Annual report on the Medical Department / Sierra Leone.

SIERRA LEONE.

Annual Report

ON THE

MEDICAL DEPARTMENT,

FOR THE

YEAR ENDING 31ST DECEMBER, 1905.

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ANNUAL REPORT ON THE MEDICAL DEPARTMENT FOR THE YEAR ENDING DECEMBER 31ST, 1905.

I have the honour to submit the following Report on the Medical Department for the year 1905.

During my absence on leave, from the 23rd April to the 10th October, Dr. Hood, Senior Medical Officer, acted as Principal Medical Officer.

The Medical Staff throughout the year consisted of nine Medical Officers of the West African Staff, and three native Medical Officers. Towards the end of the year it was found necessary to appoint an additional Medical Officer, making, with the Senior Medical Officer and myself, a total of fifteen. The general Staff of Dispensers and others remained the same.

FINANCIAL STATEMENT.

The following is a brief statement showing the Revenue and Expenditure during the year:—

	£	*s.*	*d.*
TOTAL RECEIPTS	1,280	7	10
EXPENDITURE.			
Personal Emoluments	6,047	19	6
Other Charges...	831	5	10
Hospitals and Dispensaries...	5,737	10	8
Nursing Home	669	15	8
Protectorate Medical Branch	4,440	5	4
Total Expenditure Medical Department	£17,726	17	0

PUBLIC HEALTH.

Public Health.

The population for the whole Colony (not including the Protectorate) is 76,384, on the basis of the increase which took place during the previous ten years. The total number of deaths registered was 2,156, a death-rate of 28·2. The number of births registered was 1,399, a birth-rate of 18·3.

It is again necessary to point out that the deaths exceed the births, but it is extremely probable that a number of deaths and births in the outlying districts escape registration.

Freetown.

Freetown.—The statistics are more accurate, especially as regards deaths, and may be relied upon. A new Ordinance which will ensure more accurate registration of births has now been prepared, and will be placed before the Legislative Council at an early date.

Death-rate.

Death-rate.—The total number of deaths registered in 1905 was 1,071. From these two deaths which took place on board vessels in harbour have to be deducted, giving a total of 1,069, a death-rate of 29·6 on an estimated population of 36,071.

The death-rates for the past five years are as follows:—1901, 28·9; 1902, 24·9; 1903, 23·9; 1904, 26·7. 1905 therefore shows a very marked increase over the previous years, being only approached by 1901.

I have again, in the attached chart, which is of very considerable interest and extends back for nine years, shown the relationship between the monthly death-rate and the monthly rainfall, and there are several points which at once strike the observer. First, the irregularity of the death curve in the early part of the year, and its persistence at a higher level than usual, and the marked decline in the last five months of the year, following an excessive rainfall. In previous years we have observed a rise in the early part of the year, a fall in May, a rise immediately preceding the rain, and a fall towards the end of the year. In 1905 the early part of the year has been marked by the usual rise, which has, however, persisted with fluctuation until July, the May fall being entirely absent. The rainfall, which is greater in July than it has been for the previous seven years, appears to have been beneficial, as it is followed by a marked and steady decline in the death-rate. The increase in the death-rate is thus seen to have taken place in the first seven months of the year.

The statistical tables which are attached will enable us to give some idea as to the causes of the increase. Apart from the deaths under the age of five years, which I shall consider shortly, the principal causes of death are seen to be debility, respiratory diseases, and diseases of the alimentary system. The deaths from respiratory diseases predominate in the early part of the year, as has been previously pointed out; "debility," which is a very vague term, accounts for a large number in the early part of the year, and the deaths from this cause are distributed at the two ends of the age scale, a large number occurring within a few hours of birth, and again in people over 65. Of course, in many cases the ages are to be regarded as approximate only, but the number of deaths among elderly people during 1905 has been unusually large. The high death-rate appears therefore to have occurred apart from the rainfall, and is probably associated with the other climatic conditions which existed in the early part of the year, notably the prevalence of very strong Harmattan winds, which have a great effect on the incidence of respiratory diseases. And there can be little doubt that the prevalence of diseases of the digestive system is due to the general insanitary conditions in which the mass of the people live.

