, it was coined a century ago, and is now a dirty, insanitary, and featureless metal disc, so easily counterfeited that the country is full of spurious sous made out of the metal of petrol cans.

(3) Banking

The Banque de la Guyane was established by decrees of 1849, 1851, and 1854. Its capital, originally fixed at 300,000 francs, was doubled in 1863, then reduced for a short time to 400,000 francs, and finally restored to 600,000 francs in 1875. It is in a privileged position, and enjoys an exclusive right to issue notes. Its bearer notes of 5, 25, 100, and 500 francs are legal tender throughout the colony. The bank is prosperous, and pays good dividends. It advances money for agriculture and other purposes, and makes loans on the security of agricultural, forest, and mineral products; and, in view of the assistance which is thus rendered, the Chamber of Agriculture has formed the opinion that there is no need for a system of Cooperative Credit Banks.

NOTE

Some further remarks about present conditions and future prospects in Cayenne will be found in No. 134a, Introduction to the Guiana Colonies, pp. 10-15.

APPENDIX

(A) Extracts from Treaties, &c.

I.—TREATY BETWEEN FRANCE AND PORTUGAL

Signed at Utrecht, 11th April, 1713

ARTICLE VIII

In order to prevent all possibility of discord which might arise between the subjects of the Crown of France and those of the Crown of Portugal, His Most Christian Majesty will renounce for ever, as he renounces by the present Treaty, in the strongest and most authoritative terms, and with all the necessary clauses, as if this were herein inserted, as well in his name as in that of his heirs and successors to all rights and pretensions, which he may or might pretend over the territories of Cap du Nord, and situated between the River Amazones and that of Japoc or of Vincent Pinson, without reserving to himself or retaining any portion of the said territories, so that they may henceforth be possessed by his Portuguese Majesty, his heirs, and successors, with all the rights of sovereignty, of absolute power, and entire dominion as forming part of his States (Hertslet, vol. 3, App., p. 1988).

II.—TREATY OF MADRID BETWEEN FRANCE AND SPAIN AND PORTUGAL, 29th September, 1801

ARTICLE IV

. . . les limites entre les deux Guyanes française et portugaise seront réglées, de manière qu'elles suivront le cours de la rivière Carapanataba jusqu'à sa source, d'où elles se porteront vers la grande chaîne de montagnes, qui fait le partage des eaux, et dent elles suivront les inflexions jusqu'au point où cette chaîne se rapproche le plus du Rio Blanco.

III.—TREATY OF PARIS, 30th May, 1814

ARTICLE X

Her Most Faithful Majesty, in virtue of the arrangements stipulated with her Allies, and in execution of the VIIIth Article, engages to restore French Guiana as it existed on the 1st January, 1792. to His Most Christian Majesty, within the term hereafter fixed.

The renewal of the dispute which existed at that period, on the subject of the frontier, being the effect of this stipulation, it is agreed that the dispute shall be terminated by a friendly arrangement between the two Courts, under the mediation of His Britannic Majesty.

See also Final Act of Congress of Vienna, Article CVII, 9th June, 1815.

IV.—CONVENTION BETWEEN FRANCE AND PORTUGAL

Signed at Paris, 28th August, 1817

ARTICLE I

His Most Faithful Majesty, animated by the desire to execute Article CVII of the Act of the Congress of Vienna, engages to restore to His Most Christian Majesty, within the delay of three months, or sooner if possible, French Guiana, as far as the River Oyapock, the mouth of which is situated between the 4th and 5th degrees of north latitude, and as far as the 322nd (sic) degree of longitude, to the east of the Ile de Fer, by the parallel of 2 degrees 24 minutes of north latitude.

ARTICLE II

Immediate steps shall be taken to appoint and send out Commissioners to fix the limits of the French and Portuguese Guianas, in conformity with the precise sense of Article VIII of the Treaty of Utrecht, and to the stipulations of the Act of the Congress of Vienna, the said Commissioners shall terminate their labours within the delay of one year at latest from the day of their meeting in Guiana. If, at the expiration of the term of one year, the said respective Commissioners should not have come to an understanding, the two High Contracting Parties shall come to some other amicable arrangement, under the mediation of Great Britain, and always in conformity with the precise sense of Article VIII of the Treaty of Utrecht, concluded under the guarantee of that Power (Hertslet, vol. 1, pp. 5, 30).

For Article VIII of the Treaty of Utrecht see above, No. I.

