Annual report of the Medical Department / Colony of Seychelles.

Colony of Seychelles.

ANNUAL REPORT

ON THE

MEDICAL DEPARTMENT

FOR THE

YEAR 1931

Published by Command of His Excellency the Governor.

Printed by the Supt. of Printing,
At the Government Printing Office,
Victoria, Mahé—Seychelles.

1933

Annual Medical and Sanitary Report.

for the year ending 31st December 1931.

Medical Department,

Seychelles, 3rd August, 1932.

Sir,

I have the honour to submit for the information of His Excellency the Governor, and for transmission to the Right Honourable the Secretary of State, the Medical Report on the Health and Sanitary conditions of Seychelles for the Year 1931, together with the returns, etc., appended thereto.

I have the honour to be,

Sir,

Your obedient Servant,

JOHN THOS. BRADLEY,

Chief Medical Officer.

To

The Ag. Clerk to Governor.

Victoria.

COLONY OF SEYCHELLES.

Annual Medical and Sanitary Report for the year ending 31st December 1931

SECTION 1.—Administration.

A.—*Staff.*

The establishment for 1931 as sanctioned in the Estimates was as follows:

European.

The Chief Medical Officer.
Resident Surgeon.
Assistant Medical Officer South Mahé.
Surgeon Dentist.

Asiatic.

Assistant Medical Officer Praslin and La Digue.

The staff of the Hospital was as follows:

4 Hospital sisters (order of St Joseph de Cluny).
1 Headmidwife and Matron Maternity section.
7 Probationer nurses.
1 Midwife.
1 Probationer midwife.
2 Ward Maids Maternity.
4 Male Attendants at Hospital (3 for day duty, one for night).
4 Ward maids (3 for day duty, one for night.
1 Cook.
1 Cook's mate.
1 Cook to nurses.
1 Maid Servant, quarters of sisters.
2 Washerwomen.
10 District Nurses.

Attached to Pharmacy and Chief Medical Officer's Office.

1 Dispenser and Chief Clerk.
1 Assistant Dispenser.
1 Storekeeper and second clerk.
1 Messenger.

Fiennes Institutes.

Master of Fiennes Institute.
1 Nurse.
1 Cook.
3 Male attendants (2 for day duty, one for night).
1 Female Attendant.
1 boy messenger.

Male Leper Camp Round Island Praslin.

Officer in Charge A. M. O. Praslin.
Guardian.
2 labourers.
1 cook, 1 washerman (appointed from lepers in camp.)

Female Leper Camp Round Island Mahé.

Officer in Charge Leprosy Campaign.
1 Female Guardian.

Anse Royale Lunatic Asylum.

Officer in Charge A. M. O. South Mahé.
1 Head Male Attendant.
1 Head Female Attendant.
2 Male Attendants.
2 Female Attendants.
1 Cook.

Quarantine, Public Health, Ankylostomiasis and Leprosy Campaign.

1 Sanitary Inspector.
6 Assistant Sanitary Inspectors (One Assistant Sanitary Inspector works under Victoria Town Board).
1 Dispenser.
3 Labourers.
1 Keeper Quarantine Station.

Cottage Hospital Praslin.

Officer in Charge, Assistant Medical Officer, Praslin.
1 Nurse transferred from Seychelles Hospital.
1 Attendant and Cook.

Shortage in Establishment.

During the year there was no shortage in the Medical Department.

Staff Changes.

Mr E. Mathiot, 2nd Clerk and Assistant Dispenser, transferred as Head Attendant to Lunatic Asylum from 14.9.31 to replace Mr St Ange died on 6.9.31.
Mr H. Barallon, Probationer promoted Assistant Dispenser from 14.9.31.
Mr A. Loustau-Lalanne appointed Second Clerk and Storekeeper from 21.9.31.
Mr Edwin Collie, Dispenser transferred to Fiennes Institute from 16.3.31 through retirement on pension of T. Horner (Master).
C. Antat Disinfector Attendant transferred as messenger from 1.7.31.
E. Forte appointed Assistant Sanitary Inspector from 16.7.31.
Miss Josephine Camille appointed Probationer Nurse from 1.5.31.
„ Blanche Bouchereau „ „ „ „ 1.5.31.
„ Colette Payet „ „ „ „ 22.6.31.

Leave, Resignation, &c.

Dr Bradley, C. M. O., went on leave 8.8.31.
T. Horner, Master Fiennes Institute retired on pension on 15.5.31.
Probationer Nurse May Adam resigned on 31.3.31.
„ „ Julie Morel engagement terminated 28.2.31.
„ „ Clivy Collie „ „ 30.4.13.
Felix Dorizo, Messenger, Dismissed 19.6.31.
E. St Ange, Head Male Attendant Lunatic Asylum died 6.9.31.

B.—*Legislation enacted in 1931.*

ORDINANCES.

Ordinance No. 4 of 1931.—To control communication with Leper Asylum, rendered necessary by the transfer to Round Island Praslin, of some of the lepers.
„ No. 5 „ To provide means for the prevention of malaria within the Colony Arose out of the discovery of the prevalence of malaria at Aldabra.
„ No. 10 „ To amend Ordinance No. 4 above to meet certain suggestions offered by the Secretary of State.

REGULATIONS.

Regulation No. 41 of 1931.—Victoria Town Board. To protect from dust, flies etc., foodstuffs being carried or exposed for sale.
„ No. 73 „ Providing fumigation of vessels and rates for such.
„ No. 102 „ For Nurses Home Seychelles Government Hospital.
„ No. 104 „ Applying provisions of the Dangerous Drugs Ordinance No. 7 of 1927 to esters of Morphine dihydro-oxycodeine, dihydrocodeine and dihydro-morphinone and their respective salts, etc.
„ No. 138 „ Health Committee. Regulations for the prevention of dysentery.
„ No. 152 „ „ „ Regulations providing for medical examinations of labourers proceeding to Outlying islands.
„ No. 159 „ Victoria Town Board. Regulations for Bake Houses in Victoria.

C.—*Financial.*

The estimated expenditure of the year 1931 was Rs 118,580 of this amount :—

Personal Emoluments amounted to	Rs	67,720
Other Charges, which include cost of drugs and instruments, dieting, uniform, etc.	„	50,860
Total	Rs	118,580

The total expenditure for the year was :—

Personal Emoluments	Rs	65,856 75
Other Charges	„	54,111 12
Total	Rs	119,967 87

Amount overexpended ... Rs 1,387 87.

The total amount paid by patients for Hospital fees in 1931 amounted to Rs 5,037.89, this include fees amounting to Rs 1,036.76 paid by patients in the Lunatic Asylum.

The fees in Maternity Department amounte l to Rs 1,422.

The amount received for sale of drugs at the Government Pharmacy was Rs 2,739.46.

The amount of Rs 1,387.87 overexpended was due to the outbreak of Bacillary dysentery and Leprosy Campaign.

Public Pharmacy.

Once more I draw attention to my recommendation made in 1929, in the interest of the Colony a qualified chemist should be in Charge of the Public Pharmacy.

Recommendation.

Further I again record my recommendation made in 1930. "In order to remedy this state of affairs, I would suggest that one of the public scholarships be specially set aside for candidates who desire to follow a course of study as a Pharmaceutical Chemist. Only candidates be allowed to enter for the scholarship that are prepared to take this qualification, afterwards return to the Colony, and engage to work in the public service of the Colony for a fixed number of years as a Pharmaceutical Chemist".

SECTION II.

Public Health.

During the year under review the health of the European population was good.

The death of one European, a Frenchman was registered on 3/3/31 the cause of death was due to burns and shock following a motor cycle accident.

The total death-rate for all the Colony in 1931 was 13·53 per 1,000 compared with 13·99 in 1930, this death-rate is satisfactory and compares favourably with Europe.

Communicable diseases.

Influenza of a mild form is prevalent, especially during the change of monsoons.

Dengue and chicken pox are endemic, sporadic cases always cropping up, at present these diseases are mild, and no serious symptoms are present.

Elephantiasis is seen in the outlying districts, and Beri-beri occurs in the outlying islands, especially in the island of Coëtivy.

Tuberculosis of the pulmonary type is common amongst the poorer classes.

Leprosy is increasing, and this disease requires to be carefully supervised, the bulk of the population requires education as to how the disease is propagated, and the steps necessary to combat and eradicate same, the native population is careless and indifferent with regard to this disease.

Syphilis and Gonorrhœa are common diseases in the Colony.

Ankylostomiasis is prevalent, but is kept in check by sanitary supervision and free treatment centres all over the Colony.

Amœbic dysentery is prevalent in some districts in the rainy season.

Jiggers are not increasing but are found all over the Colony, especially in the sandy plains near the seashore.

Pneumonia is one of the principal cause of death and at certain seasons of the year is prevalent.

Malaria. It would appear that the outbreak has died out, this subject has been dealt with fully under "outlying islands" and in the appendix (report of the Sanitary Inspector) when he visited the group of islands between 15th October 1931 and 7th February 1932.

Epidemic Bacillary dysentery. There was an outbreak at Anse-aux-Pins in October of this disease. In former years in May 1917 there was an outbreak, again in 1918, this is the third outbreak within 30 years.

Vital Statistics.

I am able this year to give the correct population of the Colony, as a census was taken on the 26th April 1931. It showed that on that day the total population of the Archipelago was 27,444 (13,289 males and 14,155 females).

As regards races they have been classified under three categories as follows :—

CLASS I which is the most important as it comprises the bulk of the population and is divided up as follows :—

(a) Europeans (b) European Descent and Africans.

The total for this class is 26,706 (12,694 males 14,012 females).

CLASS II refers to Indians made up of 503 persons of which 398 are males and 105 are females.

CLASS III refers to the Chinese community which is 235 (197 males and 38 females).

The total population of the Colony has been classified under these headings as it was found impossible to classify the population according to colour.

The following particulars with regard to Class I are interesting.

The Birth places of those comprised in Class I is as follows :—

Europe	... ...	147
Asia	... ...	8
Africa (including Seychelles)	...	26,546
America	... ...	4
Australia	... ...	1
		26,706

The Nationality of Class I. is also interesting.

			Brought forward			26,675
British born	... ...	26,585	Norwegian	...	...	2
British naturalised	... ...	6	Portuguese	...	...	3
French	... ...	80	Spaniards	...	...	2
German	... ...	1	Swiss	...	...	23
Italian	... ...	3	Danish	...	...	1
Carried forward	...	26,675	Total		...	26,706

The age of class I. is as follows :—

Age.	Birth to 10 years.	10–20.	20–40.	40–60.	60 and over.	Total.
Males ..	3,483	2,654	3,658	2,048	851	12,694
Females ..	3,333	2,914	4,382	2,382	1,001	14,012
Total ...	6,816	5,568	8,040	4,430	1,852	26,706

Conjugal Condition of class I.

	Single.	Married.	Divorced.	Widower.	Widow.	Total.
Males ...	8,879	3,457	3	355	...	12,694
Females ...	9,186	3,732	8	...	1,086	14,012
Total ...	18,065	7,189	11	355	1,086	26,706

Occupation of class I.

Primary production includes agricultural labourers and fishermen	...	8,699
Trade and commerce the bulk of the white population	...	243
Public administration and professions (includes Police force)	...	589
Domestic services includes House boys, cooks, maids etc	...	2,252
Other industries such as Bakers, Blacksmiths, Carpenters, Artisans, Dress makers etc	...	1,567
No industry includes Children, paupers, day labourers, carters and people not employed	...	13,356
		26,706

Producers of coprah and distillers of essential oils have been included under the heading of primary production.

Of Class I which numbers 26,706 the number that understand English is as follows:

	Males.	Females.	Total.
Able to read	2,991	4,135	7,126
Able to write	2,965	4,080	7,045
Able to speak	864	769	1,633

The bulk of those who stated they have a knowledge of English, have only an elementary knowledge of the language, and in future it would be advisable to have a better classification such as "able to read" and "write English" so as to prevent duplication as the bulk of those able to read are also tabulated as able to write.

As I have stated in former reports the language of the Colony is a creole French patois, and this is the common language used in every day conversation, English (except at Victoria) is little spoken in country districts.

The religion of Class I is as follows :—

Church of England	...	2,611
Roman Catholics ...	...	24,034
Baptist ...	...	2
Methodists and Weslayans	...	2
Presbyterian ...	...	5
Lutherians ...	...	4
Calvinist ...	...	1
7th Day Adventists	...	25
Bible and Watch Tower Society of New York		4 (Political prisoners from S. Africa.)
Christian Scientists	...	2
Agnostics ...	...	1
Free Thinkers ...	...	9
No religion ..	...	6
Total	...	26,706

Class II. The Indian Community.

This community numbers 503 their birth place is mostly India they are engaged in trade and commerce.

Primary production ...	...	73
Trade and commerce ...	...	211
Public Administration ...	...	19
Domestic services ...	...	27
Other industries (bakers Hairdressers, mechanics)	...	21
No industry (includes 42 children)	...	152
		503

This class has a fair knowledge of English as 246 are able to speak and write that language and 52 able to speak, this is that roughly about 50 o/o of the Indian population have a fair knowledge of English. 144 of the Indians are Christians (19 Church of England, 122 Roman Catholic, 2 Seventh day Adventists, 1 Syrian Christian), there are 282 Hindoes, 67 Mahomedans, 9 Zoroastrians, and 1 no religion.

Class III is the Chinese Community.

Of this class 192 were born in China (Canton) and 43 in Seychelles their total number is 235 of this number 42 are British Born, 2 British naturalised and 191 Chinese Nationals.

They work as follows:—

Primary production ...	...	7
Trade and commerce ...	...	135
Public Administration ...	...	2
Domestic service (cooks) ...	...	3
Other industries (Bakers, Butchers, etc.) ...		9
No Industries (includes 14 children)	...	79
Total	...	235

The knowledge of English by the Chinese Community is inferior to the Indian Population 73 males and 10 females can read and write English, and 7 can speak English.

With regard to religion 79 are Christians (11 C. of E. 68 R. C.), 141 Confucianism, 9 Buddhist and 6 no religion.

Infirm Population.

The following are the number of infirm people in Seychelles at the date of Census :—

Blind (32 M and 34 Females)	...	66
Deaf (22 M and 23 „)	...	45
Deaf and Dumb (3 M and 1 Female)	...	4
Dumb (6 M and 2 Females)	...	8
Lepers (38 M and 20 Females)	...	58
Insane (13 M and 17 Females)	...	30
Loss of limb (18 M and 8 Females)	...	26
Total	...	237

The estimated population of Seychelles on the 31st December 1930 as estimated by the Registrar of Births and deaths (Officer of the Civil Status) was 28,217 this was worked out from the number of births, deaths, arrivals and departures each year from 1921 to 1930. The census gives a difference of 773; As the true population was 27,444 the only way to account for the difference is that deaths in the outlying islands due to drowning may not have been registered, further there may be stowaways in ships for Madagascar, and islands of the Mozambique Channel, which the emigration authorities are unaware of.

Further labourers to the number of about 150 are engaged for the French island Juan de Nova, about 50 at the French island Glorieuse, and about 25 are engaged at Agalega Islands, these were not enumerated in the Census.

In the Census of 1921 the population was 24,523 (males 11,974 females 12,549) there has been during the decade an increase of the population of 2,921.

Total population of each Census from 1891 onward was :—

1891	Total population	16440
1901	„	19237
1911	„	22691
1921	„	24523
1931	„	27444

The population of Victoria, including population at sea was 5,420 being an increase of 407 during the decade. Anse Royale 1,864 an increase of 207. Praslin island 2,476 an increase of 477, La Digue 1,255 a decrease of 48.

Taking the area of all the islands of the Archipelago as 156 square miles the density of the population per square mile is 176.

From a historical point of view it is interesting to recall the population of the inhabited Seychelles islands in 1827 after we took over the Colony from the French. The population in that year (1827) was given as 471 whites, 95 men of colour, 119 free blacks and 6,638 slaves. In 1810 during French occupation the Town of Victoria consisted of 100 Houses with 2 Billard rooms.

Population.

On the 31st December 1931 the estimated population was 27,786 viz : 13,489 males and 14,297 females. The population has increased since 1930 by 342 persons (200 males and 142 females) since the date of census.

GENERAL NATIVE POPOLATION.

Births.

There were 829 births (437 males and 392 females) in 1931.

The total birth-rate was 29·83 per 1000 (males being 15·72 and females 14·11 per 1000). There was an increase of 23 births in 1931 compared to 1930.

Deaths.

376 deaths were registered in 1931 (195 males and 181 females) as compared to 395 in 1930, showing a decrease of 19 deaths. The death-rate in 1931 being 13·53 per 1000 (males being 7·02 and females 6·51 per 1000) compared to 15·99 per 1000 in 1930.

Still Births.

56 still-births were registered in 1931 (26 males and 30 females). This number is the same as last year.

Marriages.

194 marriages were celebrated in 1931 viz : At the Central Office 139, at South Mahé Office 25, at the Praslin Office 12 and at La Digue Office 18 showing a decrease of 14 marriages as compared to 1930. There were 2 marriages in Articulo mortis celebrated in 1931 at Praslin.

Causes of Death.

The principal causes of death during 1931 were certified as follows :—
Ill-defined causes 41. Senile decay 33, Pulmonary Tuberculosis 18, Endocarditis 10, Cerebral Hæmorrhage 16, Gastro enteritis 14, Lobar pneumonia 8, Natural causes 5, Infantile marasmus 8, Acute Bacillary dysentery 8, Acute Cholangitis 7, Myocarditis 11.

Sudden Deaths.

28 sudden deaths were reported during the year, and a post mortem examination was made in 20, the findings being :—

Acute Broncho pneumonia	1
Acute Congestion of the lungs	1
Acute dilatation of the heart and myocarditis	1
Acute generalised peritonitis	1
Broncho pneumonia, toxemia and status lymphaticus	1
Cardiac failure and alcoholic coma	1
Cardiac failure secondary to pneumonia	1
Double Lobar pneumonia	1
Hereditary syphilis	1
Intestinal obstruction secondary to volvulus of small intestine	1
Miliary tuberculosis	1
Nephritis and congenital syphilis	1
Pulmonary and abdominal tuberculosis	1
Pulmonary tuberculosis	1
Senile Myocarditis Thrombosis of Coronary arteries	1
Shock due to cerebral Hæmorrhage with fracture of the left pariotal and occipital bones	1
Shock following fracture of the skull and laceration of brain	1
Shock due to hæmorrhage form a pregnant uterus	1
Shock due to a large comminuted fracture of the skull	1
Toxemia secondary to burns	1

Twin born Children.

12 Twin births were registered in 1931 viz : 8 at the Central Office, 4 at South [Mahé] Office.

Tardy Declaration.

16 Tardy declarations of birth were registered in 1931 in accordance with Section 33 (2) of Ordinance No. 4 of 1893, viz :—
6 at the central Office and 1 at Praslin Office.

Illegitimate Children.

There were 829 births in 1931, of which 492 were legitimate and 337 illegitimate, 84 of the latter were subsequently acknowledged by their natural father, in accordance with the French Code. 66 natural children were legitimated by the subsequent marriage of their parents during 1931.

Registration.

For cases that are reported without a death certificate, it is the custom for the Civil Status Registrar to call for a Police enquiry into the case. If no foul play, or evidence of injury is discovered the Police Magistrate may order the death to be registered as "Ill-Defined causes".
During 1931 there were 41 deaths registered under this heading.
The Police Magistrate (who corresponds to the English Coroner) ordered that post-mortem be made in 20 cases.

Graphs

A Graph is attached to the original report of the total deaths due [to] infective, Systemic, and preventable diseases in 1931.
The Graph attached to the printed report is for 1930 as there are no lithographic facilities in the Colony. The Graphs have to be printed in England, and are only published in the following years report.

General European Population.

They enjoyed good health during the year.

European Officials.

There are few in number and they all enjoyed good health during the year.

I attach the number of Officials treated at Headquarters Victoria during the year, this return includes Junior clerks, Messsengers, Boatmen, Police and labourers.

Only a few of these cases were serious, the greater number being minor ailments, such as indigestion, coughs, slight contusions etc.

This return does not include those treated in the Outlying districts by the Assistant Medical Officers.

Office of Agriculture ...	... 71
Audit	... 5
Charity	... 50
Governor's Office ...	... 7
Medical	... 12
Legal	... 11
Police	... 122
Port	... 29
Printing	... 21
Post Office	... 7
Public Works Department	... 92
Treasury	... 14
Victoria Town Board ...	... 119
Total	... 560

Police Department.

The actual strength of the police all ranks on the 31st December 1931 was 87 men, leaving a shortage of 6 men, to complete the authorised establishment.

Admitted to Hospital ...	... 10
Number of days absent from duty	... 211

During the year they reported sick 135 times.
" " " there was invalided 1 man.
" " " " were medically boarded 2 men.
" " " " were discharged 3 men.
" " " " " recruited 4 men.
" " " " " dismissed 4 men.
" " " was retired on pension 1 man.

The Police enjoyed average health during the year.

SECTION III.

Hygiene and Sanitation.

This work is carried out under the superintendence of the Chief Medical Officer assisted by the Medical Officers in the Country districts.

Mosquito and Insect-borne diseases

As I pointed out in my last report, this Colony is surrounded by malarial countries, and in 1929, that malaria had been found at Aldabra Islands.

An Ordinance had been passed No. 5 of 1931 that all sailing ships that may harbour, or be suspected to harbour Anopheles mosquito, must prior to entering the inner harbour, and lying up at the quays, anchor in the outer harbour where after sulphur disinfection, and being declared free of mosquitos they are allowed to enter.

Incidentally Sulphur fumigation destroys rats and other vermin, and allows of a deratization certificate to be issued.

Epidemic diseases.

With the exception of Bacillary dysentery in October 1931 the Colony was free from any outbreak of epidemic disease during the year. Sporadic cases of Chicken pox, Dengue, and Influenza occur but not in epidemic form.

Vaccination of Children.

The Lymph supplied was of average quality, and the results were as follows :—

Central district :	1st time	...	416		
	2nd ,,	...	4		
	3rd ,,	...	2		
	Total	...	—	...	422
S. Mahé district :	1st time	...	184		
	2nd ,,	...	...		
	Total	...	—	...	184
Praslin & La Digue :	1st time	...	95		
	2nd ,,	...	8		
	Total	...	113		113
	Grand total			...	719

140 passengers from Bombay and Mombasa were vaccinated.
47 Bumboat keepers and people allowed to remove baggage from ships were vaccinated.

Ankylostomiasis Campaign.

This was carried out on the same lines as 1930 the Sanitary Inspectors visited at least twice a year all dwelling houses and compounds, to see that they were kept in accordance with the provisions of Ordinance No. 9 of 1917.