The usual loss of life which has taken place in the earlier years of existence is again shown. Out of a total of 1,069, 319, or 36·5 of the whole. Table I. shows the infantile mortality, that is, deaths under one year, of which there are 296. With a total of 642 births registered, we obtain an infantile death-rate of 461 per 1,000 births, a very considerable increase over the previous year. The infantile death-rate for the previous four years is as follows:—1901, 575·8; 1902, 466·9; 1903, 471·16; 1904, 398·67. The improvement which took place last year has not been maintained.

An examination of the table will show that the causes of death are the same as in preceding years. A large proportion occur within a few days of birth, and are evidently connected with the process of labour. It is essential that the midwives of this city should be brought under some control, and should be trained and licensed. Ignorance on the part of mothers as to the proper feeding and upbringing of children is also another important factor in this high child mortality.

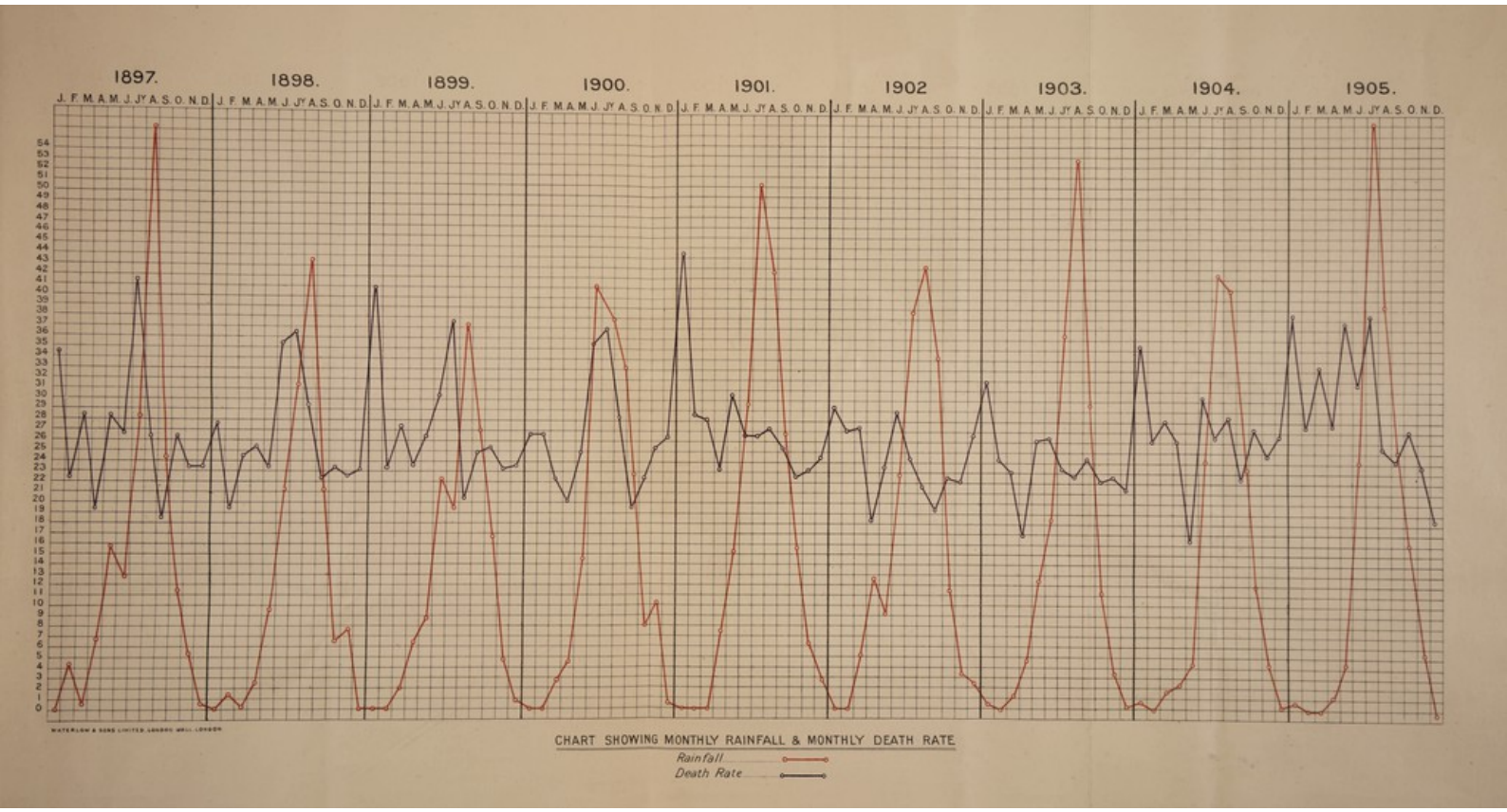

CHART SHOWING MONTHLY RAINFALL & MONTHLY DEATH RATE.

Rainfall

Death Rate

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European Death and Sick-Rates.—Eight European deaths were registered in Freetown, the causes of death being as follows :— European Death and Sick rates.

Apoplexy	1
Pneumonia	1
Rheumatic Fever	1
Malarial Fever...	3
Blackwater Fever	1
Chloroform Poisoning...	1

Of these, three were landed from steamers, leaving a total of five deaths among the European population of this town. Three of them were due to malarial fever.

I give below the usual comparative statement of European deaths :—

Year.	Landed from Vessels.	Resident in Freetown.		Garrison.		Total.
		Climatic.	Otherwise.	Climatic.	Otherwise.	
1896	3	5	2	—	—	10
1897	2	13	—	—	—	15
1898	2	8	4	—	—	14
1899	—	3	6	—	—	9
1900	4	8	7	—	—	19
1901	—	5	2	3	—	10
1902	3	3	—	1	1	8
1903	2	2	2	2	3	11
1904	3	2	3	2	2	12
1905	3	2	2	1	0	8