V.—TREATY OF ARBITRATION BETWEEN FRANCE AND BRAZIL

Signed at Rio, 10th April, 1897

Le Gouvernement de la République des Etats-Unis de Brésil et le Gouvernement de la République française, désirant fixer définitivement les frontières de Brésil et de la Guyane française, sont convenus de recourir dans ce but à la décision arbitrale du Gouvernement de la Confédération suisse. L'arbitre sera invité à décider quelle est la rivière Japoc ou Vincent Pinson, et à fixer la limite intérieure du territoire.

ARTICLE I

La République des États-Unis de Brésil prétend que, conformément au sens précis de l'Article VIII du Traité de Utrecht, la rivière Japoc ou Vincent Pinson est l'Oyapoc qui débouche dans l'océan à l'ouest du Cap d'Orange. La République française prétend que . . . la rivière Japoc ou Vincent Pinson est la rivière Araguary (Araouary), qui débouche dans l'océan au sud du Cap Nord.

In the following Articles the French lay claim to the hinterland assigned to France by the Treaty of Madrid in 1801 (see above, No. II).

The arbitral decision by the Swiss Federal Council was given (1899) in favour of the Brazilian (Portuguese) pretensions and claims.

(B) STATISTICS

TABLE 1.1—GOLD MINING STATISTICS, 1900-1915.

Year.	Concess-	Area.	Produ	ction.
	No.	Acres	Oz.	£
1900	133	148,025	76,454*	256,875
1901	496	268,088	129,278*	434,315
1902	423	461,037	149,340*	501,766
1903	234	205,794	129,728*	435,596
1904	204	160,538	110,500*	371,233
1905	_	207,964	114,745	385,448
1906	463	789,393	112,645	378,396
1907	468	715,120	133,748	149,284
1908	277	719,498	131,755	442,590
1909	188	622,309	121,750	408,940
1910	164	601,476	123,770	462,000
1911	188	571,184	121,779	409,078
1912	207	580,094	133,187	447,398
1913	213	597,500	123,237	404,231
1914	300	551,606	97,178	326,440
1915	302	481,978	109,295	364,980

¹ Statistiques de l'Industrie Minière dans les Colonies Françaises. Conversion at the following rates:—2.471 acres to 1 hectare; 31.1035 grammes to 1 ounce troy; and 25 francs to £1.

^{*} Approximate figures.

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

Alexander et a	1900	1901	1902	1903	1904
Exports	050 100	£ 341,546 449,063	£ 479,368 367,361	£ 493,216 418,723	£ 426,128 478,470
Total .	617,973	790,609	846,729	911,939	904,598
	1905	1906	1907	1908	1909
Exports Imports	1	£ 419,952 581,950	£ 493,268 560,523	£ 514,061 486,778	£ 464,9 4 3 488,945
Total .	855,152	1,001,902	1,053,791	1,000,839	953,888
	1910	1911	1912	1913	1914
Exports lmports	100 000	£ 476,145 450,533	£ 484,700 434,252	£ 488,901 499,791	£ 408,603 4 3 0,957
Total .	952,023	926,678	918,952	988,692	839,562
Annual Ave	erages.	1900-04	1905-09	1910-14	Mean.
Exports Imports		111015	£ 457,961 515,154	£ 464,207 460,974	£ 440,731 463,491
Total		814,370	973,115	925,181	904,222

¹ Statistiques du Commerce des Colonies Françaises. Conversion at the rate of 25 francs to £1.

TABLE III.1—PRINCIPAL ARTICLES OF EXPORT, 1905-14.

PLANTE TO PERMANENT CTRACT DIVINE	PART STAND FACTOR		verages.	Mean.	Per-
en rei Marie	0.3248	1905-09.	1910–14.		centage
- 1991 - and	(16.	41,367	254,894	148,130	
Balata			13,995	8.075	1.75
0	(cwt.	251	352	302	
Cacao	1 £	534	725	629	. 13
Coffee	\ cwt.	12	10	11	al male
Conee	\ ±	88	74	81	.02
Gold	5 02		117,276	121,530	
dold	£	The same of the sa	393,753	408,142	88.52
Isinglass	1 16		7,685	7,217	
	{ #		426	397	.09
Phosphate Rock	±	14,097	7,762	10,930	2.38
Plumes and Skins	±	-7,061	1,772	4,416	.96
Rosewood Essence			37,525	21,949	4.77
Rum	§ gals		290	476	0.4
) ±		24	36	.01
Timber	±		4,545	2,580	• 54
Other Exports	±	578	304	441	.09
Trans-shipments		3,514	3,302	3,408	.74
Total	£	457,961	464,207	461,084	100.00

¹ Statistiques du Commerce des Colonies Françaises. Conversion at the following rates: $31\cdot 1035$ grammes to 1 ounce troy; $50\frac{3}{4}$ kilogrammes to 1 cwt.; 100 litres to 22 gallons and 25 francs to £1.