The Medical Officer in Charge of Praslin and La Digue superintended, and carried out the mass treatment in his district, assisted by a Sanitary Inspector.

Mass treatment was carried out at the following centres, the vermifuge used was Chenopodium, in conjunction with castor oil and Magnesium sulphate.

Return of patients treated and districts visited :—

Seychelles Hospital	...	...	2,778
Beau Vallon	...	...	1,076
Anse Etoile	...	...	772
Cascade	...	...	504
Anse-aux-Pins	...	...	850
Anse Royale	...	...	493
Baie Lazare	...	...	600
Anse Boileau	...	...	1,144
Quatre Bornes	...	...	744
Anse Bougainville	...	...	408
Port Glaud	...	...	427
Glacis	...	...	480
Carried forward		...	10,276

Brought forward		...	10,276
Anse à la Mouche	...	...	204
Sans Souci	...	...	28
Bel Air	...	...	87
Praslin Baie St Anne	...	...	85
,, Grand Anse	...	...	182
,, Anse Boudin	...	...	65
,, Anse Kerlan	...	...	109
,, Anse la Farine	...	...	51
,, Consolation	...	...	111
La Digue la Passe	...	...	225
Cerf Island	...	...	8
Privately	...	...	350
Total		...	11,781

A total of 11,781 mass treatment was given in 1931 against 12,338 in 1930.

Leprosy Campaign.

As I stated in my last annual report the regulations for the segregation of lepers with their families are not observed. I find that the relatives and friends of lepers treat these regulations as a dead letter. It is hard for them to understand that leprosy can be stamped out, or at least kept under control, if lepers were prevented from mixing with the public, live apart in separate houses and not eat and sleep with the family and relatives.

Leprosy is increasing in the Colony. Children are detected by the Sanitary Inspectors in their half yearly inspection of houses and compounds. In the Cascade district, as well as in Praslin island several families have contracted the disease. This menace to the Colony does not appear to be realized by the General public.

Regulations drawn up under Section 4 of Ordinance No. 1 of 1919 and Ordinance No. 12 of 1922 are disregarded by the appointed guardians, proper surveillance is not carried out by them.

In order to remedy this it is proposed to make the following alteration in the law, and amend the main law accordingly.

"Any next of Kin, a guardian, or other person who shall have entered into a Bond as above, and who knowingly allow, aids or abets, or through carelessness or want of necessary supervision or precautions, contributes in allowing such patient to contravene any of the conditions of the bond shall be guilty of an offence and liable on conviction to a fine not exceeding one hundred rupees or to imprisonment not exceeding one month or to both.

Treatment was carried out during the year by "Hydnocreol", lepers have improved under this treatment. The results are satisfactory, but hundreds of injections are necessary, as treatment covers several years. The earlier the case comes under treatment the better, as earlier cases react quickly to "Hydnocreol" and the hope of a cure can be held out to the patient.

Even with the new quarters now provided at the leper camp the accommodation is not sufficient. The twelve double huts (for 24 patients) on the male side early in 1931 have all been occupied, another double hut male side is required, this has now been provided for in 1932.

The female lepers are still kept at the old leper camp Victoria, and no steps have been taken to build the necessary huts, or to provide accommodation for them in the new leper asylum at Round Island Praslin.

This increases the cost of maintenance, as all services have to be duplicated, and it means a serious item of expenditure, which could be avoided by having only one leper asylum.

I need hardly point out that the cost for treatment, maintenance and erection of buildings is a very serious item of expenditure for a small Colony like Seychelles.

The cost of maintenance of lepers for 1931 was Rs 9,160.81, the number of known lepers in Seychelles is 84 made up as follows.

Mahé 26, Praslin 14, La Digue 4 giving a total of 44 segregated lepers and there are 40 in the two asylums. In the new Asylum at Praslin 25 males and at Leper camp Victoria 14 females and one boy of ten years.

CENSUS OF LEPERS SEYCHELLES COLONY.

Round Islands leper camps Mahé and Praslin.

	Males	Females	Total
Number of patients in residence on 1st January 1931 ...	20	6	26
Number of new cases discovered and sent to leper camps ...	3	4	7
Number of patients transferred from Mahé to leper camp ...	2	5	7
Number of patients transferred from Praslin to leper camp...	1	1	2
	26	16	42
Number of patient transferred to Mahé ...	...	1	1
Number of patient died	...	1	1
	26	14	40

Mahé Island

	Males	Females	Total
Number of segregated lepers on 1/1/31 ...	18	11	29
Number of new cases discovered in 1931 ...	2	2	4
Number of patient transferred from leper ...	...	...	...
Camp to Mahé	...	1	1
Number of patient transferred from Praslin ...	...	1	1
	20	15	35
Number of patients transferred to Leper camp ...	2	5	7
Number of patients died ...	2	...	2
	16	10	26

Praslin Island

Number of segregated lepers on 1/1/31 ...	6	7	13
Number of new cases discovered in 1931 ...	2	2	4
	8	9	17
Number of patient transferred to Mahé ...	...	1	1
Number of patients transferred to Leper Camp ...	1	1	2
	7	7	14

La Digue Island

Number of segregated lepers on 1st January 1931 ...	3	...	3
Number of new cases discovered during 1931 ...	1	...	1
	4	...	4

Total number of lepers in Seychelles islands on the 31st December 1931 is 84 an increase of 13 lepers during the year.

From the Census return it will be seen that 38 males and 20 females (making a total of 58) were returned as suffering from leprosy, this discrepancy can be accounted for, by 26 segregated lepers failing to state in the Census that they had leprosy.

General measures of Sanitation.

No new sanitary laws were promulgated during the year, the fundamental law with regard to public health is Ord. No. 31 of 1900 with various amending Ordinances Nos 3/1902, 32/1902, 10/1903, 8/1910, 7/1922 and G. N. 64/1901.

The Victoria Town Board enforce the provisions of above Ordinances and in the Country districts Local Boards of Health are charged with the same duties.

Special regulations were made during the year.

Regulation No. 41 of 1931.—Victoria Town Board.—To protect from dust, flies, &c., food-stuffs being carried or exposed for sale.

Regulation No. 73 of 1931.—Providing fumigation of vessel and rates for such.

Regulation No. 138 of 1931.—Health Committee.—Regulations for the prevention of dysentery.

Regulation No. 152 of 1931.—Health Committee Regulations providing for medical examinations of labourers proceeding to outlying islands.

Regulation No. 159 of 1931.—Victoria Town Board.—Regulations for Bake-houses in Victoria.

Under "Sewage disposal" I have given the new system now in force from the 1st October 1930, as this work is carried out by a contractor who dumps the excreta in a specially built cofferdam one mile out at sea.

The general work of supervision and control is carried out by the public Health and Sanitatary Inspectors, dispensers and Latrine cleaners.

During the year periodical visits are made to all households at Mahé, Praslin and La Digue.

Latrines in Victoria are provided with buckets which are removed to a cofferdam situated in the outer harbour about one mile from shore. In all country districts each house must be provided with a pit latrine, built according to Ordinance No. 9 of 1917. The law is made specially to prevent householders allowing fæces to be deposited promiscuously in the year.

Estimated Population of Victoria in 1931.

Number of Natives.		Number of Europeans.		
Males.	Females.	Males	Females.	Total
2,123	2,672	250	375	5,420

The following prosecutions were entered in 1931.

MAHÉ ISLANDS.

3 having no latrines.
3 house holders were prosecuted.
3 „ „ „ fined, fines amounting to Rs 13.50.

Latrines full.

3 house holders were prosecuted.
3 „ „ „ fined, fines amounting to 11.50.

Insanitary yards and latrines.

5 house holders were prosecuted.
5 „ „ „ fined, fines amounted to Rs 25.75.

Latrines in bad condition.

1 house holder was prosecuted.
1 „ „ „ fined, fine amounted to Rs4.50.

Food unfit for consumption.

1 shopker was prosecuted.
1 „ „ „ fine amounted to Rs 26.50.

Aldulteration of milk.

4 Hawkers were prosecuted.
2 „ „ fined, amounting to Rs 18.
2 cases dismissed.

Exposing food for sale unprotected from flies and dust.

8 shopkeepers were prosecuted.
8 „ „ fined, amounting to Rs 31.

Landing at Leper camp without permission.

2 visitors were prosecuted
2 „ „ fined, amounting to Rs 13.

Breach of leper Ordinance.

3 offenders were prosecuted
3 „ sent to leper camp.

Meat Inspection at Abattoir Victoria by Chief Sanitary Inspector.

Number of oxen slaughtered in 1931	...	...	...	354
Number of pigs	...	...	...	561
Number of green turtles	...	...	...	292
Number of tortoises	...	...	...	3

The following were found diseased and destroyed.
One ox with tuberculosis, 3 green turtles were in a putrid condition when brought to the slaughter house.
In Country districts animals slaughtered for sale to the public are inspected by the Police.

Inspection of sites.

During 1931 there were four application to keep pigs within the limits of the town of Victoria all applications were investigated and sites for pig-stys marked out.

Water Supply.

The Colony has an excellent water supply, the rainfall is adequate, and for drinking purposes the water taken directly from the mountains is pure, palatable, and free from pathogenic organisms. Except in heavy rain the water is clear and sparkling, and the supply is abundant.
I consider that the good health of the Colony is due to its water supply.
The epidemic of Bacillary dysentery at Anse aux Pins was due to contaminated drinking water.
The catchment areas require to be well supervised, in the interest of the health of the inhabitants a special river ranger should be appointed to patrol the river reserves and catchment areas of water supplies.
Le Niol reservoir is situated 682 feet above sea level, and sends in approximately about 230,000 gallons of water to Mont Fleury and the lower levels of Victoria.
A good water supply is available in case of fire, the pressure through a 5/8 inch fire nozzle having an average of 45 feet high.

Offensive Trades.

I have nothing to add to my remarks for 1930 special regulations are made for the town of Victoria to prevent soap factories and bakehouses being a nuisance, due to smoke from chimneys, but in the Colony there are not any offensive trades.

Clearance of Bush and under-Growth.

Due to the destruction of the trees along the banks of rivers, and the denudation of the mountain tops by the indescriminate cutting down of the trees for building purposes and firewood, the water supply of the Colony is endangered.
The shade trees along the banks of rivers, and the forests in the catchment areas are invaluable in regulating the water supply. The spongy mulch of decaying vegetable matter to be found in forests, and amongst the shade trees of rivers, quickly absorb a larger percentage of rainfall, than can open ground where there is no obstruction to prevent the rapid run-off which now occurs after a heavy rainfall. In a well wooded mountain top the bulk of the rainfall instead of running down the mountain sides in small temporary rivulets, has sunk into the ground, to be given up later on in springs and rivers. These streams tend to flow more evenly, more regularly, and are more dependable all the year round.

In a good many districts of this Colony after heavy rains upon the treeless tops of the hills and mountains, the rich top soil or land covering is washed away. Hillsides are thus eroded or sluiced down to the plateau or the sea, very often this rich soil is deposited on the stream beds lower down, raising the level of the stream and thereby causing a deviation in its course, so that at times bridges built to carry away surplus water, become useless due to the change in direction of the river, and nearby lands become flooded after the rains.

Moreover these denuded lands on the sides of the hills and mountains, stripped of their rich soil, are rendered unfit for Agriculture, and valuable land goes out of cultivation.

Government Schools.

There are, at present, no Government Schools in Seychelles. Education is entirely in the hands of the Church of England and Roman Catholic Missions and is not compulsory.

Secondary Schools.

There are two secondary schools in Victoria, one for boys and one for girls.

The former, St Louis College is run by the Marist Brothers; the latter, St Joseph's Convent School, is conducted by the sisters of St Joseph de Cluny.

Those two schools have a European staff. At both institutions primary as well as secondary education is given Both are private boarding and day schools, unaided and uncontrolled by the Government.

Primary Schools.

Apart from those two institutions (St Joseph's Convent School and St Louis College) there are 27 schools, known as Grant-in-aid schools, at which free elementary education is given.

These schools are assisted and controlled by the Government; they have to conform to a programme of studies framed by the Governing Body of Education and approved by the Governor in Executive Council, and to satisfy the conditions laid down in the regulations for Grant-in-Aid schools.

Age Limit.

The age of pupils attending Grant-in-Aid Schools is fixed at a minimum of 5 years and a maximum of 13 years in the case of boys and 15 years in the case of girls.

School Week and Holidays.

The schools are open during 5 days in the week and the pupils frequenting them are taught 5½ hours daily, 2¾ hours in the morning and 2¾ hours in the afternoon constituting a half day attendance.

There are three vacations. 5 weeks at Easter, 4 weeks in August, 4 weeks in December.

Technical Education.

By an extension of the scheme for the technical training of boys, the pupils of the two Victoria Grant-in-Aid Schools are now given the opportunity of being trained by skilled instructors in carpentry and smith work during their school career.

Two sheds have been erected in Gordon square in the vicinity of the two schools and the requisite tools are supplied by the Government.

The classes are held daily from 2 to 4 p.m. ; 59 boys from both schools attend these classes, 32 for carpentry, 27 for Smith Work, good progress is being made and it is now possible to make in the workshop such school furniture as forms, desks, tables, chairs, Black-Boards, easels and to repair the damaged ones.

Medical Inspection and teaching of Hygiene.

All the Grant-in-aid schools are medically inspected once and sometimes twice a year. The health of the children is generally good except for a few cases of anæmia and dental caries. It was reported however that at Anse-aux-Pins school there was a surprising number of cases of anæmia in comparison with other schools and a so that about 50o/o of the children present suffered from ankylostomiasis or hook-worm disease. That district also suffered last year from an epidemic of bacillary dysentery and the schools had to be closed for some time. Jiggers were a real nuisance at St Saviour's school, which is situated on the sandy sea-shore at Anse Royale.

Anæmia is probably due partly to ankylostomiasis infection, and partly to unsuitable diet.

As regards ankylostomiasis, free medical treatment is given with good results. Every opportunity is taken to impress upon the school children the necessity for more sanitary disposal of excreta, and the importance of guarding against contamination of food and water.

The colony is generally free from endemic diseases, but communicable diseases such as pulmonary tuberculosis, Ankylostomiasis, leprosy and venereal diseases are unfortunately rather common.

As already stated the teaching of hygiene is compulsory in all the Grant-in-Aid schools of the Colony.

A special competitive examination was held during the year for the award of silver medals presented by the Chief Medical Officer, Dr J. T. Bradley, to the best candidates at each of the schools of the Colony, including the two secondary schools in Victoria, the object being to encourage and stimulate the teaching of hygiene.

20 out of 31 schools were examined; some of the schools did very well indeed, one of the best schools being Plaisance Roman Catholic School both as regards the quality of work and the number of candidates offered.

The following schools qualified for the medal:

St Joseph Convent (free); Anse Etoile, Plaisance, Cascade, Anse-aux-Pins, (boys and girls); Anse Royale (boys), Anse Boileau, Bel Ombre R. C., St Saviour's (Anse Royale) and at Praslin: Baie Ste Anne, Anse Boudin, Grand'Anse R. C., and St Mark's (Anse Consolation).

The other schools failed to reach the standard required. Another examination will be held this year for the sake of those schools which failed to qualify or which offered no candidates last year, and it is earnestly hoped that satisfactory results will be obtained.

As far as Grant-in-Aid Schools are concerned, (the Government has, as yet, no control over secondary education in Seychelles) it should be borne in mind that no pupil can expect to pass who fails in Hygiene.

Drill and Physical exercises are taught in nearly all the schools.

Labour conditions in Outlying Islands.

The work of the Medical Department in the Outlying Islands of this Colony is little appreciated by the persons for whose benefit it is carried out.

Health is the primary need in these Outlying Islands, and with labourers in good health, the owners and lessees of these islands have a profitable investment, as they get better work and results.

The money wisely spent in preventive medecine in the Outlying Islands is quickly and abundantly remunerated to the owners and lessees of same.

The Medical Department with its undermanned, and hard worked staff is doing its best in research and preventitive medecine in these far away islands, the co-operation of the owners, lessees and individuals is essential. Such co-operation is clearly the duty of managers of these islands, they should co-operate to protect their individual labourers from infection, take steps to treat and control the spread of disease, prevent outbreaks and reduce their extent and virulence, and see that the housing, sanitary surroundings and water supply are kept in good condition.

It is only on these lines co-operation with individuals residing in the islands and the Medical Department that disease can be successfully fought, and life made tolerable for the labourers in these Outlying Islands.

The following is a short resume of the principal preventitive diseases in the Outlying Islands and the factors that favour their diffusion.

1. We have a disease called locally by the natives "Decoqué" which I consider is a deficiency disease due to want of Vitamin B. (Beri-Beri) Vitamin C. (Scurvy) in the dietary scale. It must no be confounded with "pellagra".
2. Chigger or sandfleas due to unsanitary surrounding.
3. Malaria at Aldabra due to an Anopheles Mosquito (A. Costalis).
4. Hookworm (Ankylostonum Duodenale) due to unsanitary surroundings, and want of latrines.
5. Leprosy which is propagated by close contact, living together.
6. Amœbic dysentery due to a bad water supply and unsanitary surroundings.
7. Beri-Beri due to eating polished rice want of vitamin B.
8. Scurvy is not rare being occasioned by want of vegetable foods (Vitamin C.).

These are the principal preventitive diseases that there must be co-operation between managers and lessees of islands and the Medical Department, if they are to be stamped out, or at least kept under to such a degree that their labourers may enjoy fair average health.

Recruitment for the Outlying Islands.

It is interesting to know the methods followed by owners and lessees in order to recruit their labourers. The owners send round word by one of their clerks that they want men, and offer as an inducement two or four months wages as an advance. The negro is a child of nature, money means women and drink, he knows the hardships and discomforts of these islands, often short of rations and the terms of his contract not complied with, no redress until he is visited by a Magistrate or Government Official. But the lure is there, money is freely offered if he will sign a paper, engage for the islands immediate payment of Rs 10 or Rs 20 cash.

Very few of the negros can resist the temptation, money to get drunk and have women, he goes to the agent, signs on and then goes on a debauch for a few days when he has spent two to four months wages. He is bound to go to the islands otherwise he will be arrested by the police, and punished for failing to carry out his engagement. When the labourer goes to the islands he has no wages for some months, and yet due to the lure of an advance when he once more returns to Mahé, he will again and again engage himself, as the advance means the satisfying of his animal passions, drink and women.

It is not a pleasant picture as to how labour is recruited and yet it appears to be the only system that can be utilized by the lessees of the islands if they want labourers. If no advances were given labourers would decline to sign on. Since labour has been recruited for the islands this is always the procedure. The mentality of the Seychelles labourer is such that if any check or discontinuation of the system was attempted, the greatest difficulty would be encountered to recruit sufficient labourers for the Outlying islands.

The owners and lessees are out to make them a paying proposition, and if former reports by me on the islands are examined it will be found that "Beri-Beri" at Coëtivy due to giving rations of polished rice, in all islands bad sanitary conditions, insufficient or poor rations, housing conditions of labourers bad, no supervision of water, and it is wonderful that there are not more outbreaks of diseases than usually occurs. I refer to my annual medical report of 1928 page 18. "Port Health work and administration", it shows what results in those islands rarely visited and inspected by a competent authority, and the manner that owners fulfil their obligations and duties to their labourers.

From the reports of the Chief Sanitary Inspector in appendix the following facts are taken.

Cosmoledo Group.

Latrines as laid down in ordinance No. 9 of 1917 must be provided at Menai island, for the labourers.

The Hospital must be ceiled in accordance with Sec. 57 (3) of Ord. No. 5 of 1900. The Hospital should keep a stock of castor oil, otherwise for such a small community the medicines are sufficient. Pigeons must not be allowed to contaminate the collecting area of drinking water. Managers should be obliged to oil all pools in the neighbourhood of dwelling houses.

With the exception of the above there are no special remarks on this group of islands the sanitary arrangements may be classified as poor, and if latrines are provided for labourers as fair.

Assumption Island.

Huts are in bad condition, no latrines, this is a serious matter, is contrary to law and must be remedied immediately. It may be advisable to prosecute under sec. 3 (3) Ord. No. 9 of 1917 for not providing latrines according to law, as the orders of Dr Mathew in 1931 have been disobeyed. It is a serious reflection on the management that they will not comply with the law.

Hospital must be ceiled, the drugs appear sufficient. The barrels to collect rain water should have bungs attached to same to prevent mosquitoes breeding therein, the suggestion of the sanitary Inspector with regard to the isolation of all cases of fever should be impressed on the management of the island.

Managers should oil all breeding places in the proximity of dwelling houses, this should be carried out thoroughly especially in the rainy season.

The sanitary condition of Assumption may be stated as poor, but if latrines to labourers are provided it may be classified as fair.

Aldabra Island.

Huts in bad condition and dirty, no latrines, labourers defeacate promiscously, a most serious matter and reflects badly on the management. Hospital dirty has not a decent mattress, requires to be ceiled, the medicines are sufficient, a good supply, carefully graded for the inhabitants, but I cannot see castor oil on the list, it may have run out, if so this should be remedied at the earliest opportunity.

Masonry reservoir dirty, contained dead rats, water was unfit for human consumption. The surface of the reservoir was not screened as ordered by Dr Mathew, no steps taken to render tanks mosquito proof. Another serious reflection on the management, the water supply unfit for human use, dead rats found in filthy water.

Saigon rice should be prohibited for sale in the Outlying Islands except under a special permit. This is the first time that it has come to my notice that polished rice is sold on the outlying islands to labourers.

The killing of turtles for exportation will have to be carefully watched not only at Aldabra but all outlying islands. Turtle is a cheap food for the poor of this Colony, and this supply is endangered if no steps are taken to protect this important industry.

A careful malarial campaign at Aldabra has been carried out and the Anopheles Gambiæ, appears to have disappeared. With regard to Anopheles Gambiæ, the vector of malaria at Aldabra, the following extract taken from the proceedings of the South African Institute of Medicine in July 1931 No. 27 pp 245—274 are of interest :—

"A. Gambiæ breeds in small muddy pools with little or no vegetation and no shade, and it may occur in large numbers in half dried puddles seething with tadpoles in which no other anopheline is found, but it does not tolerate foul water and prefers small rain water pools, freshly formed, that disappear in a few days unless replenished by repeated showers. In a country where so much of the land is covered with grass, A. Gambiæ is attracted to road and road side puddles and to the sunny arid spaces cleared round dwellings. The dry low veldt of the Western Transvaal appears to afford an exception to this rule, for although it holds good in areas far from rivers. A. Gambiæ continues to breed in the small pools formed in the edges of river beds in dry years when the rivers are low, even when there is no rain.