It will be seen that the total number of deaths from climatic causes among the European residents of Freetown has been very small during the past three years, in spite of the fact to which I have called attention in previous Reports, that the European population has considerably increased. As the Europeans are constantly changing it is not possible to estimate exactly the total number, but taking the European population as ascertained at last census, namely 270, with 5 deaths, we have a death-rate of 18·5 per 1,000, the lowest which has been recorded for many years. If the two deaths from rheumatic fever and chloroform are excluded, we obtain a death-rate of 11·1 from climatic causes.

This points to a very considerable improvement in the health of the European population of Freetown.

Official Sick-Rate.—The following tables give the amount of sickness among Government officers during the past three years :— Official sick-rate.

ALL OFFICIALS.

	1903.	1904.	1905.
Total number on sick list	374	372	366
„ „ of days on sick list ...	2,458	2,879	2,593
Average daily number on sick list ...	6·73	7·86	7·10
Average number of days on sick list ...	6·57	7·74	7·08

NATIVE OFFICIALS.

Total number on sick list	280	302	284
„ „ of days on sick list ...	1,720	2,369	1,913
Average daily number on sick list ...	4·71	6·47	5·24
Average number of days on sick list ...	6·14	7·84	6·77

EUROPEAN OFFICIALS.

	1903.	1904.	1905.
Total number on sick list	94	70	82
,, ,, of days on sick list ...	738	510	680
Average daily number on sick list ...	2·02	1·39	1·8
,, ,, ,, of days on sick list	7·53	7·28	8·2

There is a slight diminution in the total number on the sick list, which has occurred among native officials, and a very slight increase in the average daily number of Europeans. The increase is due to illness among Railway officers, of whom 61 were placed on the sick list, as against 21 other officials.

The total number of European residents in Freetown during the year was 85, and the average daily number 41·3. With an average daily number on the sick list of 1·8 we obtain a sick rate of 4·3 per cent., as against 3·6 in 1904, 5·6 in 1903, and 4·8 in 1902.

One death took place among European officials, namely, that of Mr. Lilley, District Traffic Manager, from Blackwater fever, and four among native officials.