TABLE IV.1-PRINCIPAL ARTICLES OF IMPORT, 1905-14.

	Annual Averages.		Mean.	Per-
	1905-09.	1910–14.	mean.	centage
	£	£	£	
Animal Fats	 6,331	3,932	5,132	1.05
Building Materials	 8,346	7,584	7,965	1.63
Colonial Produce	 38,681	33,046	35,863	7.35
Farinaceous Substances	 78,655	79,719	79,187	16.23
Firearms and Powder	 4,823	5,395	5,109	1.05
Leather Goods	 16,018	15,568	15,793	3.24
Liquors	 75,878	63,545	69,711	14.28
Live Stock	 30,404	23,433	26,918	5.52
Machinery and Metals	 40,562	29,817	35,190	7.21
Meat	 34,350	32,369	33,359	6.84
Milk, Cheese and Butter	 18,784	17,423	18,104	3.71
Paper and Paper Goods	 5,034	6,207	5,621	1.15
Petrol and Paraffin	 4,391	5.412	4,902	1.00
Salt Fish	 12,458	11,210	11,834	2.42
Textiles	 57,274	50,934	54,104	11.08
11 011 1 70	12,190	13,782	12,986	2.66
Other Imports	 70,975	61,598	66,286	13.58
Total	 515,154	460,974	488,064	100.00

 $^{^1}$ Statistiques du Commerce des Colonies Françaises. Conversion at the rate of 25 francs to £1.

TABLE V.1-TRADE WITH THE PRINCIPAL COUNTRIES.

Per- centage. 1905-09. 1910-14. Mean. centage. 1905-09. 1910-14. £ £ £ £ £ £ 65.79 350,703 301,895 326,299 66.86 627,432 80.34 683 14,938 14,938 17,002 3.49 17,369 1.76 84,284 66,061 75,172 15.40 83,216 1.06 40,520 28,597 34,559 7.08 39,427 2.00 10,914 20,052 15,483 3.17 17,709	E	Exports.2	cı.			Imp	Imports.		Total	Total Trade.
centage. 1905-09, 1910-14.	Annual Averages.	K A ST		Per-	Annual A	verages.		Per-	>	Per-
£ £ £ £ £ 65.79 350,703 301,895 326,299 66.86 627,432 .08 15,494 18,510 17,002 3.49 17,369 80.34 685 148 416 .08 139,278 1.76 84,284 66,061 75,172 15.40 83,216 1.06 40,520 28,597 34,559 7.08 39,427 20 8,925 10,773 9,849 2.02 10,783 50 10,914 20,052 15,483 3.17 17,709 100.00 515,154 466,974 488,064 100.00 945,740	1905-09. 1910-14.	0	an.	centage.	1905-09.	1910-14.	Mean.	centage.		centage
65.79 350,703 301,895 326,299 66.86 627,432 .08 15,494 18,510 17,002 3·49 17,369 80.34 685 14,938 9.284 1·90 10,526 1.76 84,284 66,061 75,172 15·40 83,216 1.06 40,520 28,597 34,559 7·08 39,427 20 8,925 10,773 9,849 2·02 10,783 50 10,914 20,052 15,483 3·17 17,709 100·00 515,154 466,974 488,064 100·00 945,740	भ		4		મ.	. 4	Ŧ		મ	
80.84 685 17,502 17,502 27 3,629 14,938 9,284 1790 10,526 1.76 84,284 66,061 75,172 15.40 83,216 1.06 40,520 28,597 34,559 7.08 39,427 20 8,925 10,773 9,849 2.02 10,783 50 10,914 20,052 15,483 3.17 17,709 100.00 515,154 460,974 488,064 100.00 945,740	342,962 259,304 301		1,133	65.79	350,703	301,895	326,299	66.86	627,432	66.35
.27 3,629 14,938 9,284 1.90 10,526 1.76 84,284 66,061 75,172 15.40 83,216 1.06 40,520 28,597 34,559 7.08 39,427 .20 8,925 10,773 9,849 2.02 10,783 .50 10,914 20,052 15,483 3.17 17,709 100.00 515,154 460,974 488,064 100.00 945,740	181,002 13		3,862	80.34	685	148	416	80.	139,278	14.73
1.76 84,284 66,061 75,172 15.40 83,216 1.06 40,520 28,597 34,559 7.08 39,427 .20 8,925 10,773 9,849 2.02 10,783 .50 10,914 20,052 15,483 3.17 17,709 100.00 515,154 466,974 488,064 100.00 945,740	2,117	_	1,242	. 27	3,629	14,938	9,284	1.90	10,526	1.11
1.06 40,520 28,597 34,559 7.08 39,427 .20 8,925 10,773 9,849 2.02 10,783 .50 10,914 20,052 15,483 3.17 17,709 100.00 515,154 460,974 488,064 100.00 945,740		CO	8,044	1.76	84,284	190,99	75,172	15.40	83,216	8.80
20 8,925 10,773 9,849 2.02 10,783 .50 10,914 20,052 15,483 3.17 17,709 100.00 515,154 460,974 488,064 100.00 945,740	4,619 5,118	47	1,868	1.06	40,520	28,597	34,559	2.08	39,427	4.17
.50 10,914 20,052 15,483 3·17 17,709 100·00 515,154 466,974 488,064 100·00 945,740			934	.20	8,925	10,773	9,849	2.05	10,783	1.14
100.00 515,154 460,974 488,064 100.00 945,740			3,226	.50	10,914	20,052	15,483	3.17	17,709	1.87
100.00 515,154 460,974 488,064 100.00 945,740					1					
	454,447 460,905 457,676		929,	100.00	515,154	460,974	488,064	100.00	945,740	100.00