There does not however appear to be any fundamental difference between the individuals dependent on rain and those dependent on streams, for the water in the pools of the river is also constantly replenished, either by influx of water from the main stream or by slight changes in the level of subsoil water.

The assumption that A. Gambiæ is one of the only two vectors of malaria fits in remarkably well with epidemiological observation, malaria being most prevalent in rainy years and persisting even in dry years along the banks of rivers. In general, unless this mosquito is very rare, its presence envariably entails an outbreak of the disease".

The authors believe that in dry years the species manage to survive under very unsuitable conditions though in numbers too small to cause outbreaks of malaria. In the same way it survives the winter, although retarded development due to the low temperature is also a factor in this case.

I draw attention to the statement. "The species manages to survive under very unsuitable conditions, though in numbers too small to cause outbreaks of malaria".

It will be necessary to have a further malarial research at Aldabra in order to find out if the anopheles exist in the island, during the dry season.

The management should be called upon in their own interest to help the Medical Department to stamp out the disease, by supervising and screening all water tanks, and oil all pools in the neighbourhood of dwelling houses.

The sanitary condition of Aldabra at the time of Dr Mathew's visit was reported as bad, and I regret to see that no serious steps have been taken by the lessees of this island to remedy this state of affairs.

In the annual report for 1929 I published maps for the Outlying Islands, as well as a short description of all the islands of the Archipelago, with their distance from headquarters at Mahé.

The floating population of the Outlying Islands is estimated at 1000 but the guano islands have at times large numbers of labourers that are sent especially to load ships.

During the year 1931 the number of labourers engaged was 576 for the following Outlying Islands :—

Aldabra Group	...	...	91	Brought forward	... 402
Denis island	...	...	156	Alphonse Group	 35
Remire Island and Amirantes		...	78	Coëtivy island	 39
Daros	...	...	11	Poivre island	 14
Providence	...	...	12	Cosmolodo island	 27
Farquhar island	...	...	18	Astove island	 33
St Pierre island	...	...	36	Flat island	 8
				Desroches	 23
Carried forward		...	402	Total	... 576

In addition to labourers for the Outlying Islands, labourers are recruited by the Director of the "Société des Iles Malgaches" for the French islands which are under the dependency of Madagascar.

Reports received from the authorities of Madagascar show that the health conditions in the French islands are good, no dysentery, the ration supplies liberal, being the same standard as that laid down for the labourers of the Seychelles Outlying Islands. Returned labourers from these islands had no complaints.

Labourers are also engaged for Agalega and French islands (Glorieuse and Juan de Nova) under notorial contract.

No cases were prosecuted during 1931 in these islands for offences relating to indiscipline, or any complaints relating to rations.

According to Civil Status there were 9 deaths in these islands during the year, 1 male at Providence, 1 male at Coëtivy, 1 male at Marie Louise, 2 males at Aldabra, and 4 at Assumption island, the cause of death were returned as "ill-defined causes".

There were four births registered, one female at Flat island, 1 male at Astove island, 1 female at Farquhar and 1 female at Providence island.

The following is the number of labourers that returned from the Outlying Islands in 1931 :—

				Brought fwd.	... 358
Aldabra Group	...	91		Alphonse	 38
Cosmoledo	... ...	49		Marie Louise & Amirantes	52
Astove	... ...	37		Daros	 6
Assumption	... ...	77		Desroches	 28
Providence	... ...	26		Poivre	 25
Farquhar	... ...	26		Coëtivy	 54
St Pierre	... ...	52		Flat islsand	 10
Carried fwd.	...	358		Total	... 571

For Denis island the figures are not available as vessels trading between Mahé and this island require no clearance from the Customs.

RECOMMENDATIONS WITH REGARD TO THE OUTLYING ISLANDS.

I consider it necessary that a Medical Officer visits the Outlying islands at least once a year.

It is most important to inspect and control the health of labourers in the Outlying islands, to see that rations, water, sanitary conditions in these far away islands are as laid down in the Ordinances.

All labourers prior to their departure are now medically examined. This is in the interest of the labourers, formerly some left with advanced venereal disease, others with hernia, and in these far away islands they have no skilled medical assistance.

I again put forward that steps be taken by a competent authority to see that proper rations, medicines, etc. are forwarded, and that an inspection to this effect be carried out at Victoria. That rations are of good quality, and in accordance with the ration scale laid down by law.

It should not be difficult to devise some means to control the despatch of food, and it would make owners and lessees of islands, pay more attention to the feeding of their labourers.

Food in relation to Health and Disease.

The staple food of the native is generally polished rice imported from India, fish, and when it can be got turtle, very little meat is used by the labouring class but the better of families use pork, fowl, ducks, eggs etc.

The native supplements his food with breadfruit, manioc, sweet potatoes, bananas. At certain seasons of the year there is a plentiful supply of eggs which are collected from sea birds on Outlying islands.

Except on the Outlying islands, Beri-Beri rarely occurs on the main island ; "Décoqué" only occurs in the Outlying islands.

Fish curing is carried out either by drying in the sun, and smoking or first salting, and subsequent sun drying, the latter system is the commoner.

Soda water factories and the only Ice Factory are visited and inspected by the Sanitary Inspector and are kept in a clean and sanitary condition.

Regulations are now in force that Hawkers of cakes and other eatables must have same covered with a clean cloth to prevent contamination with flies and dust, and this also applies to shops that exhibit same for sale.

Bakehouses are inspected and controlled, a new ordinance gives power to the sanitary department to inspect and control the sanitary conditions of all bakehouses. During the year 4 Hawkers of cakes were prosecuted and Fined Rs 18.

8 shopkeepers were prosecuted for exposing food for sale unprotected from flies and dust and fines amounting to Rs 31 were imposed, one shopkeeper was fined Rs 26.50 for selling food unfit for human consumption.

Bacca made from cane juice is the native drink, it is heavily adultered but detection is difficult.

At the abattoir of Victoria 354 oxen, 561 pigs, 292 green turtles and 3 land tortoises were killed for sale in the public market, of these one ox had tuberculosis, and 3 green turtles found in a putrid condition were destroyed.

I would like to draw special attention to the adulteration of alcohol with methylated spirit and this principally applies to rum, cheap wine, and so called cheap brandy. It is only lately that this custom has been introduced, and during the past year, the drinking of rum adulterated with methylated spirit has become common. In the interest of the health of the community, it is necessary to control the importation of methylated alcohol, and prevent the native purchasing same except for legitimate purposes.

B. Measures taken to spread the knowledge of Hygiene and sanitation.

It is compulsory now that all grant in aid schools have to receive instructions on this subject during school hours. The catechism that I published in French in 1929 is now in the hands of the school children. In the annexure will be found the result of the examinations held in 1931 for the silver medal.

Special teaching is devoted to Ankylostomiasis. On this important subject I have published a special catechism (also in French) showing how the disease is propagated and the manner to control same, special emphasis being laid on soil pollution, sanitary latrines, cleanliness of yard and surroundings and manner of infection.

C. Trainiy of Sanitary Personel.

Special teaching classes were again carried out during the year, in order to give instructions to the Assistant Sanitary Inspectors.

The lectures were of a practical nature covering food supplies, and the common causes of adulterations, tinned food, tainted fish, inspection of bakehouses, mineral water and Ice Manufacture. The construction of hygienic latrines, inspections of urinals, meat killed at slaughter House, adulteration of milk, articles exposed for sale in shops, fumigation of cargo from vessels, sterilisation of passenger's baggage, supervision of night soil service and its disposal, prophylaxis of Ankylostomiasis and Leprosy.

IV. Port Health Work and Administration.

In the Colony of Seychelles the principal Health authority is the Chief Medical Officer, aided by a Health committee composed of the Health Officer, the Inspectorof Police, and three other persons appointed annually by the Governor.

Laws and Regulations.

The laws and regulations governing quarantaine, and Port Administration are contained in Ordinance No. 1 of of 1916, and Ordinance 33 of 1919, with quarantaine regulations enacted under these Ordinances.

The above ordinances and regulations are now under revision and a new ordinance will be in force before the end of 1932, so as to bring the present laws in conformity with the international Sanitary convention.

During 1931 the following ships called at Mahé.

33 steamers, 9 sailings ships, 3 men of war.

From Bombay	...	13
,, Mombasa	...	14
,, Madagascar	...	12
,, Reunion	...	1
,, Colombo	...	2
,, Mauritius	...	3
Total		45

Free pratique	...	33
Partial pratique	...	12
		45

No quarantine was imposed during 1931.

Deratisation of ships.

Eleven sailing vessels were deratised in 1931 and 176 dead rats were found as follows :—

29. 1.31.—Charles Edouard	...	...	...	27
27. 4.31.—Zipporah	...	...	...	40
30. 5.31.— ,,	...	...	...	2
31. 5.31.—Charlotte	...	...	...	89
10. 7.31.—Zipporah	...	...	...	Nil
12. 7.31.—Wanetta	...	...	...	12
11. 7.31.—Zipporah	...	...	...	Nil
18. 9.31.—Charles Edouard		...	...	Nil
21.10.31.—Zipporah	...	...	...	Nil
17.12.31.—Wannetta	...	...	...	6
			Total	176

In addition to rats destroyed a great quantity of minor vermin such as cockroaches were killed.

Number of passengers landed in Seychellos.

1st class	...	...	...	86
2nd class	...	...	...	59
Deck	...	...	...	345
			Total	490

Number of passengers who left Seychelles.

1st Class	...	...	...	87
2nd Class	...	...	...	66
Deck	...	...	...	242
			Total	... 395

Quarantine Stations, Long Island.

The number of local residents that visited the station was 157 and paid fees amounting to Rs 25.25 for use of quarters. Visitors staying at quarantine station were 53; Pic-nic parties 104. The water supply of the quarantine station is now in order, the pipes have been cleansed and have been extended to within 300' from the main quarters.

V. Maternity and Child Welfare.

The Maternity Department is under the charge of a Matron holding in addition to a registered Diploma as medical and surgical nurse, special qualifications in midwifery.

In addition to her other duties she has to deliver lectures and train the district midwives. Probationer midwives are trained at least twelve months in practical work, attend a course of lectures in midwifery and child welfare, and a short course in general nursing and hygiene.

A probationer midwife when qualified is placed in one of the out districts of the Colony and is paid a retaining fee of Rs 12 per month, she is allowed private practice, and must free of cost attend all indigent and pauper cases of midwifery.

The old untrained midwife is now being replaced by a qualified midwife that has a fair average knowledge of her work, in addition a knowledge of child welfare, and diseases of new born children.

None of these midwives can speak English, and the course of lectures and instruction has to be given in Creole French by the Matron.

In Appendix table III. of this report the figures are given of infant mortality under one and up to five years.

The Still-birth rate is high and is probably due to Syphilis.

All nurses in training at the Hospital in their third year have to take out a special course of midwifery lectures delivered by one of the staff and, have to pass a special examination in Anatomy, Physiology, and Pathology, with regard to parturient patients, further they attend classes on Anti-Natal and Post-Natal treatment.

There were admitted to the Maternity Department of the Hospital during the year 228 patients.

175 babies were born in the hospital including two cases of twins.

Primiparia	Males babies	...	28	
„	Females	...	32	
			—	60
Multiparia	Males babies	...	65	
„	Female babies	...	50	
			—	115
		Total		175

11 babies were still-born compared with 14 in 1930 the causes of death being :—

Hereditary syphilis ...	...	8
Asphyxia ...	...	1
Hæmorrage umbilical cord...	...	1
Nephritis	...	1
	Total	11

There were no maternal deaths during the year.

7 new born children died during the year.

Fractured skull case of infanticide admitted by Police		...	1
Hereditary syphilis	...	...	3
Premature birth	...	...	3
		Total	7

There were 19 cases of miscarriage and abortion principally due to syphilis.

Forceps were applied in 4 cases and chloroform given in 6 cases of confinement.

Twins were born twice, there was one case of Eclampsia.

13 cases miscalculated the date of confinement and left the Hospital to return later on ; Curettage for metritis and retained products of abortion was performed 6 times, 5 cases from outside were admitted with post partum hæmorrhage.

Anti-Natal treatment was given to 12 cases for the following diseases :—

Abdominal colic ...	...	4
Hyperemesis ...	...	1
Accidental hæmorrhage	...	2
Pyrexia ...	...	1
Pseudo Cyesis ...	...	2
General debility (Ankylostomiasis)		1
Abscess of breast ...	...	1
	Total	12

7 patients were admitted to the Gynæcological Ward and treated for the following diseases :—

Metritis	...	4
Abscess of Bartholin Gland	...	1
Metrorrhagia	...	1
Carcinoma of Os ...	...	1
	Total	7

The Maternity Department has 18 beds in 3rd class, 6 in 2nd and 2 first class, the fees payable by patients are given under Seychelles Hospital.

The training school is invaluable for the training of district nurses as midwives and fills an important place in the needs of the Colony.

The fees paid by patients to the maternity by Department during the year amounted to Rs 1,422.

VI. Hospital, Dispensaries and Venereal Clinics, Seychelles Hospital.

As stated in the medical report of 1931 the primary object of the Seychelles Hospital as laid down in Ordinance No. 20 of 1899, shall be to provide hospital accommodation and treatment for such of the poorer classes, as shall be unable to secure proper medical treatment in their own homes.

Accommodation for the poorer classes is provided in the 3rd class male and female wards this accommodation is free for persons admitted under Section 165 of the Hospital Regulations, in other cases a charge of 50 cents (or 9*d*) is made daily. In this class operations and electro medical treatment is free, and there are no extra charges.

As a rule in these wards specially on the male side, the beds are nearly always occupied. Attached to this section there is a special children's ward which is also free.

In the second class wards a charge of Rs. 1.50 per diem is made (or 2/3) this included ordinary medicines and ordinary medical attendance and nursing, but does not include special appliances, dressings and drugs that are not used in the ordinary practice of the Hospital. The latter when ordered are charged at cost in the patient's Hospital account.

For major operations on the inhabitants of the Colony, the operating surgeon can charge a reasonable fee, and in 2nd class this does not except in very exceptional cases exceed Rs. 30.

The First class wards have two scale of fees:— 1st Class A. Rs. 5 (or 7/6) per diem, 1st class B. Rs 3 or (4/6) per diem the difference is the cost of food.

1st class B. gets the same diet as in 2nd class, the difference in cost being due that the first class B. has a single ward, whilst the second class patients are accommodated in a ward that holds six beds.

In the first class there are no other charges, as in 2nd class the daily fee covers, medical attendance and nursing, special appliances, drugs, &c., are charged at cost in the patient's Hospital account.

With regard to major operations on the inhabitants of the Colony, a rather higher scale is charged, the usual fee does not exceed Rs 60, at times this is exceeded, due to difficulty of operation, social and financial position of patient, but the maximum does not, as a rule, exceed Rs 100 for inhabitants of the Colony.

The only fees charged in a separate account to the patient are the operating fees which are paid directly to the operating surgeon. All other hospital costs, including special drugs, &c., are paid directly to Government.

Government Officials drawing pensionable emoluments of less than Rs 1,500 per annum are entitled to free treatment in the 2nd class wards.

Free treatment in the 3rd class wards is provided for Police Constable, Prison Guards, Messengers, Port Office boatmen, Postmen, Government House servants, labourers in any Department of the Government or the Local Boards, all other Government Officials admitted to the Hospital pay only half fees in 1st and 2nd class wards, operations being carried out free.

The 1st and 2nd class accommodation in the Hospital is ample for the needs of the Colony, as it is rare to have all the beds in these classes fully occupied.

With regard to the Maternity Department a different scale of charges is made.

In 3rd class a charge of Rs 5 is made, and this covers all Hospital charges ante and Poste-natal treatment, operative interference etc., and there is no time limit as to the period covered by this minimum fee.

If this fee was not imposed the wards would be overcrowded and even at present the 18 beds in this ward are taxed up to their limit at times.

Poor and indigent patients are always admitted free to the Maternity Ward.

A fee of Rs 15 is charged in 2nd class, which covers all costs for a period of 15 days, includes the services of a qualified midwife, nursing, medical attendance &c. If instrumental interference is necessary a fee not exceeding Rs 20 may be charged, as a rule patients in this class rarely pay for application of forces.

First class in the Maternity includes two classes. 1st Class A. pays Rs 50 which covers all costs for 15 days, 1st class B. pays Rs 30 which also covers all costs for 15 days.

In case of 1st class patients a fee not exceeding Rs 50 may be charged for the confinement by the medical Officer that attends same.

With regard to X-Ray Diathermy, Ultra violet Ray treatment, this is carried out by the Resident Surgeon, who fixes his fees beforehand as all the installation and apparatus are his private property.

In case of 3rd class patients no fees are charged for X-Ray examination as there is a subvention of Rs 600 per annum, allowed to the Resident Surgeon for this service.

During the year under review the Tubercular wards in the Hospital grounds have been completed, it is now furnished and patients are able to be placed under open air treatment. It is devided into two wards male and female, each containing 3 beds, the cost of the building was defrayed by a grant of £400 from the Colonial Development fund.

The quarters of the Resident Surgeon in the Hospital grounds have been completed, and the old quarters of the Resident Surgeon have been converted into a nurse's home.

The Public Works Department erected temporary wooden wards in the Hospital grounds for the segregation of cases of epidemic Bacillary Dysentery, these temporary buildings were taken down when the need for same ceased.

The water supply from Hermitage Hills 132 feet above the sea level was abundant during the year and there were no complaints on the subject, the discharge from the reservoir is 13½ gallons per minute.

Extern Dressing Room Hospital.

During the year there were 1799 cases treated in the extern dressing room. Most of the cases were for minor injuries and wounds, fees amounting to Rs 81.35 were paid for the dressings supplied, which are supplied at cost to those able to pay and free to indigent patients.

X Ray and Electro Medical Department.

This Department continues to be of great assistance in the work of the Hospital.

During the year 137 X Ray examinations both radioscopic and radiographic were carried out by the Resident Surgeon.

As free examinations (to paupers and those entitled to same) numbered 87, over 63 o/o of the total number of X Ray examinations during the year were carried out free.

Since an X Ray installation became available in the Colony and up to the end of 1931, the number of radiogical investigations carried out in the following group of diseases is as follows :—

For injuries and diseases of bones and joints	...	...	...	176
„ Diseases of the chest ...	...	...	...	71
„ „ of the alimentary canal	...	...	...	34
„ „ of the genito urinary tract	...	...	...	14
„ „ (organic) of the nervous system		...	...	6
		Total	...	301

Diathermy treatment and Ultra-Violet irradiations with the Quartz mercury vapour lamp are also applied in this Department and a good many Hospital patients of the poorer classes received free electro-medical treatment during the year.

Admissions during 1931.

882 patients were admitted consisting of (352 males and 530 females). There were in addition in the Hospital on the 1st January 1931, 25 patients (12 males and 7 females) making a total of 907 patients for 1931.

276 males and 447 females were discharged as cured.
39 males and 52 females were discharged as relieved.
21 males and 25 females were discharged as unrelieved.
There died 19 males and 10 females in the Hospital.

Surgical Operations performed in Seychelles Government Hospital.

Operations performed during the year 1931 numbered 407 of which 402 were cured, 1 improved and 4 died.

List of operations with Remarks thereon.

Operation.	No.	Cured.	Improved.	Died.	Remarks.	
GENERAL ABDOMINAL OPERATIONS.					... ...	31
For Hernia ...	10	10	...	...		
Strangulated Hernia...	5	4	...	1	The fatal case was in a child 14 months old in whom the strangulation occurred 12 hours before admission.	
Acute appendicitis ...	3	3	...	...		
Chronic „ ...	11	11	...	...		
Laparatomy (for general peritonis) ...	1	...	...	1	Case of injury seen 2 days after the accident.	
Intussusception ...	1	1	...	...	Intussusception was due to a Meckel's diverticulum and a resection was carried out.	
GENITO URINARY OPERATIONS.					... ...	16
Circumcision ...	7	7	...	...	In adults.	
Hydrocele (radical cure) ...	8	8	...	...		
Orchidectomy ...	1	1	...	...		
GYNAECOLOGICAL OPERATIONS.					... ...	6
Hysterectomy... ...	5	3	...	2	One of the two fatal cases was due to pulmonary embolism. In the other severe unexpected shock was the cause of death.	
For Bartholinian's operations ...	1	1	...	...		
Amputations ...	2	2	...	...	... ...	2
Benign new growths...	4	4	...	...	... ...	4
						59
MISCELLANEOUS OPERATIONS					... ...	345
Unclassified ...	293	293	...	...		
Rib resection Empyæma ...	2	2	...	...		
Fistula in ano ...	5	5	...	...		
Liver abcess ...	2	1	1	...		
For fractures and dislocations ...	25	25	...	...	Dislocations reduced under anæsthesia.	
Cataract ...	1	1	...	...		
Hæmorrhoids ...	12	12	...	...		
Tonsils and adenoids ...	2	2	...	...		
Osteotomy ...	2	2	...	...		
Plastic ...	4	4	...	...		
Total ...	407	402	1	4		407

Deaths in Hospital during 1931.

There were during the year 29 deaths in the general wards of the Hospital as follows :—

Bacillary dysentery	7
Septicæmia	1
Tuberculosis	2
Diabetes	1
Meningitis	1
Cardiac disease	1
Endocarditis	2
Toxemia acute	1
Pneumonia	1
Phthisis	1
Ankylostomiasis	1
Colitis	1
Hernia strangulated	1
Intussusception	1
Peritonitis	1
Cystitis	1
Uterine Fibroid	2
Uræmia	1
Senile decay	1
Fractures	1
Total ...	29

Summary of dental treatment given to Government Officials Employés, &c., in the Hospital during the Year 1931.

Total number of extractions ...		...	226
,, ,,	with local Anæsthetic	...	111
,, ,,	without an ,, ...	...	115
,, ,,	with Chloroform	...	Nil
,, ,,	Fillings	...	17
,, ,,	Dentures at reduced cost ...	...	7

Report supplied by Government Surgeon Dentist Mr Murray.

Summary of dental treatment given to Government Officials, employees &c., in the Hospital during 1931.

The majority of the above include employees of all Government Departments, paupers, prisoners, etc., all of whom seem grateful for services rendered ; unfortunately, with hardly an exception, they refuse to accept conservative treatment, such as fillings etc., and prefer ruthless extractions ; t' is is very much to be deplored, perhaps in time they may be pursuaded to see the matter differently It has been proved that all diseased teeth are the indirect cause of many serious illnesses, Tuberculosis, Diabetes, even cancer.

Even if not seriously ill, a man or a woman with a septic mouth suffers in health. Millions of working weeks are lost each year through illness due to defective teeth. The loss of production which follows means less prosperity to the country, less profit to the firms engaged in industry, lower wages for the workers.

It would, of course, make a considerable difference if the Colony had sufficient funds to employ the Government dentist on full time Government dental surgeon to the School children as well as Government Department. They would then receive dental treatment from the vital age on entering school to the time they left, when they would be perfectly equipped to start their way out in the world, and would then realize the benefits of having the teeth regularly attended to afterwards.

It stands to reason that the earlier the defects are detected and remedied the better, and the greater the proportion of conservative treatment to radical, which should be the Dental Surgeon's aim, as teeth should be kept, as far as possible in a healthy and useful condition, and not extracted which sets up all sorts of unnatural and harmful conditions.

If ever the Colony is fortunate enough to be in this position, and the treatment once commenced, it would have to be continuous, for if it was once allowed to lapse, irreparable damage to the teeth would result. Emphasis must be laid upon the fact that the work would be essentially of a preventive nature, that the success of the work of the school dentist would be judged, not by the number of teeth he extracts or fills but by the number of older children leaving school with sound mouths, caries having been averted by timely attention during the eruption of the second set of teeth. We must not forget that for the future industrial workers we have to look for the children, and every endeavour should be made to maintain them in as healthy a condition as possible.

If this ideal state of affairs ever comes to pass, it would be absolutely essential if the work was to be efficiently and economically carried out, that a motor should be used, preferably one fitted as a dental surgery and with a sleeping apartment, in order to reach the outlying and inaccessible school without loss of time.

Victoria Prison.

The prison at Victoria is administered as a convict prison, and as a local prison, all the prisoners sleeping in association cells the large cells can accommodate as many as 30 prisoners.

The sanitary arrangements of the prison are satisfactory, rations are adequate and of good quality. At times prisoners complain of the maize rations, as they are principally rice eaters, but when they get accustomed to the maize diet they seem to thrive on it.

The general health was satisfactory during the year, there was no outbreak of any serious disease or epidemic.

Prisoners were regularly employed on various industries such as carpentery and the making of mattresses, blinds, baskets, etc., for the Government Officials, and the total revenue derived from those industries was Rs 622.67.

There were 652 male and 99 female prisoners convicted during the year 1931 as compared with 353 men and 90 women in 1930 shewing an increase of 299 men and 9 women.

611 males and 94 females were emprisoned for non-payment of fines and costs including taxes, and 40 males and 5 females for penal purposes.

The total number of prisoners in jail on 1st January 1931 was 46 and on 31st December 29.

The unexpired terms of sentences of prisoners under detention on 31st December were as follows :—

Over 5 years	...	none
1 year to 5 years	...	9
6 months to 1 year	...	9
Below 6 months	...	29
Total	...	47 prisoners

The minimum number of prisoners during the year 1931 was 33 on the 17th January and the maximum 57 on the 21st December.

The daily average was 3 males and 3 females.

The total number of prisoners sent to the Seychelles Hospital for medical treatment during the year was 4 men.

The daily average on the sick list was 2.

The sanitary conditions of the prison were satisfactory during the year.

On 5 occasions prisoners were sentenced to solitary confinement with forfeiture of 1/3 rations.

192 were under penal diet, and 10 reprimanded, further 39 prisoners who were under the mark system regulations, were deprived of part of their marks owing to bad conduct.

No Corporal punishment, execution nor escape occurred during the year.

Lunatic Asylum Expenditure 1931.

	Rs	cts.
Maintenance	4,376	98
Upkeep of Asylum and Grounds	91	50
Total Expenditure ...	4,468	48
Less amount paid by paying patients	1,036	76
	3,431	72
Salaries of Attendance and Cook	3,652	62
Total cost of Asylum ...	7,084	34
The total amount voted for Asylum was	8,850	00
Balance in favour on 31st December 1931 ...	1,765	66

Table showing the Admission, re-admissions, Discharges and Deaths during the year ending 31st December 1931

	Males	Females	Total.	Males	Females	Total.
In Asylum including those out on trial	11	9	20	...	...	...
Cases admitted during 1931.						
First admission	2	3	5	...	...	...
Not first admission	1	...	1	...	...	...
Total cases under care during year	14	12	26	14	12	26
Cases discharged during 1931.						
Recovered	...	...	...	...	...	...
Relieved	1	1	2	...	...	...
Not improved	...	...	...	...	...	...
Died	4	...	4	...	...	...
Total cases discharged and died during the year... ..	5	1	6	5	1	6
Remaining in Asylum.						
31st December 1931, including those out on trial ...	...	...	...	9	11	20

Leper Asylum.

All the male lepers are now living in the leper asylum situated at Round Island, in Bay St Anne, Praslin. The latter island has an area of about 54 acres. The quarters for the female lepers in the new Asylum are not yet built, so the females remain in the old camp, until the buildings are erected. This means extra expenditure for surveillance and administration. It would be a marked economy to have all the patients in the one Asylum, under a single administration and control.

I consider it from an administrative point of view, that it is unwise for the Colony to have two separate and distant leper Asylum. During 1931 the female leper asylum in the old camp was carried on in a haphazard manner, as it was expected that during the year arrangements would be made for the transfer of the patients to the new Asylum at Praslin.

Seeing that the number of female patients has greatly increased during the year and there is not any immediate prospect of these patients being transferred it will be necessary to have a proper administration staff appointed in the Female Leper Camp. This additional expense would have been avoided if all the patients were kept under a single administration staff at Round Island Praslin.

The Assistant Medical Officer stationed at Praslin is the officer in charge of the Asylum and the island which is about 1½ miles from his quarters is reached by a small motor launch specially provided for this service.

Reference to the census 1931 taken of all lepers in the Colony the number was found to be 58, this number which is incorrect was due to lepers in charge of their guardian not stating they were affected.

The number of known and certified lepers at the end of 1931 was 84 an increase of 13 lepers during the year, and I am of opinion that there are still many cases of leprosy undiagnosed, as patients and their families hide the disease as it is considered in the Colony as a social taint.

85 years ago an island called "Curieuse" off the coast of Praslin was the first leper establishment in the Colony, and I understand that the district of Praslin that borders on the coast next to Curieuse has a higher incidence of leprosy than other parts of the island. It is interesting to record that in 1847 all lepers at Mauritius were transferred from Mauritius to Seychelles which was then a dependency of Mauritius. It appears that prior to that date leprosy appears to be unknown in Seychelles. Mauritius dumped all their lepers in Seychelles and "Curieuse Island" at Praslin was especially set aside for their reception.

Under Leprosy Campaign more detailed information is given on this important subject, the cost of maintenance of lepers for 1931 was Rs 9,160.81 the estimate being exceeded by Rs 1,660.81 due to an increase of lepers and new admittances to the leper camp, this sum will be exceeded in 1932.

Fiennes Institute.

This institution is situated at Plaisance about 2 miles from Victoria. It has accommodation for about 130 paupers. The Resident Surgeon who is also the Medical Superintendent of the Institute visits there three times a week and at other times when necessary.

The daily average number of patients in 1931 was 85.

There were 21 deaths during the year mostly from senile decay and cardiac disease.

Rs 8,095.14 were spent during the year for the upkeep of the Institution, this represents a saving of Rs 504.86 on the amount voted for the year.

The number of patients admitted during the year was 71 and the number discharged 34.

The health of the inmates considering their advanced age was fair throughout the year, the industries which include gardening, mat, basket and broom making, maize cleaning, &c., realised Rs 221.30. The cost of these industries was Rs 149.45, the difference being handed over to the paupers as a bonus.

Cottage Hospital, Praslin.

This Hospital is reported on by the Assistant Medical Officer in his report found as an appendix.

VII. Meteorology.

This has been supplied by the Port Officer and is given in tabulated form in Table IV., it shows temperature, rainfall, winds and a column for total death in each month.

This island (Mahé) is in Lat. 4 37' S and although situated close to the equator, experience very little of the hot and depressing weather common to equatorial regions, the surrounding sea ensuring the uniformity and equibility of its climate.

The South East monsoon is more pleasant with its steady, cooler, and drier wind than the North West Monsoon with its alternating variable winds, calms and resulting humidity.

The hottest months are however at the change of the monsoons when the daily mean of maxima temperature is 85 F. and that of minima 78 F. During the South East Monsoon the mean daily is 81 F. whereas the absolute minimum recorded is 68 F. at sea level.

Relative Humidity is 76 o/o at its minimum during the South East and 81 o/o at its maximum during the N. W. monsoon extremes recorded being 59 o/o and 93 o/o respectively.

Temperatures of stations situated at 1,500 feet or more above sea level show a decrease of approximately 4 to 5 degrees F.

IX. Scientific.

Thanks to the free grant from the Colonial Development Fund, the Laboratory in the Hospital is now provided with an incubator, special research microscope with dark ground illumination, a small still, so that research work can be carried out by staff.

In the Laboratory at the Hospital fæces are systematically examined for the detection of Ankylostomiasis ova, several hundred of specimens having been examined during the year.

The mosquitoes sent to Dr Stanton, C. M. G., from Aldabra were classified by Mr Edwards at the National History Museum as follows:—

The Anophelines (adults and larvæ) are all A. Gambiæ Giles (Costalis Theo).

The Culicine larvæ include three species, Aedes aegypti L. (stegomyia fasciata), Culex Simpsoni Theo., and Aedes Fryer Theo., the first two abundantly represented, the third by two specimens only.

The occurrence of C. Simpsoni is of interest as it was not found by Fryer, though McGregor in 1923 found it to be abundant in Mauritius and Rodriguez. It is an East and South African species no doubt artificially spread.

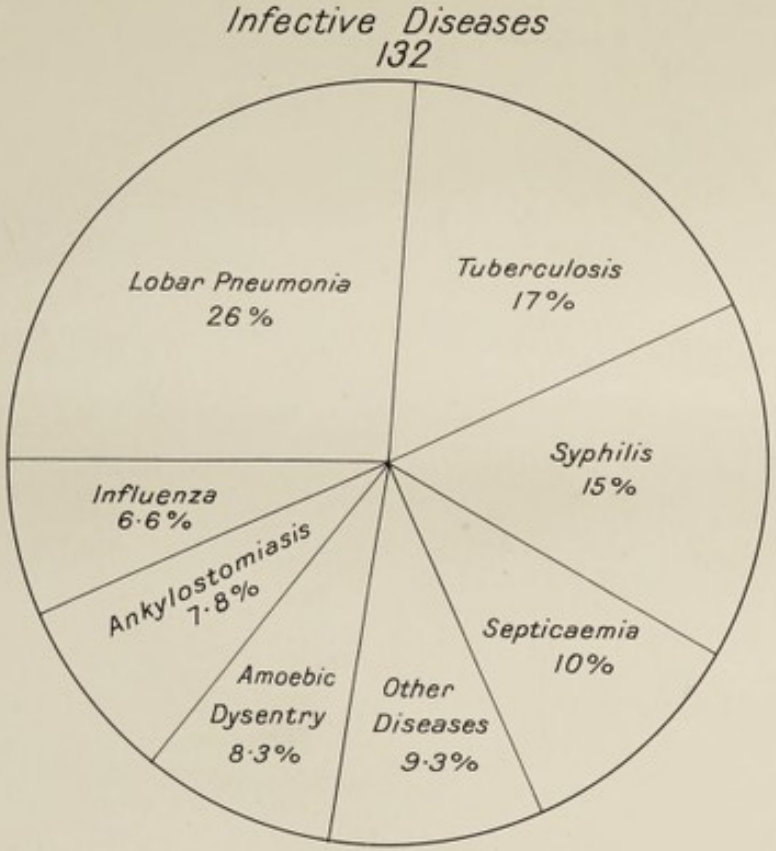
The larvæ of A. Fryeri have not previously been obtained, and are therefore of interest for our collection.

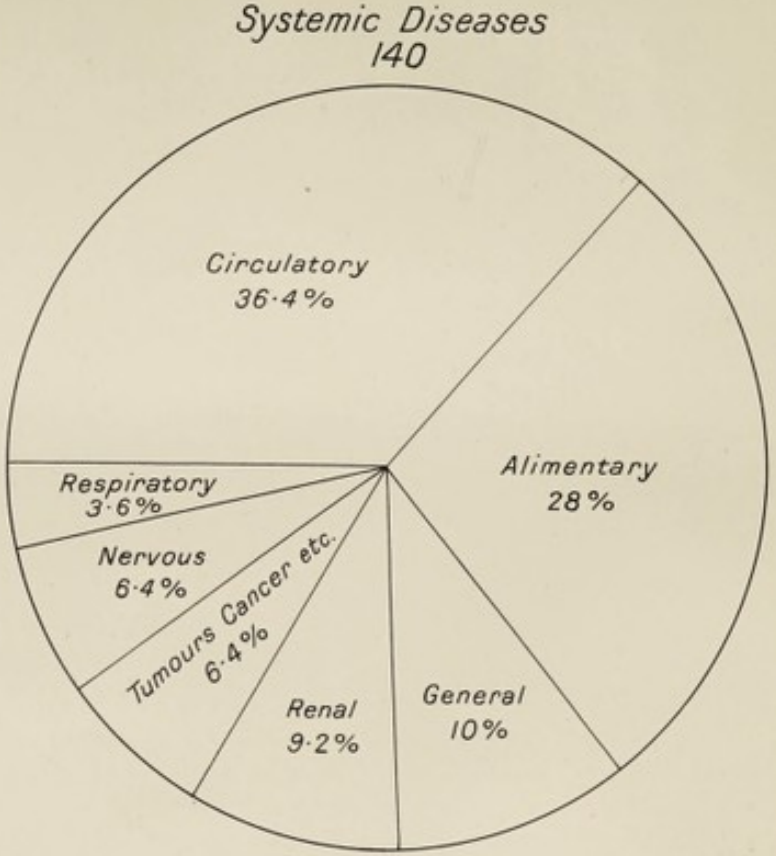
The possibility should however be borne in mind that A. Gambiæ might tide over the dry season by æstivation of adults, or by breeding in salt water, though neither of these habits would accord with what is known of its behaviour in Africa.

JOHN THOS. BRADLEY,
Chief Medical Officer

Annexure

Total Deaths in 1930 = 395





Senile Decay, Accidents & Illdefined Causes = 123.

Table I.

Return showing the Medical Staff and the principal members of the subordinate staff.

Names of Qualifications.	Rank of appointment	Where stationed on 31st Dec. 1931.	Remarks
John T. Bradley M.D. ...	Chief Med. Officer	Victoria	
E. M. Lanier M.D., M.R.C.S., L.R.C.P. ...	Resident Surgeon	Seychelles Hosp.	
P. J. Gonsalves M.R.C.S., L.R.C.P. ...	Asst. Med. Officer	South Mahé	
K. C. Mathew M.B., B.S. ...	do	Praslin and La Digue	
A. Murray R.D. ...	Govt Surg. Dentist	Victoria	
J. E. Houareau ...	Dispenser	do	
A. Loustau-Lalanne ...	Second Clerk and Storekeeper	do	
H. Barallon ...	Asst. Dispenser	do	
Sister Catherine ...	Matron Hospital	Seychelles Hosp.	
„ Yvonne ...	Nurse	do	
„ Laure ...	do	do	
„ Emmanuel ...	do	do	
A. Grandcourt D.N. & M., S.R.N. ...	Matron Maternity Department	do	
J. Faure C.M. ...	Midwife	do	
Seven probationary nurses ...	Probationers	do	
F. Westergreen ...	Sanitary Inspector	Victoria	
J. Hickey ...	Night San. Insp.	do	Attached to V. T. B.
A. Pool ...	Asst. San. Insp.	do	
M. Grandcourt ...	do	South Mahé	
V. Soleil ...	do	Praslin & La Digue	
D. Morel ...	do	Victoria	
M. Payet ...	do	South Mahé	
E. Collie ..	Master Fiennes Institute	Fiennes Institute Plaisance	
C. Hodoul C.M. ...	Nurse do	do	
E. Mathiot ...	H. Male Attendant	Lunatic Asylum South Mahé	
V. Payet C.M. ...	Head Female Attendant	do	
C. Collie C.M. ...	Nurse	Praslin	

TABLE II.

	Males.	Females.	Total.
Estimated Population on Census day 26.4.31. ...	13,289	14,155	27,444
Births during 1931 ...	437	392	829
Arrival during 1931 ...	383	119	502
Decrease by deaths ...	195	181	376
Decrease by departures ...	234	161	395
Estimated population on 31st December 1931 ...	13,489	14,297	27,786
Net increase during 1931 ...	200	142	342

Birth rate during 1931 per thousand 29·83
Death rate „ „ „ „ 13·53

TABLE III.

AGES AT WHICH DEATH HAS OCCURRED.

Under 1 year		1 to 5 years		6 to 70 years		70 to 100 years		Over 100 years		Total	
M	F	M	F	M	F	M	F	M	F	M	F
44	24	30	29	92	77	29	50		1	195	181
68		59		169		79		1		376	

TABLE IV.

Meteorological Returns for 1931.

1931	Temperature							Rainfall		Winds		Deaths	
Months	*Barometer Pressure in inch	Solar Maximum	Minimum on grass	Shade Maximum	Shade Minimum	Range	Mean	Amount in Inches	Relative Humidity	Directions of Wind	Average force	Deaths per month	Remarks.
January ...	30.062	132		83.4	75.9	7.5	79.6	11.16	79.5	NW.	7.4	26	
February ...	30.061	132		84.1	77.8	6.3	80.9	18.68	81.4	NE.	4.6	25	
March ...	30.080	132		84.6	78.5	6.1	81.5	2.02	73.8	NW.	6.2	29	
April ...	30.071	139		87.2	78.9	8.3	83.0	2.21	70.6	ESE.	4.4	32	
May ...	30.073	136		86.3	79.6	6.7	82.9	9.80	73.5	ESE.	10.3	32	
June ...	30.096	127		83.0	76.8	6.2	79.9	4.06	75.0	ESE.	13.8	31	
July ...	30.082	128		81.1	76.4	4.7	78.7	2.44	75.2	ESE.	18.5	30	
August ...	30.110	128		80.7	75.2	5.5	77.9	1.14	72.1	ESE.	16.8	30	
September ...	30.106	130		82.5	76.9	5.6	79.7	.14	73.3	ESE.	15.7	36	
October ..	30.122	132		83.4	77.2	6.2	80.3	8.41	72.3	ESE.	11.0	38	
November ...	30.067	133		84.3	76.2	8.1	75.2	5.78	70.8	ESE.	4.2	35	
December ...	30.063	125		81.4	74.0	7.4	77.7	29.30	86.2	NW.	5.9	32	

*corrected for Index error only.

TABLE V.

Return of Diseases and Deaths in 1931 at the Seychelles Hospital.

Diseases.	Remaining in Hospital at end of 1930.	Yearly Total. Admissions.	Yearly Total. Deaths.	Total Cases Treated.	Remaining in Hospital at end of 1931.	Remarks.
Epidemic, Endemic & Infectious Diseases.						
Dysentery Amœbic ...	...	13	...	13	1	
Bacillary ...	...	73	7	73	...	
Influenza ...	...	25	...	25	...	
Malaria imported ...	...	4	...	4	...	
Septicæmia ...	...	2	1	2	...	
Syphilis ...	2	11	...	13	...	
Tetanus ...	...	2	...	2	...	
Tuberculosis ...	...	14	2	14	1	
Venereal Diseases ...	1	8	...	9	...	
Gumma ...	...	1	...	1	...	
Asthenia ...	...	3	...	3	...	
General Diseases not mentioned above.						
Anæmia ...	...	3	...	3	1	
Carcinoma ...	...	2	...	2	...	
Diabetes ...	...	8	1	8	...	
Rheumatism ...	...	8	...	8	...	
Alcoholism ...	1	..	...	1	...	
New Growths various ...	...	6	...	6	...	
Affections of the Nervous System and Organs of Senses.						
Concussion Cerebral ...	...	1	...	1	...	
,, ,, Spinal ...	...	1	...	1	...	
Conjunctivitis ...	...	1	...	1	...	
Cataract ...	...	1	...	1	...	
Hemiplegia ...	...	1	...	1	...	
Meningitis ...	...	1	1	1	...	
Melancholia ...	...	1	...	1	...	
Neuralgia ...	...	4	...	4	...	
Neurosis ...	...	5	...	5	...	
Otorrhoea ...	...	1	...	1	...	
Sciatica ...	1	...	...	1	...	
Opthalmia ...	...	1	...	1	...	
Affections of the Circulatory System.						
Arthritis ...	...	9	...	9	...	
Cardiac disease ...	...	5	1	5	...	
Cerebral Thrombosis ...	...	1	...	1	...	
Endocarditis ...	...	6	2	6	...	
Gout ...	...	1	...	1	...	
Myocarditis ...	...	2	...	2	...	
Myelitis ...	...	1	...	1	...	
Phlebitis ...	...	2	...	2	...	
Rheumatism Articular	..	4	...	4	...	
Toxemia Acute ...	...	1	1	1	...	
Affections of the Respiratory System.						
Asthma ...	...	10	...	10	...	
Bronchitis ...	..	8	...	8	...	
Empyema ...	...	1	...	1	...	
Pneumonia ...	...	3	1	3	...	
Phthisis ...	...	1	1	1	...	
	5	271	18	276	3	

Return of Diseases and Deaths in 1931 at the Seychelles Hospital.