¹ Statistiques du Commerce des Colonies Françaises. Conversion at the rate of 25 francs to £1.

² Excluding transit trade.

TABLE VI.1—IMPORTS: COUNTRIES WHENCE SHIPPED, 1905-14.

		Average Annual Value, 1905–09.	Average Annual Value, 1910–14.	Mean.	Percentage of total Import of Commodity.
France—		£	£	£	mit saletaj
Arms and Ammunition		4,760	5,294	5,027	98.39
Building Materials, Miner		1,100	0,20,1	0,021	00 00
Oils, &c		6,726	4,568	5,647	43.89
Colonial Produce		23,781	19,846	21,813	60.83
Farinaceous Substances		38,261	39,458	38,860	49.07
Fish		9,940	8,040	8,990	75.97
Leather Goods		15,637	15,401	15,520	98:28
Liquors		62,502	46,085	54,293	77.88
Machinery and Metals		34,397	24,192	29,294	83.24
Milk, Cheese, &c.		13,648	12,541	13,094	72.31
Paper and Paper Man	• •	10,040	12,941	15,054	12 01
factures		4,950	6,125	5,538	98.50
Salt Meat, &c	• •	14,534	10,952	12,743	38.20
Textiles		55,181	48,729	51,955	99.72
Vegetable Oils, &c.	• •		5,602		
	• •	7,955		6,778	52.20
Other Imports		58,431	55,062	56,747	
Total		350,703	301,895	326,299	
French Possessions—					
Colonial Produce		7,346	4,339	5,842	16.29
Liquors		5,857	10,385	8,121	11.65
Other Imports		2,291	3,786	3,039	-
other imperes					
Total		15,494	18,510	17,002	-
United Kingdom-					
Liquors		316	3,604	1,960	2.81
Machinery		119	3,061	1,590	29.34
Textiles		956	1,048	1,002	1.85
Other Imports		2,238	7,225	4,732	_
Total		3,629	14,938	9,284	

 $^{^1}$ Statistiques du Commerce des Colonies Françaises. Conversion at the rate of 25 francs to £1.

	Annual Value,	Average Annual Value, 1910–14.	Mean.	Percentage of total Import of Commodity
British Possessions—	£	£	£	1 1 27
Farinaceous Substance		21,926	23,066	29.13
Liquors	0.000	2,525	4,577	6.57
Live Stock	00. ===	12,642	19,609	72.84
Salt Meat, &c	10.000	10,202	10,506	31.41
Other Imports	10 000	18,766	17,414	
Total	84,284	66,061	75,172	1
United States—				Para de la la
Building Materials	3,189	3,219	3,204	24.90
Farinaceous Substances	10,536	9,294	9,915	12.52
Salt Meat, &c	8,532	4,465	6,499	19.48
Vegetable Oils	2,215	4,771	3,493	26.90
Other Imports	16,048	6,848	11,418	Considerable
Total	40,520	28,597	34,559	engle <u>all</u> en

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