Diseases.	Remaining in Hospital at end of 1930.	Yearly Total. Admissions.	Yearly Total. Deaths.	Total Cases Treated.	Remaining in Hospital at end of 1931.	Remarks.
DISEASES OF THE DIGESTIVE SYSTEM.	5	271	18	276	3	
Amœbiasis ...	1	...	...	1	...	
Appendicitis ...	...	15	...	15	...	
Ankylostomiasis ...	...	1	1	1	...	
Abscess Liver ...	...	4	...	4	1	
Colic ...	1	15	...	16	...	
Colitis ...	...	1	1	1	...	
Dyspepsia ...	...	2	...	2	...	
Diarrhœa ...	...	1	...	1	...	
Enteritis ...	...	5	...	5	...	
Gastritis ...	...	8	...	8	...	
Gastro Enteritis ...	...	6	...	6	...	
Gastralgia ...	...	1	...	1	...	
Fistula in Ano ...	...	3	...	3	1	
Icterus ...	...	1	...	1	...	
Hernia ...	...	11	...	11	1	
„ Strangulated ...	...	6	1	6	...	
Hepatitis ...	1	8	...	9	...	
Hæmorrhoids ...	...	12	...	12	...	
Intestinal Nephritis ...	...	2	...	2	...	
„ Obstruction ...	...	1	...	1	...	
Indigestion ...	...	2	...	2	...	
Intussusception ...	...	2	1	2	1	
Protusion of Anus ...	...	1	...	1	...	
Peritonitis ...	...	1	1	1	...	
Tonsillitis ...	...	2	...	2	...	
Herniochidectomy ...	...	1	...	1	...	
Hæmatoma of Rectus ...	...	1	...	1	...	
Helmintiasis ...	...	4	...	4	...	
DISEASES OF THE GENITO URINARY SYSTEM.						
Adenitis ...	1	7	...	8	1	
Ascites ...	...	1	...	1	...	
Cystitis ...	...	3	1	3	...	
Cystoscopic Examination ...	...	1	...	1	...	
Dysmenorrhœa ...	...	1	...	1	...	
Endometritis ...	...	1	...	1	...	
Fibroma of Breast ...	...	1	...	1	...	
Hæmorrhage of Pinis ...	...	1	...	1	...	
Hydrocele ...	...	3	...	3	...	
Leucorrhœa ...	...	1	...	1	...	
Mastitis ...	...	1	...	1	...	
Menorrhagia ...	...	1	...	1	...	
Nephritis ...	...	4	...	4	...	
Orchitis ...	1	3	...	4	...	
Ovaritis ...	...	7	...	7	...	
Ovarian Cyst ...	...	1	...	1	...	
Odema of Pinis ...	...	1	...	1	...	
Prostate Enlarged ...	...	2	...	2	...	
Procidentia ...	...	1	...	1	...	
Phimosis ...	...	1	...	1	...	
Pyelitis ...	...	1	...	1	...	
Retention of Urine ...	...	10	...	10	1	
Slapingitis ...	1	11	...	12	...	
Stricture ...	...	4	...	4	...	
Carried forward ...	11	456	24	467	9	

Return of Diseases and Deaths in 1931 at the Seychelles Hospital.

Diseases.	Remaining in Hospital at end of 1930.	Yearly Total. Admissions	Yearly Total. Deaths	Total Cases Treated	Remaining in Hospital at end of 1931.	Remarks.
Brought forward ..	11	456	24	467	9	
Diseases of the Genito Urinary System.-Ctd.						
Tumor of R. Testicle	...	1	...	1	...	
Uterine Fibroid	1	11	2	12	...	
Uræmia	...	1	1	1	...	
Vaginitis	...	2	...	2	...	
Affections of the Skin & Cellular Tissues.						
Abscess	1	59	...	60	2	
Boils	1	...	...	1	...	
Bursitis	...	1	...	1	...	
Cellulitis	...	1	...	1	...	
Cyst	...	3	...	3	...	
Carbuncle	...	3	...	3	...	
Dhobie Itch	...	1	...	1	...	
Furunculosis	...	1	...	1	...	
Papiloma of cheek	...	1	...	1	...	
Scar of chin	...	1	...	1	...	
Synovitis	...	4	...	4	...	
Sinusitis	...	1	...	1	...	
Ulcers	1	5	...	6	...	
Whitlow	...	2	...	2	...	
Lichen	...	1	...	1	...	
Impetigo Contagiosa	...	1	...	1	...	
Jiggers	...	2	...	2	...	
Diseases of Bones & Organs of Locomotion.						
Osteomyelitis of Tibia	...	2	...	2	...	
Periostitis of Tibia	...	1	...	1	...	
Pyorrhœa	...	1	...	1	1	
Affections of Old Age.						
Senile Decay	...	5	1	5	...	
Affections produced by External Causes.						
Bruise	...	3	...	3	1	
Burns	1	2	...	3	1	
Dislocation	...	3	...	3	...	
Fractures	...	16	1	16	1	
Injuries	1	45	...	46	1	
Ill-Defined.						
Malingering	...	3	...	3	...	
Observations	4	15	...	19	...	
Hospital Total ...	21	654	29	675	16	
Maternity Cases ...	4	228	...	232	2	
Grand Total ...	25	882	29	907	18	

TABLE VI.

Return of patients treated at the Dispensaries.

Month.	Seychelles Hospital.		Anse Royale.		Praslin.		Total.
	M	F	M	F	M	F	M. & F.
January ...	20	68	11	7	12	13	131
February ...	27	63	7	10	10	10	127
March ..	24	64	13	13	5	8	127
April ...	18	83	19	18	15	15	168
May ...	11	85	17	21	7	10	149
June ...	23	78	7	23	15	9	155
July ...	32	126	12	20	13	13	216
August ...	49	135	11	14	11	8	228
September ...	53	188	19	23	12	10	305
October ...	64	204	13	24	13	13	331
November ...	80	201	15	25	6	11	338
December ...	60	134	8	18	10	9	239
	461	1,427	152	216	129	129	2,514

Result of Cases treated at the Seychelles Hospital.

Sexes.	Remaining in Hospital at the end of 1930.	Admitted during 1931.	Total treated.	Cured.	Relieved.	Unrelieved.	Died.	Remaining at the end of 1931.	Total.
Males ...	12	352	364	276	39	21	19	14	369
Females ...	13	530	543	447	52	25	10	4	538
Total ...	25	882	907	723	91	46	29	18	907

APPENDIX A.—1931.

TABLES SHOWING THE ADMISSIONS, DISCHARGES, DEATHS FOR EACH YEAR FROM THE OPENING OF THE ASYLUM 13th MARCH 1906.

Years	Admitted.			Discharged.									Died.			Remaining in Asylum including those out on trial 31st Dec. each year			Remarks
				Recovered.			Relieved.			Not improved.									
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	
1906	2	2	4	—	—	—	—	—	—	—	—	—	1	—	1	1	2	3	
1907	3	3	6	—	—	—	—	—	—	—	—	—	—	—	—	4	5	9	
1908	7	1	8	2	—	2	1	—	1	—	—	—	3	1	4	5	5	10	
1909	12	2	14	4	—	4	—	—	—	—	—	—	—	—	—	13	7	20	
1910	3	3	6	2	1	3	—	—	—	—	—	—	1	—	1	13	9	22	
1911	4	3	7	2	1	3	—	—	—	—	—	—	4	—	4	11	11	22	
1912	5	2	7	3	1	4	1	—	1	1	—	1	2	2	4	9	10	19	
1913	2	5	7	2	1	3	—	—	—	—	—	—	1	—	1	8	14	22	
1914	5	3	8	—	1	1	—	1	1	—	—	—	1	2	3	12	13	25	
1915	3	6	9	1	—	1	—	—	—	—	—	—	2	3	5	12	16	28	
1916	4	2	6	1	1	2	—	—	—	—	—	—	1	7	8	14	10	24	
1917	1	2	3	—	—	—	—	—	—	1	1	2	2	2	4	12	9	21	
1918	2	9	11	2	—	2	—	—	—	—	—	—	3	4	7	9	14	23	
1919	6	—	6	2	1	3	—	—	—	—	—	—	—	3	3	13	10	23	
1920	4	3	7	5	—	5	—	—	—	—	1	1	2	2	4	10	10	20	
1921	5	5	10	1	2	3	—	—	—	—	2	2	1	2	3	13	9	22	
1922	4	5	9	1	—	1	—	—	—	—	—	—	3	3	6	13	11	24	
1923	6	—	6	—	—	—	3	—	3	—	—	—	1	1	2	15	10	25	
1924	5	3	8	1	1	2	—	—	—	—	—	—	5	—	5	14	12	26	
1925	3	4	7	2	1	3	—	—	—	—	—	—	2	2	4	13	13	26	
1926	5	4	9	1	2	3	—	—	—	1	1	2	1	2	3	15	12	27	
1927	6	—	6	—	1	1	1	—	1	—	—	—	5	—	5	15	11	26	
1928	4	4	8	3	—	3	—	3	3	—	—	—	4	1	5	12	11	23	
1929	5	2	7	1	—	1	1	3	4	—	—	—	3	3	6	12	7	19	
1930	4	3	7	1	—	1	2	1	3	—	—	—	2	—	2	11	9	20	
1931	3	3	6	—	—	—	1	1	2	—	—	—	4	—	4	9	11	20	

TABLE SHOWING CONDITION AS MARRIAGE, PROBABLE CAUSE OF INSANITY, MENTAL DISEASE AND OCCUPATION OF PATIENTS FOR THE YEAR 1931.

Conditnon in reference to Marriage	Males.	Females.	Total.
Married ..	1	3	4
Single ...	8	6	14
Widow ...	...	2	2
Widower ...	...	...	...
Unknown ...	...	...	...
	9	11	20

Probable Cause of Insanity.	Males.	Females.	Total.
Moral.			
Domestic trouble ...	...	...	..
Adverse circumstances ...	...	...	...
Mental anxiety and worry ...	..	...	...
Religious excitement ..	...	1	1
Love affairs ...	...	...	...
Fright and nervous shock ...	...	...	...
Physical.			
Intemperance in drink ...	1	...	1
„ sexual ...	...	...	...
Venereal disease ...	3	5	8
Self abusive sexual ...	...	...	...
Over exertion ...	...	...	...
Sunstroke ...	...	...	...
Accident or Injury ...	...	...	..
Pregnancy ...	...	...	...
Parturition and the puerpural state	...	1	1
Lactation ...	...	...	...
Uterine and ovarian disorders ...	..	...	...
Puberty ...	...	...	...
Change of life ...	...	...	...
Fever ...	...	..	...
Privation and starvation ...	...	...	...
Old age ...	...	...	...
Other bodily disease and disorders	...	2	2
Previous attack ...	...	...	..
Hereditary influences ...	5	2	7
Congenital defect ...	...	...	...
Other accidental causes ...	...	...	...
Unknown ...	...	...	...
	9	11	20

Form of Mental Disease.	Males.	Females.	Total.
Congenital or Infantile Mental defect.			
(a) with Epilepsy ...	...	...	...
(b) without Epilepsy ..	2	...	2
Epilepsy acquired ..	...	..	...
General paralysis of the Insane ...	...	1	1
Mania.			
Acute ...	1	2	3
Chronic ...	2	3	5
Recurrent ...	2	3	5
A. potu ...	...	...	...
Puerperal ...	...	...	...
Senile ...	...	...	...
Melancholia.			
Acute ...	...	1	1
Chronic ...	...	...	...
Recurrent ...	...	...	...
Puerperal ...	...	...	...
Senile ...	...	...	...
Manic Depressive ..	1	...	1
Dementia.			
Primary ..	...	1	1
Secondary ..	1	...	1
Senile ..	..	...	...
Organic (coarse brain disease) ...	..	...	...
Not insane.			
	9	11	20

Occupation.	Males.	Females.	Total.
Clerk ...	...	...	...
Labourer ...	5	1	6
Proprietor ...	1	1	2
Planter ...	...	...	...
Sailor ...	1	...	1
Unknown ...	2	8	10
Washerwoman ...	...	1	1
	11	9	20

TABLE SHOWING THE NUMBER OF PATIENTS FOR EACH MONTH IN THE ASYLUM, THEIR COST AND THE AMOUNT CONTRIBUTED BY PAYING PATIENTS TOWARDS MAINTENANCE FOR 1931.

Month	No. of patients			Cost						Cost of Washing per month for a patient		No. of Paying patients			Total amount contributed by paying patients		Classes of paying patients		Remarks
	Males	Females	Total	Total daily		Per Head		Patient per month				Males	Females	Total					
				Rs	c.	Rs	c.	Rs	c.	Rupees	cents				Rupees	cents	1st Class	2nd Class	
January ...	11	9	20	11	13	...	46	14	34	...	62	2	1	3	82	00	2	1	
February ...	11	9	20	11	16	...	46	13	02	...	59	2	1	3	73	00	2	1	
March ...	12	9	21	11	07	...	44	13	80	...	62	2	1	3	82	00	2	1	
April ...	12	10	22	12	36	...	47	14	26	...	65	2	2	4	101	70	3	1	
May ...	12	10	22	11	47	...	44	13	68	...	65	2	2	4	114	00	3	1	
June ...	12	10	22	11	57	...	45	13	35	...	78	2	2	4	111	00	3	1	
July ...	11	10	21	11	38	...	45	14	11	...	65	2	2	4	114	00	3	1	
August ...	11	11	22	11	69	...	45	13	92	...	75	2	2	4	104	06	3	1	
September ...	10	11	21	10	58	...	42	12	70	...	59	1	1	2	62	00	2	...	
October ...	10	11	21	11	38	...	44	13	57	...	61	1	1	2	64	00	2	...	
November ...	10	11	21	11	38	...	45	13	66	...	72	1	1	2	62	00	2	...	
December ..	10	11	21	11	16	...	45	13	84	...	56	1	1	2	64	00	2	...	

APPENDIX D.

Nurses Training School Seychelles Government Hospital.

In 1931 a "Nurses' Home" was opened in the quarters at the Hospital lately occupied by the Resident Surgeon. The Home is quite comfortable, and consists of a spacious dormitory, dining room on the verandah, and a small combined sitting-room and library. There is a bathroom and lavatory attached to the Home, and Electric lights are laid on in all the rooms.

A complete course of medical, surgical and maternity nursing is provided for in the syllabus, which takes a minimum of 3 years to complete, but in practice about 4 years are required. There were in training in 1931, seven probationary nurses, of European descent and these young ladies are selected from good middle class families. A high standard of education on entrance is expected, and candidates are expected to hold a certificate of Secondary Education or a Junior Cambridge certificate.

The usual systematic courses of lectures were delivered during the year and clinical teaching was carried out in the wards.

The following certificates of the British Red Cross Society were awarded in 1931.

First Aid Examination 24th July 1931.

Probationer—Mr Henri Barallon		No. A 114017
Prob. nurse—Miss Blanche Bouchereau		A 114018
,, ,, ,,	Josephine Camille	A 114019
,, ,, ,,	Solange Hoareau	A 114020
,, ,, ,,	Anne Pothin	A 114021

Advanced certificate.

Probationer nurse—Miss	Mary Tregarthen	B 27082
,, ,, ,,	Amelie Hoareau	B 27081

In addition to the Diploma in Midwifery the standard for this examination being not less than the C. M. B. of England, a certificate to practice as a local midwife is delivered after examination and attendance for not less than twelve months in the practical work of the midwifery Department.

The standard for the certificate is not as high as for the Diploma, but a good sound knowledge of practical midwifery is required, in addition to ante and post partum treatment, and the diseases of new born children.

One candidate Mrs Klebert Tirant passed the necessary examination in June 1931 and was awarded a "certificate of competency to act as a midwife" under Ord No. 2 of 1929.

APPENDIX E.

Annual Medical Report, South Mahé, 1931.

The general health of the district has been fair throughout the year. There was an outbreak of Bacillary Dysentery at Pte-au-Sel which spread to the north side of Anse aux Pins beyond the official limits of the district. Special report is attached.

Ankylostomiasis is still widespread, but the anæmias found are more moderate. The weekly clinics in all districts are well attended.

Roundworm is common, mainly in children, but is occasionally found in adults.

Tuberculosis has been rather more frequent than in 1930.

Jiggers have been conspicuously uncommon throughout the year.

Leprosy—There are now seven segregated lepers in the district. Two females have been removed to the leper camp during the year. Treatment has consisted of Hydnocreol with occasional short periods on small doses of Iodide of Potassium.

Venereal diseases are common, but very few avail themselves of the free clinic which I started last year.

Asylum—The annual returns are attached thereto. The only change in the staff has been due to the sudden death of the Head Male Attendant, Mr E. St Ange. His place has been taken by Mr E. Mathiot, whose work has been satisfactory since appointment. The outbreak of dysentry did not affect the Asylum in any way. Special precautions as to packages and visitors were taken until the outbreak was past. The sanitary condition of the Asylum has been good throughout the year.

Vaccinations—There have been 184 successful vaccinations. The lymph has been of good quality, and there have been no complications.

Anse Royale Dispensaries.

Vaccination:

Successful 1st time	...	180
,, 2nd ,,	...	3
,, 3rd ,,	...	1
Total		184

Return of patients treated at the South Mahé Dispensary.

Month.	Old.		New.		Total.
	M.	F.	M.	F.	
January	5	6	6	1	18
February	5	7	2	3	17
March	8	7	5	6	26
April	14	12	5	6	37
May	11	14	6	7	38
June	4	17	3	6	30
July	7	18	5	2	32
August	6	4	5	10	25
September	9	20	10	3	42
October	4	12	9	12	37
November	13	21	2	4	40
December	4	14	4	4	26
Total ...	90	152	62	64	368

Free Government Dispensary—The return show an increase on the average for the past few years. This is due to the increase of unemployment, and the decrease in the scale of wages, and does not indicate a poorer state of health of the district.

The report on School Inspection has already been sent in.

P. J. GONSALVES,
A. M. O. South Mahé.

APPENDIX F.

Annual Medical Report Praslin and La Digue 1931.

GENERAL REMARKS.

The general health of the district was fair, no epidemics outbreaks during the year. Veneral diseases are only too common secondary anaemia and amoebic dysentry are endemic in these islands.

Leprosy.

The male side of the new leper camp at Round Island Praslin consists of 12 double huts. The camp is at present 25 strong, the 25th being accommodated in the building that was intended to be the kitchen of the camp. Accommodation is insufficient. Not only the 25th leper has to be placed elsewhere, but also room has to be provided for those lepers who are now living under the guardianship of their relations but complain, that owing to the present scale of wages and in many cases the actual want of labour, their relatives are unable to provide for them and ask for admission to the camp. One has also to think of such segregated lepers as may transgress the law and be eventually ordered to the camp by the court. I may suggest that temporary thatched huts be built at a small cost to meet the above eventualities until such times as the Government can afford them a permanent and better habitation.

These lepers have now been for a little over one year to the new camp. Hydnocreol injections and chaulmoogra mixture are regularly administered. The cure of leprosy is such a slow progress that no statements in that direction can yet be made. But the disease is not progressing in individual cases some of them show definite improvement.

Cleanliness, personal and domestic is that can be got least of these lepers, however much one may impress on them the value and need of same. An abundant supply of water close at hand is always an inducement towards personal cleanliness. Water is now doled out to the camp and the supply of same have to be brought in pirogue from the mainland of Praslin, which is indeed a tedious process. If pipes could be laid out from the nearest source to the camp it will always ensure a constant free supply.

Besides those that are at the camp there were 15 segregated lepers living under guardianship at the beginning of the year between Praslin and La Digue. 6 more were declared during the year, of these one male has been admitted to the leper camp Praslin and one female to the leper camp Mahé and female has gone to live under guardianship at Victoria, leaving a total of 18 lepers distributed as follows. 8 males and 6 females at Praslin and 4 males and 2 females at La Digue. This show an increase of 3 excluding the 3 that are accommodated as mentioned above. These cases received regular treatment and many of the early cases show great improvement.

Many of these lepers are very poor and can scarcely afford one comfortable meal a day. It is only the fear to be cut off from their social ties that keeps them on to live under the guardianship of their relatives in spite of the fact that their relatives can only with great difficulty keep the wolf off their doors. It would be to the mutual advantage of the lepers and the community that they are removed to the leper camp.

Two women who had landed at the leper camp without permit were prosecuted and fined before Court. The old guardian who had become indifferent and unable to keep the discipline of the camp was dismissed and replaced by another.

Ankylostomiasis Campaign.

Regular mass treatment was administered at 8 centres of the district during the months of November and December. The treatment consisted of repeated doses with an interval of one week 427 people received treatment for the 1st time and 401 for the second time. Besides 300 people received treatment at the various dispensaries.

Latrines—There are 20 public latrines at Praslin and 8 at La Digue which are kept clean by the cantoniers. The private latrines are regularly inspected by the Sanitary Inspector 16 contraventions were taken under latrine regulations of which 2 were withdrawn 2 discharged and 12 fined. The work of the Assistant Sanitary Inspector in this connection is very satisfactory.

Vaccination. 113 children were vaccinated of which 8 required to be revaccinated.

School Inspections. The schools of the district were inspected twice and reports forwarded.

Vital statistics.

Year	Total births		Total deaths		Still births.	
	Praslin	La Digue	Praslin	La Digue	Praslin	La Digue.
1930	66	46	37	18	9	...
1931	84	58	23	18	3	3

The return of patients treated at the dispensaries is herewith appended.

Cottage Hospital Praslin.

The A. M. O. in charge of the Hospital was absent from the station during the months of January and February while he was deputed to investigate on the outbreak of malaria at Aldabra and Assumption and from August till the end of the year while he was transferred to Victoria during the absence of the C. M. O. on leave.

The medical work of the districts during these periods were carried out by weekly visits of the different medical officers from Mahé who stayed here every week form Wednesday to Friday and in emergency cases till Saturday. The nurse in charge of the Hospital was permanently stationed and her work was "very satisfactory" in the Ag. C.M.O. who congratulated her on the way she kept the little Hospital running during the time a medical officer was not permanently stationed at Praslin.

There were 85 admissions to the Hospital during the year of which 25 were cases of confinement. The detailed lists of admissions deaths and operations is attached herewith.

(s) K. C. MATHEW,
A. M. O. Praslin.

Return of patients treated at the dispensaries 1931.

Month.	Bay St Anne.		Grand Anse.		La Digue.		Total.
	M	F	M	F	M	F	Males and Females
January ...	2	3	4	3	6	7	25
February ...	3	2	3	3	4	5	20
March ...	2	2	1	3	2	3	13
April ...	4	5	6	7	5	3	30
May ...	2	2	1	3	4	5	17
June ...	5	2	6	3	4	4	24
July ...	6	3	5	4	2	6	26
August ...	3	2	5	3	3	3	19
September ...	4	3	6	3	2	4	22
October ...	3	3	6	7	4	3	26
November ...	2	2	3	4	1	5	17
December ..	2	3	5	4	3	2	19
Total ...	38	32	51	47	40	50	258

Statistics Cottage Hospital Praslin 1931

No. admitted for the year.	No. cured.	No. relieved.	No. transferred to Seychelles Hospital.	No. of deaths.
85	80	1	3	1

Nature and Number of cases treated.

1.	Non specific pyogenic infections.			
	(a) Abscesses various	...	...	12
	(b) Burns	...	...	3
	(c) Carbuncle	...	...	1
	(d) Whitton	...	...	1
2.	Injuries.			
	(a) Soft parts various	...	...	12
	(b) Fractures different	...	...	2
3.	Diseases of Lungs and Pleura.			
	Bronchitis	...	...	1
	Asthma	...	...	2
4.	Diseases of Kidney and Urinary apparatus.			
	Retention Urine	...	...	1
5.	Diseases of Ear, Nose and throat.			
	Foreign body ear	...	...	1
	Otitis media	...	...	2
6.	Tropical diseases.			
	Amoebic Dysentery	...	...	7
	Hepatitis and Hepatic abcess	...	...	2
7.	Diseases of the Eye.			
	Keratitis	...	...	1
	Conjunctivitis	...	...	3
	Iritis	...	...	2
8.	Obstetrical and Gynæcological.			
	Purperium	...	...	25
	Eclampsia	...	...	1
	Abortion.	...	...	2
9.	Hernia strangulated	...	...	1
10.	Herpes Zonatis	...	...	3
		Total	...	85

List of cases that required surgical aid at Cottage Hospital Praslin 1931.

Nature of diseases	No. of cases	Nature of operations	Anæsthetic used.
Abcesses ...	12	Incisions	Chloroform
Fracture leg ...	2	Set up	,,
Hepatic abcess ...	1	Aspiration	
Injuries ...	8	Stitched up	,,
In complete abortion ...	2	Completed	
Retention urine ...	1 Entrapubic parreture.		

Appendix G.

SCHOOL INSPECTION FOR THE YEAR 1931.

School.	Date of Inspection.	Present Boys	Present Girls	Total on Roll.	Health	Ventilation	Light.	Area	Cleanliness.	Latrines.	Remarks.
Victoria Roman Catholic ..	14.12.31	...	15	22	Good	Sufficient	Good	Sufficient	Satisfactory	Clean	
„ „ „ ..	„	189	...	249	do	do	do	do	do	do	
St Paul's Church of England	15.12.31	15	52	80	do	do	do	do	good	Insufficient	Another latrine is necessary.
Victoria Church of England ..	„	82	40	150	do	do	do	do	do	Clean	
Port Glaud ...	3.11.31	5	13	37	Fair	Fair	Bad	do	Fair	Good	
Glacis ...	4.11.31	37	32	71	Good	do	Good	do	do	Fair	Latrines have to be kept [cleaner
Bel Ombre Roman Catholic ..	4.11.31	35	50	100	do	Good	do	do	do	do	
Bel Ombre Church of England	14.12.31	8	6	14	Fair	do	do	do	Good	Good	
Anse Etoile ...	14.12.31	20	16	50	Good	do	do	do	do	do	
Mont Fleuri ..	14.12.31	49	46	122	Fair	do	do	do	do	Fair	
Cascade ...	4.12.31	48	28	85	do	do	do	do	do	do	
Anse Royale Church of E. ...	13.11.31	12	5	25	Good	Fair	Not good	Enough	Clean	2 in good condition	Satisfactory.
Anse Boileau Roman Catholic	16.11.31	65	66	154	Good. A few severe cases of Anæmia	Good	Good	Just enough for those present	do	4 are not deep enough	All latrines should be re-dug.
Baie Lazare Roman Catholic...	27.11.31	28	42	96	Fair 30 o/o mild anæmia	Fair	Fair	Insufficient for all on the roll	do	4 clean	Two latrines will have to be filled in and replaced.
Takamaka Roman Catholic ...	27.11.31	33	43	95	Good 15 o/o mild	Good	Good	Enough	Very clean	4 all new	Very satisfactory.
Anse Royale Roman Catholic	11.12.31	43	66	173	Great [anæmia improvement on 30 only mild anæmias met	do	Fair	Enough for those present	Clean	6 all nearly full and in dirty condition on the boy's side.	Boys in temporary building due to collapse of roof following rains. Boys latrines filthy.
Anse aux Pins Roman Catholic	14.12.31	36	64	147	Only fair 50 o/o of those present, anæmia.	do	Good	Insufficient for full attendance	Clean	4 very clean 2 require renewal.	Girls overcrowded. Anæmias mild, but greater number affected than 1930.
Anse Boudin Roman Catholic	19.12.31	16	9	33	Fair	Fair	Fair	Sufficient	Fair	Fair	
La Digue Girls ...	10.12.32	...	72	105	Good	Good	Good	do	Good	Good	
La Digue Boys ...	10.12.31	60	...	72	do	do	do	do	do	do	
Grand Anse Roman Catholic...	11.12.31	17	18	40	do	do	do	do	do	do	
„ „ Church of E. ...	11.12.31	31	28	69	do	do	do	do	do	do	
Consolation Church of E. ..	10.12.31	14	10	41	Fair	Fair	Fair	do	Fair	Fair	
Baie St Anne Roman Catholic	26.11.31	23	29	63	do	do	do	do	do	do	

APPENDIX H. No. 1.

Report of Mr F. Westergreen Chief Sanitary Inspector on a visit of inspection to Aldabra Island from 15th October 1931 to 7th February 1932.

Aldabra is an atoll, a stretch of honeycombed conglomerates "champignons" of an average of 1½ miles across encircles a vast lagoon of about 40 sq. miles containing inumerable islets of different aspect. There are four breaks or inlets in the ring where the sea enters the lagoon. The convex circumference of the ring is very rugged and has 14 beaches of white sand, the most important being at Picard the settlement, three of them are planted with coconuts and it is on these beaches of sand that the turtles land to lay their eggs, exterior to this is a line of breakers and a few hundred feet beyond them the unfathomable ocean, the top of the land rises but slightly above the sea level and is luxuriant in vegetation. On the concave circumference of the ring there are big swamps with extensive forests of mangrove.

Population.

The population was 35 men including the manager Mr B. Mathiot, 3 women and 2 children. 2 women are employed as labourer and washer woman respectively.

Housing :—As I have already said in my report of the 7th November 1931, the huts were in bad condition and dirty. The labourers were not provided with latrines and defeacated indiscriminately on the beach or in the bush along the settlement. I called the manager's attention to this bad state of things and he took the necessary steps, when I left Aldabra seven new huts had been built and the camp was provided with latrines.

Hospital :—This was in a dirty condition and there was not a decent mattress or pilllow The building is of wood covered with corrugated iron, not ceiled and has 2 wards one for males and one for females.

From the records I ascertained that from November 1930 to August 1931, 25 patients were admitted to Hospital with fever, the four last patients admitted were new comers from Assumption, they arrived in July and in August, they all had the fever, some improvments have since been made to the Hospital, it was cleansed and provided with 3 mattresses, 5 pillows, 11 zephir towels, 1 enamelled basin, 1 zinc bath, one chamber pot, 1 lantern, 13 bed sheets (zephir) 5 blankets, ten wooden "cadres" and 3 mosquitoe nets.

Death :—One labourer Willy Jean died from fever in February of last year.

Medecine :—The list of medecine signed by the manager is herewith attached there was 72 ozs of quinine in store when I left the island on the 26th January 1932.

Water supply :—This is derived from rain water collected from the roof of buildings in a big masonry reservoir measuring 41' x 25' x 65' and in 3 tanks of about 1000 gallons each and also from a spring of fresh water at Takamaka about 20 miles from the settlement. Rain water more that any other kind of water approaches nearly to absolute purity, when collected in a clean vessel, and the first washing allowed to run to waste but unfortunately this was not the case at Aldabra, the masonry reservoir was dirty and contained dead rats. It was therefore absolutely unfit for Human consumption, and I ordered that the water be removed and also the reservoir be thoroughly cleansed and this was done. From the 12th to 28th November water for drinking and cooking purposes was procured from the spring at Takamaka and also from water tanks at Anse Mais and Anse Malabar, the water from Anse Malabar was examined and filtered by me on the spot before being conveyed to Picard (the settlement) because Dr Dauban had stated that he found anophelene there, I examined the residue but found no larvæ nor eggs of anophelene. The roof of the masonry reservoir which was in a rotten condition had been replaced by a superstructure covered and bordered with corrugated iron sheets with four opening screened with wire Gauze to ærate the water. When I left the island this work was nearly completed, there remained some holes in the corrugated iron sheets to be puttied unless this is satisfactorily done the reservoir will not be rendered mosquitoe proof. Dr Mathew suggested that the surface of the reservoir be absolutely screened, this was not done. I found no larvæ of any kind of mosquitoe in the reservoir.

Water Tanks.—The three water tanks near the manager's house and the store have also not been rendered mosqnitoe proof. Mr Lemarchand at the time of his visit at Aldabra promised to have them capped with concrete as soon as possible.

New Réservoir.—Dr Mathew suggested in his report on Aldabra that a new reservoir be built, this work had been taken in hand and I hope it will be completed before the end of the year.

Prison.—The prison measures 18'9"x13'6" x 10'7" is of masonary covered with corrugated iron, not ceiled and has three cells. During 1931 one labourer I. Renaud was sentenced by Mr Mein the ex-manager of Aldabra to seven days imprisonment for disobedience of orders According to section 63 (1) of Ord. No. 5 of 1909 the period of imprisonment should not exceed 6 days. I enclose herewith an enquiry made by the police in this case.

Fines.—The fine book prior to July 1931 could not be produced, the manager informed me that the book had been sent to the Crown Prosecutor in Mahé, the list of fine amounting to Rs 5 signed by the manager is herewith attached.

Books.—The following books were examined and found correct, Pay book and ration book.

Ration.—The list of ration signed by the manager is herewith attached. There was Ks 2,146 of rice in stock when I left the island on the 26th January 1932, the average weekly ration was 134ks. During my stay on the island each labourer received 5 lbs turtle every other day, also fresh fish was supplied when available, vegetables were not procurable on account of the dry season. When the Zipporah left the island for Mahé on the 6th November 1931. There was in stock only for ten weeks supply of rice. According to law section 38 (1) of ordinance No. 2 of 1909 there should be on the island three months supply at the departure of the vessel to Mahé I understand that there was a shortage of rice at Assumption when the Charles-Edouard called there.

Saigon Rice.—As it the case on the other outlying islands Saigon rice is sold to the labourers at Aldabra, I submit this for consideration.

Maize.—This is growing well in the rainy season and could be extensively cultivated all over the island.

Coconuts.—Coconut is planted on the spits of land at Picard, Anse Mais and Ile Michel the monthly average of nuts collected is 250 about 1½ tons of coprah was shipped to Mahé this year. The coconut plantation at Picard is much more promising than on any other island of the whole Aldabra group.

Mangrove.—The beauty and wealth of Aldabra lie in the extensive forests of mangrove which encircle the lagoon.

Turtles.—In 1931. 780 turtles were captured and 733 harpooned, of these 135 were sent to Mahé and the rest 1,376 were killed on the island and the following were manufactured.

			Ks grms.
Necks	...	...	727,500
Calipee	...	...	2,031,000
Flips	...	...	697 500
Flippers	...	...	1,164,000
Scraps	...	...	977,000
Dried turtle	...	...	3,797,000

I think that it would be well to mention that it is only the meat of the turtle which is manufactured, the entrails which form about ⅓ of the weight of the turtle are thrown away and wasted. During the year 1,376 turtles have been killed on the island, if each turtle produce an average of 20 lbs of dried turtle, lbs 27,520 instead of 7,594 should have been manufactured, it is a fact that on these islands turtle is supplied to the labourers for ration, taking all these into consideration, I think that there is great waste.

Fregates, Florentins and Crows.—These birds are plentiful at Aldabra and their favourite food is small turtles which they destroy by thousands annually, I think that it would be worth the expense if a campaign be made against these birds, or if small turtles were preserved from these rapacious birds by being ponded and fed till they attain about three inches in diametre and then freed in the lagoon, I understand there are conflicting theories about the adoption of this method which is therefore to be discussed by competent authority. There are many lakes of salt water on these islands which could be utilised for this purpose, it was in one of these lakes that Mr Spurs kept and fed small turtles. I think that it is time that some measure be adopted to protect them.

Trepangs.—These are procurable in the lagoon especially near "Ile" Michel.

Malaria Campaign.—There are obviously four points at which one may attack the disease and thus control it. 1st. One may attack the mosquitoes. 2nd. The parasites. 3rd. Arrange the life of man so that he be not bitten by mosquitoes, and 4th, break the circuit between the person with malaria germs in his blood, the infected and infective mosquitoe, and the non malaria individual.

The prophylactic measures recommended by Dr Mathew were as follows :—

1. The removal of all malaria carriers from Aldabra.

This was very unsatisfactorily carried out, the labourers were removed from the island eleven days after my arrival, and Messrs. Mein, Hoareau and their families were left on the island and were removed a few days before I left.

2. That all collection of water from the largest to the smallest be protected by efficient screenings.

With the exception of the new reservoir which has been covered up with a corrugated iron structure, the three other water tanks near the main House and the store have not yet been screened. The opened barrels used by the labourers to store their water which were found by Dr Mathew to contain so many mosquitoe larvæ, have not been removed and replaced by bunged barrels with a stoppered hole at the bottom to draw the water.

3. That all those remaining on the island should receive prophylactic doses of quinine daily.

Three days before my arrival at Aldabra 10 grains of quinine were administered to the men and 5 grains to the women and children daily this was continued up to 3rd December 1931. From the 1st to the 26th January (when I left the island) the adults received 5 grains and the children 2½ grains. At the beginning of January 1932 some labourers were sent in the different parts of the island to capture turtles, quinine was supplied to these men, but it is most probable that they did not take it.

4. That all pave holes or pits be filled in with sand etc. or treated with petroleum oil.

This work was in hand before my arrival on the island and was I understand supervised by Dr Dauban 177 small holes had been filled with cement and 802 with sand. On my arrival a gang of labourers were placed under my supervision and during my stay on the island 2430 holes capable of holding water long enough for the mosquitoe to breed, were filled in, this includes

four big disused reservoirs and six very big pave holes of about 1500 gallons each, to fillwhich required 3 days work to six men, there remained approximately 859 holes to be filled in within 1000 yds from the settlement, the maximum flying distance of the Anopheline We had rain four times during the campaign, this of course filled the pave holes with water, some had to be treated with petroleum and in the majority of cases the water was removed, this proved more economic and satisfactory and was continued after every rain.

On my arrival at Aldabra Dr Dauban told me that a few days before my arrival he found the anophelines at Picard the settlement and at Anse Malabar 20 miles from the settlement both in the larval and adult stages. Accordingly I thought it my duty to ascertain if Anophelines still existed there, and to take the necessary steps. I carefully surveyed the locality and having not found any water in the honey comb conglomerates on Picard island due to prolonged draught, I therefore attacked the mosquitoe in its adult stage. Anophelines are very secretive insects indoors, hanging about clothes and cobwebs, &c., dark corners are their favourite resting places and out of doors during the day they shelter in dense undergrowth, therefore the thick bush, &c., along the settlement and the old thatched huts full of gunny bags and cobwebs etc., were ideal places for the Anopheline to shelter. I repeatedly searched these places during the day, also after sunset and before sun rise and particularly when the labourers were sleeping, but never found a single Anopheline. I then caused the bush along the settlement to be cleared up on an extent of 2350' long and 400' feet broad, the result was very gratifying and hundreds of potent breeding sites were revealed. After the removal of the labourers from the island, the very old huts were pulled down and burned and new ones built. The crabs holes were examined with same results, these of course could not be filled in as I had no poison nor cyanogas to kill the crabs. Trunk cavities capable of holding water were filled in with sand, the pigsties and goat pens were kept under observation in case they had been deflected there. Having so far seached in vain for the Adult Anopheline I resolve to extemporise several breeding places in different part of the island especially along the settlement, these breeding places were kept under very careful observation during the whole campaign and were destroyed the day before I left the island.

Culex and Stegomaya beeded abundantly in them and were also destroyed by thousands. Having now ascertained from one of the labourers that Dr Dauban had also extemporized a breeding place at Anse Malabar, I proceeded there and found it within a 100' feet from the house, it consisted of a half barrel with about six inches of water full of mossy growth, I very carefully examined it and found only culex and stegomaya. It stands to reason that if Dr Dauban had found Anophelines there I should have also found them because all the elements were present. I inspected this place on several occasions with the same result and I finally destroyed the beeding place ten days before I left the island. Also different parts of Aldabra were periodically examined. A great quantity of pave holes full of water and overgrown with weeds or moss were found abundantly supplied with culex and Stegomya only. It may be that the anopheline mosquitoe being much more fragile insect than the culex and stegomaya could not survive the dry season, or that they have tided over the dry season by æstivation of adults. To my mind to complete this experiment the island should be visited again and tests made when the rainy season there is well advanced.

Fever.—During the campaign the labourers were in the best of health and not a single adult or child suffered from malaria. I am pleased to say that they were very regular in taking their quinine and their occasional doses of calomel and salt. I think that it would be well to mention that exotic birds and also big logs of wood are drifted on to the island every year after strong winds from the west or southwest it is therefore quite probable that anophelines are periodically introduced by those means.

Birth.—On the 23rd December 1931, Mrs James Mein gave birth to a girl, having no midwife on the island she was attend by one Mrs Augustin Jacques.

Tortoises.—These are abundantly found all over Aldabra more especially on the main island in the vicinity of St Caze. This I think is a matter which deserves the consideration of competent authority.

Tobacco.—There is a great complaint on the outlying islands, that no sufficient tobacco is available as a rule they prefer the local tobacco because it is cheaper and stronger.

Leprosy.—At Providence I examined one Pierre Barra a labourer about 20 years of age, he was in my opinion affected with leprosy. I asked the manager Mr. J. Beaufond to put him in a separate house and not to allow him to mix up with the other labourers, pending his removal to Mahé. Hence the necessity of having all the labourers, their wives and children examined before they are sent on the islands.

F. WESTERGREEN.

APPENDIX H. No. 2.

Report of Mr F. Westergren Chief Sanitary Inspector on a visit of inspection to Assumption island from 15th October 1931 to 7th February 1932.

Population.—The population was 75 men, 20 women and 6 children including the manager Mr P. Morel and his wife. Only one woman is employed as washerwoman the rest have no chance of employment and are absolutely dependant upon their husbands for their livelihood.

Camp.—Some of the huts were in bad condition and the camp was not provided with latrines. The labourers attended to the call of nature on the beach or in the bush. I called the manager's attention to this and he promised that he would at once take the necessary step. When Dr Mathew visited the island in 1931 he ordered that the camp be provided with latrines and up to the 23rd October 1932 the time of my visit there nothing had been done.

On my return to Mahé in February 1932 the Colibris called there but as she stayed about an hour I did not have an opportunity of landing and I am therefore not in a position to report if my orders have been carried out.

Hospital.—The Hospital measures 53' x 16 x 8'9" is in masonry covered with corrugated iron, not ceiled, has two wards and a dispensary and is amply provided with beds and mattresses. The list of medecines signed by the manager is herewith submitted for medical observation. According to the Hospital book only one patient was admitted with Hernia and he recovered a few days after.

Fever.—Two cases of light fever occurred on the island in June 1931 according to the manager's report. It was not malaria and they recovered after a few doses of quinine and they were therefore not admitted to the hospital. In my opinion a slight attack of fever in a malarious region is just as dangerous as a severe one and a labourer refusing to go to the Hospital to take quinine should be severely dealt with. I also think that it would be more prudent if the manager in future should look upon every case of fever on the island with suspicion and endeavour to understand the necessities for the precautions advised or imposed upon him as in the case with malaria fevers viz: that the patient must be segregated, under properly fitted mosquito nets and quinine administered daily. I therefore beg to submit that Mr Lemarchand be asked to instruct his manager accordingly.

Death.—There were four deaths during 1931. Mr F. Bristol the able and regretted manager of Assumption on the 23rd June, William Thomas Ash a sailor of S. S. Casablanca on the 14th April and two labourers, Jean Mussard and Felix Jupiter drowned on the 10th March. According to the manager's report respecting the cause of death of these labourers five men including Mussard and Felix went fishing on the 10th March 1931 with his permission, when they left the island it was calm but sometime after the weather turned muggy and finally bad. The fishermen eventually made for the land and in order to shorten the course crossed the reefs and the pirogue capsized. Upon the report of this tragic accident the manager at once put off to render assistance and when he came upon the fatal spot he found only 3 men, two had disappeared, he then searched the reefs and their bodies were found two hours after the accident and although artificial respiration was tried it was unsuccessful. He then examined their bodies and found no traces of violence.

Water.—This is derived only from rain water collected from the roofs of guano sheds in two masonry reservoirs measuring 45640 and 4·444 gallons respectively. The water in one of the reservoirs had been used up and in the other there remained 33980 gallons approximately. Apart from these reservoirs every house or hut on the island is provided with tanks or barrels to collect rain water. Here again pigeons are kept in the manager's yard, I called his attention to this and he assured me that they never go on the guano sheds (the collecting area) and that the water collected from the roof of his house is for washing purposes only.

Mosquitos.—In the majority of barrels supplied to the labourer to collect rain water from the roofs of their huts, I found thousands of culex and stegomaya larvæ. The pave holes were also examined only six had very little water but no larvæ. The dearth of water in the pave holes was due to the prolonged absence of rain, according to the record kept of the island it had not rained from May to October 1931 (the time of my visit there). Mosquitos are a pest on these islands and cause great discomfort and the labourers in order to have some rest at night generally make a smudge in their hut or sleep in gunny bags.

I think that for the sake of comfort mosquitos should not be allowed to breed so freely contiguous to habitations and that the present system of storing water in open barrels be abolished and replaced by bunged barrels with a stoppered hole at the bottom to draw the water and that the labourer neglecting to have his barrels closed up when not required should be fined.

Rations :—Apart from the ordinary weekly ration of rice each labourer receives about 4 lbs of turtles three times a week, when turtle is not available fresh fish, pumpkin, dried turtle or salt fish is supplied.

Guano :—There is actually about 10000 tons of guano in store. There were only three shipments during 1931. Tons 1200 were shipped for London in April per S. S. CasaBlanca and 450 tons for Colombo in May per S. V. Elizaletha. I understand that another 450 tons were shipped for Colombo by the S. V. Elisabetha towards the end of 1931.

Turtles :—During 1931, 666 turtles were captured and the following was manufactured :—

Calipee ...	... 1016	lbs.
Flippers ...	... 938	"
Necks and tails	... 687	"
Stripes ...	... 366	"
Scraps ...	... 475	"
Dried Turtle	... 2317	"

Maize :—This is growing well during the rainy season, lbs 12615 were collected during 1931.

Coconuts :—Coconut is planted on the spit of sand along the western coast of the island about 150 nuts are collected monthly and lbs 700 of coprah was shipped for Mahé last year.

Prison :—The prison measures 16' 5" x 15' 5" x 8' 6" is of masonry covered with corrugated iron not ceiled and has 2 cells. During 1931 one labourer (Jean Mussard) was imprisoned for six days for insult and 24 labourers were fined, the list of fines amounting to Rs 56.75 signed by the manager is herewith attached. I have been through the cases and confirmed same.

Bacca :—Last year two labourers Joseph Bile and Stephen Macassar were found in possession of strong fermented bacca, as this had been an abuse on the island, their cases were referred to Mahé and they were both fined Rs 25 and costs. I understand from the manager that this was a very good lesson for the labourers, that they have practically stopped making bacca and that there was less disturbance in the camp.

Books.—The following books were examined and found correct :—

Pay book, Ration book and Prison book.

Decoqué.—A labourer came to me complaining of the disease called by the natives Decoqué. I examined him and noticed that he had a scaly eruption at the corners of the mouth and a erythematous rash on the genitalia. I advised him to eat vegetables and fruits.

Complaints.—No complaints from the manager nor the labourers.

(Sd) F. WESTERGREEN.

APPENDIX H. No. 3.

Report of Mr. F. Westergreen Chief Sanitary Inspector on a visit of inspection to Cosmoledo island from 15th October 1931 to 7th February 1932.

I have the honour to report that I left Mahé on the 15th of October 1931 for the Aldabra group of islands on the S. V. Zipporah and returned on the 6th of February 1932 by the M. V. Colibris.

Cosmoledo.—This a group of 15 islands, the two principal are Menai and Wizzard. Menai is the settlement and is partly planted with coconut and Wizzard is noted for fishery and bird's eggs.

Population.—The population was five men including the manager Mr S. B. Potter two women and two children.

Housing.—The camp is about 75 feet from the manager's house, was in fairly good condition, clean but not provided with latrine. I called the manager's attention to this and he told me that the labourers used his latrine.

Hospital.—The Hospital measures 19' 6" x 13' 6" x 9' 5" is of wood covered with corrugated iron and not ceiled, has two wards provided each with one bed, one mattress and one pillow. During 1931 three patients were admitted to Hospital with fever, Pneumonia and Gonorrhœa respectively. According to Section 57 (3) of Ordinance No. 5 of 1900, hospital roofed with corrugated iron should have a wooden ceiling.

Medicines.—The list of medicines signed by the manager is herewith attached. I consider subject to medical opinion that this island was not sufficiently provided with medicines.

Water-supply.—This is derived from rain collected from the roof of the manager's house in one masonry reservoir measuring 23' 10" x 23' 4" x 7' 9". There was 5' 8" of water in the reservoir. There are also several wells of potable water at Wizzard, this was the only available supply of drinking water when I first visited these islands in 1914. Here also as in the case of many islands, pigeons are kept in the yard and naturally they dirty the roof of the house used as collecting area and as the first washing is never allowed to run to waste the water in the reservoir is polluted by faeces of pigeons and dirts from the roof. In view of the fact that most of the outlying islands derive their water supply from rain collected from roofs of buildings. I beg to submit this for medical consideration.

Prison :—The prison measures 9' 4" x 7' 4" " x7' is of masonry covered with a flat corrugated iron roof, not ceiled and has two cells. During the year two labourers were imprisoned for six days each for insubordination and disobedience of orders. I went through every detail of the cases and confirmed same.

Fines :—No labourer was fined during the year.

Books :—The following books were examined and found correct : Pay book, Ration book, Register of fines and Prison book.

Coconuts :—The coconut plantation at Menai is far from being very promising, the trees are mostly sunburnt and the nuts very small. The yearly average of nuts collected is 2212. In my opinion Wizzard is much more suitable for coconut and has not been planted.

Maize :—This is growing well and could be extensively cultivated at Menai and Wizzard. Ks 1741 was produced last year.

Carets :—Only six carets were captured during the year.

Turtles :—A fishing expedition headed by Mr G. Sauzier landed at Cosmoledo on the 8th January 1931, they stayed on the island up to the 31st August 1931, during that period they captured 299 turtles, 114 were sent to Mahé and the rest (165) were killed on the island and the following was manufactured.

Calipee	...	...	Ks	956
Quitouze (dried turtle)	...	...	,,	4954
Flippers	...	...	,,	593
Stripes	...	...	,,	147
Scraps	...	...	,,	123
Eggs	...	...	Casks	6

Trepangs :—This is abundant in the lagoon in the vicinity of Wizzard. kos. 569 were prepared during 1931.

Birds :—In May 1931 Mr N. Frichot with 30 men landed at Menai and proceeded to Wizzard during the laying season, they left the island on the 23rd July of the same year and during that period they manufactured 47 casks of yolk of bird's eggs and 2 cases of white.

Ration :—The list of rations signed by the manager is herewith attached, there was for over 3 months supply when I left the island.

Mosquitoes :—The holes of the honey combed rocks at the back of the settlement were examined, only two contained some water. Culex and Stegomya larvæ were abundant.

Complaints :—No complaint was made by the manager nor the labourers.

(s) F. WESTERGREEN.

APPENDIX I.

Seychelles 8th April, 1932.

To the Chief Medical Officer,

I have the honour to forward to you as requested a detailed report of the late outbreak of Bacillary Dysentery which occurred during your absence on leave.

1. *The nature of the Outbreak.*

The first cases of the disease were confined to 1 household at Pointe-au-Sel and the other cases to the region of Anse-aux-Pins, to the North side of South Mahé district.

On September 21st, I received from the Medical Officer of South Mahé notification that a form of dysentery which "clinically ressembled bacillary dysentery and did not respond to emetine treatment" had appeared in his district. As soon as I received this report, the Chief Sanitary Inspector was ordered to proceed immediately to the infected locality to take active steps at disinfection and report further.

On the following day patients coming from that region and complaining of diarrhœa or dysentery were sent to the septic wards of the Seychelles Hospital for investigation and treatment. These patients were kept under close clinical observations. They all had fever ranging from 100° to 103°". severe tenesmus and were passing scanty but very numerous stools of pure blood, mixed with viscid mucus. The microscopic picture showed an abundance of cellular exudate in which there was a marked preponderance of polymorphonuclear leucocytes, these having distinctive ringlike nuclei, and many macrophage cells. Red blood copuscles were not aggregated in mass but appeared singly. Entameba Hystolitica were absent, except in 4 cases in which the stools, in addition to the microscopical appearances described above, contained active amœbæ as well.

Cultural methods of diagnosis being then unavailable for the isolation of the specific organism or organisms, and being fully aware of the many pitfalls of such a method in the bacillary dysenteries except in a specially equipped and organised laboratory, the government medical staff relied on the clinical features of the 15 cases then under observation, and on the microscopical examination of the stools, early in the disease, to diagnose bacillary dysentery.

The diagnosis made by the medical officer of South Mahé was therefore confirmed by cytological methods at the Hospital on September 25th.

2. *The Control of the Outbreak.*

Meanwhile the Sanitary Inspector had reported that there were about 20 infected huts or houses in the district and that active steps had already been taken at disfection. Contaminated bedding, linen, and latrines had been burnt. On September 26th I visited the locality where the disease had taken a foothold.

Most of the infected huts were situated along a hilly pathway called the "Capucins" and on either side of a stream which had evidently been contaminated. No washing limits seemed to have been observed there and on enquiry I found that at the top of the hill soiled linen from a case of dysentery had been washed in that stream. In fact, in that locality, water for drinking purposes was drawn off the stream, while a few feet below, in the same stream, dirty linen was washed. Every house from top to bottom of the stream did exactly the same thing, and in most of these houses cases of Bacillary dysentery occurred.

A wake had also taken place on September 17th at the house of a Mrs Espérance Legai. On that date there were no suspicions yet that bacillary dysentery had broken out in Mahé. It was found later that most of the people who attended the wake developed bacillary dysentery within a week. This case is referred to in his report by the medical officer of South Mahé.

The niece of Mrs Espérance Legai attended the wake and funeral, and afterwards returned to her house, at Mont Fleury, quite close to the Seychelles Hospital. Although from the very beginning of the outbreak, contacts were being followed up and watched, this one was not reported, and on September 27th, she consulted one of the Government Medical Officers in town and stated that she had been ill two days in her house in Mont Fleury. She was found to be suffering from Bacillary dysentery and was immediately sent to Hospital. Active steps were at once taken to disinfect her premises and burn her bedding, latrines and other soiled article ; further that locality was visited twice daily for the detection of any suspicious cases. Fortunately however no further cases occurred in the neighbourhood or in any other place in town.

In order to exercise efficient control over the outbreak special regulations had to be passed making compulsory the notification of dysentery, the segregation of patients, and the supervision of contacts, and the disinfection of premises as deemed necessary by the Sanitary Authorities.

I therefore on my return from the scene of the epidemic on September 26th, issued notices to members of the Health Committee for a meeting to be held on Monday the 28th at 9 a.m. At this meeting, at which all the Government Medical Officers were present, the regulations which appear in Appendix A. of this report were unanimously passed and afterwards approved by the Governor in Executive Council, wide publications was given to these regulations in both English and French. Recommendations from Medical Department were also issued to the public by special notices and through the press to the Sanitary precautions that should be taken during the epidemic.

On Tuesday 29th, patients who had remained in the infected locality were brought by sea to hospital, where special isolation wards and a propriate arrangements had been made to receive them. Meanwhile contacts were closely supervised by the Sanitary Inspectors and members of the police. These officers visited the infected districts twice daily and as soon as a suspected case of dysentery or diarrhœa was detected it was at once sent to the hospital accompanied by a Sanitary Inspector. By that time patients had also learnt to report to the Sanitary Inspector as soon as they experienced any sort of abdominal trouble. Consequently many cases came along who did not suffer from bacillary dysentery at all, but as a precautionary measure, they were kept in Hospital in a special observation ward which had been especially fitted up for those doubtful cases. Infected huts and houses were daily disinfected, bedding soiled linen and latrines were burnt. Contacts as already stated were kept under close observation. No contacts could leave the districts and no visitors from town or elsewhere were allowed to visit the infected locality.

With regard to the segregation of patients the members of the medical staff unanimously agreed that, under the circumstances, considering that there were no special Hospital for infectious disease in the Colony, the Seychelles Hospital was the most suitable place and the only place where proper supervision and efficient treatment could be carried out.

Looking back at the medical report of 1917 and 1918 I found that there had been two similar outbreaks of bacillary dysentery in the Colony.

In 1917 the disease was introduced by the Seychelles Labour Force from East Africa. About 360 men were repatriated on account of ill health and arrived here on board the hospital ship Guildford Castle on May 17th. They were suffering from many different diseases but principally bacillary dysentery, pneumonia and malaria. "In the 1917 Medical Report, the Chief Medical Officer wrote: "At the end of 15 days quarantine at Long Island, there were still 15 men who were acutely ill (with bacillary dysentery) and they were all transferred to Victoria Hospital at Mahe where precautions to prevent the spread of infection could be taken", and, again, re the outbreak at South Mahé later, the report continues: "It was entirely due to the energetic measures taken by the medical officer of the district (Dr Bradley) in following up contacts, dispatching them to hospital when found infected and disinfecting premises that the diseases was stamped out. That year the number of bacillary dysentery cases treated at Victoria Hospital was 39, and yet no one was infected at the Hospital, in the neighbourhood or in town.

In the recent outbreak of bacillary dysentery, it was agreed therefore that special provisions would be made to segregate patients at the Seychelles Hospital. This is a sufficiently spacious building to have some of its wards converted into special isolation wards.

As a matter of fact only two wards on the ground floor of the hospital were converted into isolation wards : one was used as an observation ward for suspicious cases, the other was utilised as an isolation ward for female patients.

These two wards were excluded from the main building of the hospital and no one except the staff of nurses and attendants specially appointed to look after dysentery cases were allowed within its boundaries.

The majority of patients however were isolated in the septic wards which are situated behind the main building of the Seychelles Hospital, in an adjoining shed temporarily converted into an isolation ward, and in the new Tubercular ward which was then under construction and to which a temporary roof was immediately put up.

All the necessary prophylactic measures to prevent the spread of the disease were taken at the Hospital and no members of the staff nor those specially appointed to the dysentery wards became infected.

In spite of the fact that on two previous occasions the Victoria Hospital (a much smaller building than the Seychelles Hospital) was used for segregation of cases of bacillary dysentery without the disease spreading to the neighbourhood or elsewhere in town, in spite of all the sanitary precautions that had been enforced this time, exception was taken by certain members of the public as to the Hospital being used as a place of segregation and this was first brought to my notice by a local private medical practitioner who on October 1st, notified me that a certain Mrs J. N. age 22, residing at Hermitage, Mont Fleury, about 300 yards to the right of the Hospital had developed bacillary dysentery. His letter ended thus : This case has not been to Anse-aux-Pins and so far as I know bacillary dysentery has not existed in Mont Fleury until you segregated such cases in Hospital. The conclusion is obvious".

It was not obvious to me however either from the tone of the letter or from the look of the woman that I was in presence of a case of bacillary dysentery that had just broken out in town.Mrs J. M. was therefore sent to the observation ward at the Hospital.

On October 5th another young lady was sent to me by the same private doctor with a diagnosis of bacillary dysentery. This case came from Rivière Anglaise and was even reported in the local paper in its issue of October 10th to show how rapidly the disease was spreading in town.

The two last cases were also admitted to the observation ward at the Hospital, and with, the first one, kept there for about a fortnight : none in the opinion of four medical men suffered from any form of dysentery after admission to the Hospital none had been to the infected locality or ever been outside the Colony : the presumption therefore of any of these three people being healthy carriers, as it has even been suggested, was totally erroneous.

Such cases of bacillary dysentery reported by a private medical practitioner from so many different points of Mahé did not fail to cause some commotion in the Colony and were certainly not calculated to maintain public confidence in the Medical Department. Later on, however, at a meeting of the Legislative Council, questions on these points were raised and the official replies given thereto will be found in Appendix B. of this report.

The last case of Bacillary dysentery was sent to the hospital on October 11th, and, for 6 days previously, no case had been admitted.

By October 5th, therefore, the disease had practically died down.

Clinical features of the disease.

Out of 89 cases segregated at the Hospital during the late outbreak, 67 suffered from bacillary dysentery, 6 from a mixed form, amœbic and bacillary, 16 were under observation but did not develop any type of dysentery.

Of these 75 patients suffering from the disease 7 died (9.6% approximately). Four of these deaths occurred in old people of 80, 65, 60, and 62 respectively, the latter suffering in addition from severe endocarditis. The other three deaths occurred in young people. The disease was generally of a mild type except in four cases, beside the seven patients who died, in which the signs and symptoms were somewhat severe.

Fever generally of a remittent type, was present in about 98 o/o of the cases ; it reached 104 F. in three of the cured cases.

The stools varied from 10 to 60 a day and consisted of pure blood mixed with viscid mucus. They were not offensive.

Tenesmus was present in all cases and usually very severe.

The abdomen was tender in most cases.

The treatment in the initial stage consisted of 2 hourly doses of Sodium Sulphate and later a Bismuth Salicylate mixture was used. Local treatment such as turpentine stupes to the abdomen, and starch-opium enemas were used in some patients to relieve the tenesmus. In the severe cases, Roger's hypeotonic saline solution was injected intravenously and marked benefit resulted.

On October 1st, the Medical Department ordered by cable from Bombay, a stock of polyvalent anti-dysentery serum.

On October 3rd I received a letter from a local private medical practitioner asking me if there were any specific serum available. I replied that polyvalent serum had been ordered. That same afternoon a second letter came from this same practitioner informing me that he had isolated the shiga bacillus from cases of dysentery treated by him before these cases were segregated at the Hospital, and that it was accordingly advisable that I should *"alter"* my order for polyvalent serum and obtain in its stead anti-shiga. The practitioner however did not bring fourth any conclusive scientific proofs in support of the statement contained in his letter. On October 4th I replied that the Medical Department was not prepared to *"alter"* its order for serum as its three medical officers were of opinion that a polyvalent serum was the best one to use in the circumstances. On the same day, however, I forwarded to His Excellency the Governor for his decision the correspondence exchanged between this private medical practitioner and myself, as I could not take the responsability of asking the Government to go to the expense of ordering a serum which none of the medical officers in charge of dysentery patients intended to use.

On October 5th a deputation composed entirely of the clients of the medical practitioner (they were about 18) with himself at the head of it as "technical adviser" went up to Governor's Office to interview His Excellency on questions relating to the serum ordered and to the epidemic in general. The Government Medical Staff was asked to be present. At the very beginning of the interview, His Excellency informed the members of the deputation that a stock of anti-shiga would be ordered as well. But these gentlemen were not satisfied, they launched a violent attack on the Medical Department generally and the three Government Medical Officers were held up to obloquy by these laymen and their "technical adviser," a British registered medical practitioner ; they inter alia accused the Ag. Chief Medical Officer of the grossest negligence of duty for not having isolated and identified the causative organism of the outbreak, or for not having sought the help of their technical adviser the latter openly stated at the meeting that two of the Government M. O. present had no experience at all of bacillary dysentery while he who had worked in India for five years had frequently dealt with epidemics of this disease.

The Government Medical Staff stated in reply :—

1. That for the control of an outbreak of bacillary dysentery and for the treatment of cases, the identification of the causative organism was more of scientific interest than of practical importance whether the responsible bacillis be shiga or flexner.

The sanitary measures to prevent the spread of the disease were the same.

2. That polyvalent serums contained at least 50o/o of anti-shiga and was therefore effective against both the Shiga type and the Flexner type, while anti-shiga serum was specific for the Shiga type of dysentery only.

3. That although Dr Hermitte claimed to have isolated pure Shiga bacillus, one should not overlook the fact that his investigations were carried out in five cases only, as he stated himself, and that in such a highly technical procedure experimental errors were not impossible.

4. That it is a well known fact that in Shiga infections the clinical manifestations of the disease are usually very severe and the death rate high, but that in the great majority of the cases under our care the clinical features of the disease were mild. By October 4th although no serum had been used, out of 71 patients suffering from the disease there were 50 convalescents and only four deaths had occurred, two of which were in men 80 and 65 years old.

At the request of a member of the deputation, a daily bulletin was issued by the medical Department to keep the public informed of the position, but the sanitary measures taken by the medical Department as from the very beginning of the outbreak or the treatment of patients were in no way modified or altered as a result of the deputation of October 5th.

On October 13th, the serum ordered from Bombay arrived but on that day all the patients were cured or convalecents except three who where still dangerously ill. Polyvalent anti-dysentery serum was used in these three patients and the three of them recovered.

By the end of October most patients had been discharged from the hospital.

Thorough disinfection of all the wards occupied by dysentery cases was afterwards carried out and it was only at the beginning of January 1932 that the two wards used during the epidemic were reopened for medical and surgical cases.

The origin of the Outbreak.

Bacillary dysentery is not an endemic disease in this Colony. It follows therefore that it must have been introduced from outside either by a sick person or by a healthy carrier.

In endeavouring to trace up the origin of the recent epidemic, the first step was to look up the names of all the ships that called at Mahé during the few weeks preceeding the outbreak, their ports of origin and the list of passengers who landed here.

This was done and it was noticed that in August, on the 8th and 11th respectively 2 ships called here, the S. S. Khandalla from East Africa landing 11 saloon and 11 deck passengers and the S. V. Wanetta from Juan de Nova, viâ Nossi-Bé (Madagascar) landing 67 passengers mainly labourers.

The Medical Officer of South Mahé in his report states that the first case, which later he considered as being clenically identical with true cases of bacillary dysentery, was that of a boy from Pointe au Sel whom he first saw on August 17th that is 9 and 6 days respectively after the arrival of these two last named ships It would not be unreasonable, therefore, to suspect that one of these ships had brought in the disease.

It has been freely stated by certain people that bacillary dysentery was introduced here by the S. V. Wanetta as she had on board, so it was alleged, several passengers suffering from this disease. It is necessary, therefore, that I should go into details with regard to this allegation.

When I arrived on board the S. V. Wanetta on the morning of August 11th the captain reported all well save two men who were sick in Juan de Nova with dysentery and whom he had brought back to Mahé.

The bill of health from the last Port, Nossi-Bé was clear.

I at once proceeded to examine the two sick men.

One, Jules Hoareau, the carpenter of the ship stated that :—

(a) He had been ill since 25th July.

(b) He was still passing some blood but had 3 or 4 motions a day with no colic and no straining.

(c) He never had any fever from the beginning of his illness.

(d) He was feeling much better since he had taken the medicine the doctor at Nossi-Bé had given him. The captain then showed me the medicine referred to, they were tabloids of Treparsol, an arsenical preparation often used in the treatment of amœbic or other protozoal forms of dysentery (never to my knowledge in bacillary dysentery).

On examination this man had no fever, good pulse, a dirty moist tongue, and no tenderness over his abdomen. He was walking about the deck and I came to the conclusion that he was a straightforward case of amœbic dysentery and that a few emetine injections would completely cure him.

The other Charles Marie was lying on deck and looked ill. He stated that :—

(a) He had been feeling unwell in Juan de Nova quite a month before he began passing blood at the beginning of July.

(b) He now complained mostly of severe diarrhoea.

(c) He felt severe pains in his chest.

(d) He had pains in his abdomen and in his legs. On examination I found that he had no fever but a small, weak and irregular pulse; he was short of breath and had some ascites but there was no tenderness over his abdomen except near the hepatic region. His heart was dilated but no murmurs were heard. His tongue was furred but moist, he had no knee jerks and felt severe pains in his calf muscles when these were squeezed.

I came to the conclusion that this man was suffering primarily from Beri-beri and Myocarditis. I knew that Beri-beri had previously occurred in Juan de Nova. I looked upon this man's diarrhœa or dysentery as a concurrent amœbic dysentery. I ordered this case to be sent to Hospital.

The main reason that made me eliminate any possibility of these two men suffering from bacillary dysentery, apart from the clinical signs and no symptoms being totally different from those of bacilary dysentery, was the fact that both had travelled and lived together with the other 58 labourers in the small hold of a sailing vessel under most unhygenic conditions for 14 days.

Any one knows the rapidity with which bacillary dysentery can spread in any crowded place under unhygenic conditions and as no one else on board, so the Captain informed me, had been sick since the ship left Juan de Nova, I came to the conclusion that these two cases could not be of a contagious nature. The subsequent history of these two patients proved this to be correct.

Fumigation of the whole ship including passengers' and crews' luggage was carried out as usual as she came from an anopheline infected country but I did not feel justified in refusing pratique to a ship with the two cases of amœbic dysentery on board, as quarantine which is intented to prevent the introduction of a disease in a colony cannot be imposed for a disease like amœbic dysentery which is endemic in Seychelles.

Moreover, ships with cases of amœbic dysentery on board had already been admitted to pratique.

On the afternoon of the day the S. V. Wanetta arrived, I was consulted by a labourer named François Bonne from Juan de Nova. He complained of abdominal pains and diarrhœa but did not mention to me that he had or had had any dysentery. He was admitted to Hospital.

The ship's carpenter whom I had seen on board was not considered ill enough to be sent to Hospital but he came in daily to receive his emetine injections. He was in perfect health at the end of his course of treatment and I then lost sight of him. Later I was informed that he had returned to Juan de Nova with the S. V. Wanetta when she sailed again on October 1st.

1. A microscopical examination of the stools of Charles Marie and François Bonne was carried out on the day of their admission by Dr Mathew A. M. O. and myself. Both specimens contained amœbæ cysts and ova of ankylostome and trichiuris; there was no evidence of macrophage cells or of that abundant cellular exudate of polymorphonuclear leucocytes so constantly seen later in the stools of patients with Bacillary dysentery.

2. Neither of these two patients had any temperature on admisson or throughout their stay in Hospital.

3. No blood, after 3 days of emetine treatment, could be detected in their stools.

4. François Bonne recovered but Charles Marie although his dysentery ceased, did not improve generally; in spite of all treatment his cardiac condition grew worse, he was often delirious looked toxemic and died on September 1st, twenty days after his admission to Hospital.

A postmortem examination was carried out which revealed a characteristic ulceration of the large intestine.

The small intestine was healthy, but the cœcum, ascending colon and to a less extent the transverse and descending colon showed numerous large ulcers more or less oval in shape, with raised and thickened margins. A black gangrenous slough was attached to the surface of some of these ulcers while in others a yellowish purulent exudate appeared over their base. Between the thickened and raised patches of ulceration, there were areas of quite healthy mucous membrane. The heart was dilated, the myocardium pale and soft. There is little doubt that death was due to exhaustion and toxoemia due to the ulcerative condition of the large intestine, there was nothing however, in the naked eye postmortem, appearance of the bowel or of the ulcerations present therein that were characteristic of bacillary dysentery.

1. The two sick men landed from the S. V. Wanetta remained throughout their illness in the general wards and no one at the Hospital in these wards or in others developed their disease.

2. They were examined in Mahé by two medical officers who are convinced that they were clear cases of amœbic dysentery.

3. They were examined, with the ship's carpenter, by the Government Medical Officer at Nossibé and this doctor has since written statement duly legalised (vide Annexure No. 3 of the Chief Medical Officer's report) to the effect that these three men were suffering from amœbic dysentery.

4. The autopsy on Charles Marie revealed a pathological condition of his intestines quite unlike that seen in bacillary dysentery.

We are convinced therefore that bacillary dysentery could not have been introduced here by any of these three sick men from Juan de Nova as they were not suffering from that disease but from pure amœbic dysentery. It did not however exclude the possibility of the Wanetta having introduced the disease here through some other labourer not reporting himself sick to the captain on board or when the ship arrived, or through some healthy carrier.

As early as September 29th the Medical Department began its investigations into the origin of the outbreak in Mahé.

Written statements were taken down, in the presence of at least two independent witnesses, from labourers who had returned from Juan de Nova on board the Wanetta in August

On or about October 10th the Medical Officer of South Mahé (Dr Gonsalves) took a statement at Anse Boileau from Francois Bonne (who was a patient in Hospital) and Joseph Firminot, while in town, the Assistant Medical Officer (Dr Mathew) took similar statements from Emile Marengo, and Théogen Estico, all labourers who were on board the Wanetta in August.

The majority of labourers had returned to the island and only these four men who were passengers on the Wanetta in August could be followed up.

The statement of Marengo, Estico and Bonne concurred in that there were only three men sick on the island or on board when the ship arrived here while Joseph Firminot declared that there were about ten people sick on board including himself. Consequently on October 12th I wrote to the manager of the Syndicat des Iles Malgaches, the society who owns the S. V. Wanetta, the letter which will be found and its reply in appendix C of the report.

As we were unaware here whether bacillary dysentery existed or not at Juan de Nova or at Madagascar, the telegram which will appear in annexure No. 5 of the Chief Medical Officer's report was on the same date (October 12th) sent by this Government to the British Consul at Tananarive.

It had been alleged that Joseph Firminot when he returned from Juan de Nova was sick with Bacillary dysentery and that three people living in the same house developed the disease later. After careful investigation we found that this was not correct.

Only two cases of dysentery of the amœbic form occurred, they came to hospital and active amœbæ were detected in their stools by two medical officers; only emetime treatment was given and they quickly recovered.

The third case referred to, is that of Adèle Firminot (or Bonne) who was taken to Pointe au Sel where she stayed a few days for treatment. It is alleged that this girl brought the disease to Pointe au Sel whence it spread afterwards to Anse aux Pins.

But Adèle Firminot arrived at Pointe-au-Sel on August 22nd while it was on August 17th that Dr Gonsalves saw the first case, that of Clement Songor, which he considered as being clinically identical with the cases he saw later and which led him to diagnose Bacillary dysentery. In his minute to me dated 1st October 1931 Dr Gonsalves wrote : "This case (Clement Songor) must be regarded as the first case of the epidemic".

Moreover I agree with Dr Gonsalves in his diagnosis of the case of Adèle Firminot. She was brought to the hospital out-patient on September 9th in a moribund condition with cancrumoris and with all the signs and symptoms of generalised tuberculosis. This diagnosis was entered in on her card at the hospital on that date.

When she died there was a wake at the house of Firminot at Anse Boileau. Numerous persons attended the wake none of whom were afterwards infected.

While Joseph Firminot declared that he was sick when he returned from the island, his brother Jean states that on the arrival of the Wanetta, he went to meet his brother Joseph and that he never told him that he had been or was feeling sick at all. Jean states that they remained together all day and had a few drinks before his brother left him in the afternoon to go to Anse-Boileau.

There was certainly some conflicting evidence between the statement of Joseph Firminot and that of all the others.

On October 17th I visited the district of Anse Boileau and the suspected house of Joseph Firminot. The latter then made the curious statement that he had been visited by four gentlemen from town who took from him a written declaration with regard to the conditions at Juan de Nova and on board the S. V. Wanetta when she arrived here on August 11th.

To quote his own words in creole language :—

"Mon rappele qui Mr Touris fine vine voir moi ensemble avec Mr Morel, Notaire, Mr Marcel Lemarchand, et un autre Mr gros et court, Mr Touris ti prend une evidence avec moi ça jour, y ti écrire li meme."

It is interesting to note that these four gentlemen were among the leading members of the deputation of 5th October at the Governor's Office".

There is no doubt that Bacillary dysentery was introduce to Anse-aux-Pins by a Mrs Legai who came to Pointe au Sel to help to nurse Clement Songor, the first case of the disease in this epidemic.

There was no evidence to show that any person suffering from Bacillary dysentery had lived at Pointe au Sel prior to Clement Songor's illness, but it is quite likely, as the medical officer of South Mahé states, that this child Songor who was a regular dirt eater, contracted the disease through eating some contaminated earth or through some infected material left by some passerby.

When I visited the house of Songor at Pointe au Sel I noticed that the latrine was quite close to the main road and Mrs Songor in a statement made when she was in Hospital said that she had already seen strangers using her latrine.

On October 28th the Manager of the Syndicat des Iles Malgaches received a cable from the captain of the S. V. Wanetta stating that all on the island of Juan de Nova were in perfect health.

It was not possible however to proceed any further with the enquiry with regard to the S. V. Wanetta until the return of that ship, as a statement had to be taken from the Captain.

The S. V. Wanetta returned to Seychelles from Juan de Nova via Nossi-Bé, on December 18th.

On December 23rd a written statement was taken from the Captain in my presence by the Hon. Ag. Legal Adviser. This statement will appear in annexure No. 3 of the Chief Medical Officer's report.

There had been no reply yet to the cable sent by the Government to the British Consul at Tananarive but from the evidence then at our disposal we began to doubt whether the Wanetta was at all responsible for the introduction of bacillary dysentery in the Colony.

Our enquiries were to be directed towards East Africa when you returned from leave, and the whole matter was then taken up by yourself.

E. M. LANIER,
Resident Surgeon.

4th April, 1932.

APPENDIX A.

Regulations made by the Health Committee under Ordinance No. 5 of 1919 Sect. 6.

1. The occupier of any premises on which there is a person suffering from dysentery or his nearest relative or any person in attendance on him is required as soon as he becomes aware of the fact to give notice thereof to the Ag. Chief Medical Officer or Sanitary Inspector in Victoria or in the Country to the officer or Constable in charge of the nearest Police station who shall at once inform the Ag. Chief Medical Officer of the same.
2. It shall be lawful for the Ag. Chief Medical Officer to order the segregation or isolation in appropriate places of persons suffering from dysentery, or of any persons who have been in contact with patients suffering from dysentery or who may have been exposed to infection by any means whatever.
3. It shall be lawful for the Ag. C. M. O. to order the cleansing and disinfecting of premises on which a case of dysentery has manifested itself and the disinfection or burning of nuts, clothing or any other articles that may have been exposed to infection.
4. Further the Ag. C. M. O. is empowered to take any sanitary measures which he may think fit for the prevention and mitigation of dysentery.
5. The above mentioned regulations apply to and will be in force in the island of Mahé.
6. Any person contravening any of the above regulations will be liable to a fine not exceeding rupees five hundred and to imprisonment not exceeding three months.

Made and approved at a meeting of the Health Committee on the 28th September 1931.

(s) E. M. LANIER,
Chairman Health Committee.

Passed in the Executive Council at a meeting held on the 28th September 1931.

(s) O. WARD,
Ag. Clerk to Executive Council.

Appendix B.

Questions put by the Hon. Jouanis at a meeting of the Legislative Council held on.

1. Is it a fact that all the cases that were sent to the Hospital as Bacillary dysentery by a private Medical practitioner were not suffering from any form of dysentery? If so why were these cases segregated at the Hospital for about a fortnight.
2. While in Hospital were these cases examined by one or more Medical Officers?
3. Did these cases come from the infected region or from any other locality?

Replies.

1. (a) Only three cases were sent to the Hospital as Bacillary dysentery by a private Medical practitioner. None of these showed signs or symptoms of any form of dysentery after admission.
   (b) As these cases were sent in by a Medical man with a written diagnosis of Bacillary dysentery they had to be kept for many days under close observations until the Medical staff was fully satisfied that these cases were not suffering from any form of dysentery: Hence their long stay in Hospital.
2. While in Hospital these cases were examined by 3 Government Medical Officers and by a fourth Medical man from the S. S. Karanja on October 13th.
3. None of these cases came from the infected region :—

   One came from Mont Fleury
   The other from Rivière Anglaise
   The third one from La Misère.

Copy.

Appendix C.

Medical Department.
Seychelles,
13th October 1931.

To

P. V. HUNT,
Manager S. I. M.
Victoria.

Dear Sir,

We are endeavouring to ascertain the origin of the present outbreak of bacillary dysentery. The first case is supposed to have started in the house of one labourer Joseph Firminot who came back from Juan de Nova on S. V. Wanetta on 11th August 1931.

This man made statement to the effect that over 10 people were sick on the island and as many on board when the ship arrived here and that a malgache died on board from Juan de Nova to Nossi'Bé. The latter statement is confirmed by one labourer named Bonne who was also on board and who was sent to me as sick only in the afternoon of the day the ship arrived.

When I went on board however to give pratique the captain reported all well except for 2 men who had some dysentery or diarrhœa. After I had examined these men and asked whether they were the only ones sick on board the captain again certified that there were no others. He never mentioned anything to me about that malagache who is supposed to have died at sea.

I should like if you could enlighten me on these points as it is most desirable that this matter be cleared up without any misunderstanding as soon as possible.

Yours faithfully.

Syndicate des Iles Malgaches.

Mahé 12th October, 1931.

The Ag. Chief Medical Officer
Mahé.

Dear Sir,

In reply to yours of even date I have pleasure in stating what facts are known to myself on the matter in question.

The "Wanetta" left here in March last with 60 Seychellois for Juan de Nova island. At Nossibé she picked up 60 Malgaches also for Juan de Nova. All these labourers arrived at Juan de Nova in April. There were already 80 Seychellois on the island and they all, the whole 200, worked together in guano. No other labourers reached the island after the arrival of the Wanetta in April.

One Seychellois Charles Marie who left here in March, fell sick at the beginning of July and was brought back to Mahé by the Wanetta when she left Juan de Nova at the end of July. The carpenter belonging to the crew of the Wanetta also fell sick on 25th July. They both had a kind of diarrhœa or dysentery and, at Nossibé, they were both examined by a doctor who gave the captain some medecine for them. One of them was apparently much improved on arrival at Mahé when they were both handed over to your care. As far as I know there were no other cases of sickness on the island, and on arrival here the captain of the Wanetta reported that he had only two (the above) sick men on board. Obviously if any man is sick and does not report then the captain cannot be blamed.

Before leaving Juan de Nova island the captain called all the 132 souls remaining there and asked if any were sick but not one reported sick.

Of those who arrived here per Wanetta, one, François Bonne, came to me after he had received pay and stated that he was sick and I immediately sent him to you but I am quite ignorant as to his malady.

In connection with the outbreak of bacillary dysentery at Mahé, I would ask you to take special note that the whole 200 men were working together on the island for 3 months and that 65 men travelled together in the hold of the Wanetta from Juan de Nova to Mahé for about 16 days. Most of the men who came back by the Wanetta have already returned to the island.

The Wanetta should reach Juan de Nova this week and will immediately return to Nossibé and I have instructed the Captain to cable me immediately the state of Health on the island.

Regarding the Malgache labourer reported to you as having been buried at sea between Juan de Nova and Nossibé, I can only say that your intimation is the first I have heard of, but if it is correct then the captain would naturally have reported same at Nossibé and not at Mahé.

Yours faithfully,

(Sg) P. V. HUNT.

Syndicat des Iles Malagaches.

Mahé, 28th October, 1931.

His Excellency
Governor of Seychelles
Mahé.

Your Excellency,

With reference to the recent outbreak of bacillary dysentery at Mahé, and in view of opinion so readily and so freely exppressed by certain members of the public, I with pleasure inform you that the following telegram has just been received by me from Jouan de Nova.

"Juan-deNova parfaite santé".

That is emphatic enough.

Had there been any such disease as bacillary dysentery on the island, Your Excellency hardly needs me to say what sort of telegram I would have received remembering there is no doctor on the island and that 200 labourers all live in a small area.

I am sending a copy of this letter to the Acting Chief Medical Officer in view of the correspondence exchanged between us on 12th October copies of which are enclosed for your Excellency's information.

I am,
Your Excellency's obedient servant,

APPENDIX J.

Outbreak of Epidemic (Bacillary) Dysentery in South Mahe.

On August 17th. Clément Sungwar, of Pointe au Sel, was brought to me suffering from a form of dysente y, which, at the time, there was no reason to suspect was other
CASE 1. than amœbic dysentery. I treated with emetime for a week, but death occurred on August 24th, I assumed at the time that it was one of those cases which did not react to emetine.

On September 2nd. Abel Sungwar, the brother of case 1 was brought to me in extremis. He had Head retraction, coarse moist sounds in both lungs, and a sunken abdomen. No treatment was possible. He died on the way home. His stools contained slightly blood stained mucus, and it is possible that he may have been infected by his brother, but, I do not consider that d sentery was the cause of his death. I issued a certificate for Acute general (miliary) Tuberculosis, and even now, see no reason to alter my diognosis.

On September 3rd. Françoise Olivier, residing in the same house as case 1, came to me suffering from amœbic dysentery. After two injections of emetime, she became constipated, and was quite well. No further treatment was necessary.

As a result of having had three cases of illness in one family in a short space of time, I sent the Sanitary Inspector to report on the condition of the house and surroundings. He reported that the house, yard and latrine were in averagely clean condition.

On September 11th. Mme Esperance Legai of Anse aux Pins, came to me suffering from what I diagnosed as amœbic dysentery. Emetine was given, and on her return
CASE 2. on the 12th September for further injections, her condition was unchanged. In my notes on this day, I queried the cause of the dysentery. I tried her on a Bismuth Emetine Iodide mixture and asked her to report daily by messenger to me.

I received no word until *September 17th*, when a death certificate was asked for. I issued a certificate for dysentery, but definitely not amœbic dysentery, and as yet I did not consider that there was sufficient evidence to cause one isolated case "Epidemic dysentery".

No evidence of contact was forthcoming between this case and case one until the evening of September 18th, when it was found that she had helped in the house of case one during his illness.

On September 18th Three cases were brought to me. All were given treatment as for bacillary or epidemic dysentery. They were as follows :—

CASE 3. Marie Rose Nicette of Anse aux Pins who was told to report daily. No further news was heard from her until later, when it was found that she had consulted a private practitioner and under whom she died. (certificate for amœbic dysentery).

CASE 4. Mme Sungwar of Anse aux Pins, the mother of case 1. She was reported improved each day, and was later removed to Hospital convalescent.

CASE 5. Germaine Boniface of Anse aux Pins, the daughter of Mme Esperance Legai (case 2) was brought in a extremely toxic condition. I isolated her in my garage and observed and treated her personally. It was from the clinical and miscroscopical findings from this case, taken with the other four cases that convinced me that there was an outbreak of Epidemic Bacillary Dysentery

On September 19th.—I wrote and posted in the morning my notification that there was an outbreak of bacillary dysentery.

Clinical features in brief.—1. Onset. Sudden in all cases.

2. Temperature. Subnormal Cases 1 & 5.
   99—100 Cases 2 & 4.
   101.6 Case 3.

3. Tenesmus All cases.

4. Evacuations varying from 8—10 per day in cases 1 & 4, to 50 per day in case 5.

5. Stools consisted mainly of pure blood with only a small quantity of thick mucus.

Origin of epidemic.—Clément Sungwar was a regular dirt eater, and probably ate some infected fæces or other infected material left by some careless passer-by. No stranger nor any person lately returned from the islands can be traced in the vicinity.

It has been stated that the disease was brought to Anse aux Pins by a girl named Adèle Firmineau of Anse Boileau who had lived with a relation lately returned from the islands. This is not possible since Adèle Firmineau did not come to this district until August 22nd, five days after the first case had presented itself to me. Incidentally, she was not suffering from Dysentery, but from Tuberculosis. As she was seen on the day of her death at the Outpatient Department of the Hospital, another opinion can be obtained as to her condition at that time. Taken together with the evidence of the surveys of the districts of Pointe au Sel, Anse Boileau and Anse aux Pins I am perfectly convinced that the disease did not start in Anse Boileau but in Pointe au Sel. How it was introduced into the Colony does not directly concern me.

Surveys of suspected and infected Districts.

1. *Pointe au Sel.*—Only one house infected. Articles and materials likely to harbour the bacilli were burnt, the latrine was also burnt. The house was washed with disinfectant from roof to floor, and lime was spread under the house.

2. *Anse Boileau.*—One suspected house was thoroughly disinfected as above. It is hardly likely that this house was infected with true bacillary dysentery, since it was amongst a batch of six other houses and drew its water supply from the same source as these others. No other person in these other houses were reported sick.

The house of Firmineau was inspected and the latrine burnt. Firmineau washed his line in the stream (above the washing limit) and although about 200-300 drew water from this source, none were infected.

Several cases of amœbic dysentery were discovered. It is my opinion that there were no cases of bacillary dysentery occurring in Anse Boileau.

3. *Anse aux Pins*—(The infected area lies to the North of this district but I was asked by the Ag. Chief Medical Officer to perform the second survey.

The house of Mme Espérance Legai is situated on the hill near a stream from which all dwellers on the hillside drew their water supply. The top house of all became infected from attending the wake of Mme Espérance Legai. Linen infected was washed in the stream, and nearly all the cases occurring in this area were drawn from houses whose water supply was taken from this infected stream. The other cases were infected at the wake on Mme Espérance Legai.

After inspecting the house of Legai, it was not surprising to find that there were 5 or 6 deaths from this house alone infected linen was found in every corner of every room. Linen with dysenteric stools still moist, was found lying openly within one yard of a trellis, on the other side of which was the family kitchen. Flies were in abundance. The whole family must have been eating practically pure cultures of the bacilli at each meal.

All dangerous materials were burnt, and the house disinfected as above.

All latrines in this district were burnt.

P. GONSALVES,
16. 1.32.

APPENDIX K.

Report of the Inspector of Schools, results of competition in schools for the silver medals in Elementary Hygiene presented by Dr J. T. Bradley C. M. O.

I have the houour to forward for Your Excellency's information the detailed resulted of the examination held last year for the silver medal so kindly offered by the Chief Medical Officer, Dr J. T. Bradley, to each school of the Colony, to stimulate the study of hygiene in the schools.

The results are, in my opinion, satisfactory. Some of the schools did very well indeed.

I regret however that neither of the 2 secondary schools qualified for the medal. St Joseph's convent Boarding school offered no candidate, and out of 32 candidates presented by St Louis College only one got 58% while none of the others got 50%.

At the following schools, La Digue, Glacis, Takamaka and Baie Lazare the teachers requested more time which was granted. An examination will be held this year at these schools and also at those which failed to qualify viz : St Louis College, Anse Royale (R. C.) Girls' school, and St Mathew's (Grand' Anse Praslin).

An examination will also have to be held at the Victoria R. C. School and at St Saviour's C. of E. School at Anse Royale where the best candidates have been placed ex aqua.

In conclusion, I would like to suggest that the medals be distributed by Your Excellency on Gordon Square on Empire day (24th May) after the School children's Sports which are usually held on that day.

Arrangements might be made for the children of the Country schools who have been awarded a medal to attend on that day.

J. D. E. HARTER,
Inspector of Schools.
15. 3.32.

Medals were awarded in 1931 as follows :—

St. Joseph Convent School	No candidate
„ „ (free school)	Miss Aimée Star
St. Louis College	No award
St. Louis free school	No candidate
St. Paul's C. of E. School	Miss Flora Barbé
Victoria Roman C. School	Miss Antoinette Chetty Louis Alexis
Victoria C. of E. School	George Gonsalve
Anse Etoile R. C. School	Miss Mariola Tregarthen
Plaisance	Arthur Théodore
Cascade	Miss Simonne Chetty
Anse aux Pins (boys)	J. E. Edmond
do (girls)	Miss Marguerite Didon
Anse Royale (boys)	Alexandre Vel
do (girls)	No award
St Saviour's C. of E.	Miss Doris Soomessur Mamode Ibrahim
Anse Boileau R. C.	Miss Daisy Pool
Bel Ombre R. C.	Miss Josephine Serre
Glacis	No award
Takamaka	do
Baie Lazare	No candidate
La Digue	do
Baie St Anne (Praslin) R. C.	Miss Gabrielle Larue
Anse Boudin „ „	Miss Antonia Dugasse
Grand'Anse „ „	Miss Elise Lablache
St Mark's (Praslin) C. of E.	Miss Rosalie Barbé
St Mathew's „ „	No award.

J. D. E. HARTER,
Inspector of Schools.