SMALL-POX.

Small-pox.

A very serious epidemic of Small-pox occurred during the early part of the year, no fewer than 371 having been removed. The spread was largely due to concealment of cases, and I regret to say that the more intelligent classes of the community did not render that assistance which they should have done, and although for some time there was a certain amount of panic, they were inclined to place obstacles in the way of removing discovered cases. Very energetic steps were taken to cope with the epidemic. An additional Medical Officer, Dr. Hatch, was appointed for general duties in connection with Small-pox, and house to house visitation was carried out, street isolation and disinfection were insisted on, and vaccination was extensively performed with the assistance of an additional vaccinator, Dr. Easmon.

These measures were eventually successful in stamping out the epidemic. Some time ago I pointed out that vaccination was only performed when an outbreak occurred, and that as we had had a number of years comparatively free from Small-pox, the result was that there was a gradually increasing number of unprotected persons in the city, and I predicted that before long we should have to deal with a serious outbreak.

It is essential, in view of the free communication with the interior, where Small-pox is endemic, that vaccination and re-vaccination of children should be compulsory, and an Ordinance dealing with this matter is now under consideration.

SANITATION OF FREETOWN.

Sanitation of Freetown.

There is little fresh to be said on this subject, as I have gone into it very comprehensively in previous reports.

The general sanitary work has been under my direction as Medical Officer of Health to the City Council. The Staff has remained as before, but it is not adequate for the requirements of a town so spread out as Freetown.

Cleaning of streets.

Cleaning of Streets.—This has been done in a satisfactory way so far as the central parts of the City are concerned, but the outlying parts have not received the attention they require.

Removal of Refuse from Houses and Yards.—This is done by the occupiers and the rubbish deposited in public dust bins, whence it is removed by the sanitary carts, and dumped down at one or other of the shoots on the foreshore. This is unsatisfactory, and destructors should be provided to dispose of the very large amount of vegetable and other refuse which accumulates. Removal of refuse from houses and yards.

Sewage Disposal.—The pernicious system of cesspits still exists unchecked in our midst, and I have no doubt whatever that it accounts for a considerable proportion of the sickness and mortality among the inhabitants of Freetown. On a still night the fœtid smell emanating from the cesspits and the sewage-soaked soil is appalling, and as most of the houses are uncemented on the ground floor, the sleeping inhabitants get the full benefit of it. Sewage disposal.

In my last Annual Report I stated that a dumping ground had been selected, and it was proposed to carry out an experiment with reference to the disposal of excreta of a limited area of the town by burial in shallow trenches. Distinct instructions were given with reference to the preparation of the ground, but owing to some misunderstanding, I found on my return from leave that the ground had been improperly prepared.

The scheme met with a very great deal of opposition, not only among the inhabitants of the locality but generally in the town, and a petition was addressed to His Excellency the Acting Governor, who saw a deputation on the subject.

Eventually, as there was some doubt as to the effect of the rain on this method of disposing of excreta, His Excellency decided to allow the scheme to remain in abeyance while a limited experiment was being carried out at the Lunatic Asylum.

I regret to think that the progress of education has been so slow in Freetown, that even among the so-called educated class the dangers of this method of sewage disposal are not appreciated; and I am forced to the conclusion that it is a matter which cannot be left to the City Council, but which will have to be taken up by the Government, and the cesspits closed compulsorily. In 1896, when I made my first Annual Report, I entered very fully into this question, and I have drawn attention to it every year since that time, and now, when I am on the point of severing my connection with this Colony, I can only express the hope that this crying evil will be seriously taken up and dealt with.

WATER SUPPLY.

This is satisfactory in every way, and the new water supply has been a great boon to the inhabitants. Water supply.

The drains leading from the standpipe must, however, be put in proper order, otherwise collections of water form, which breed mosquitoes.

In view of the new water supply, the numerous polluted surface wells of the city should now be closed.

SURFACE DRAINAGE.

This is gradually undertaken, and a great improvement has been effected in many of the streets of the town. Surface drainage.

In my last report I alluded to the various streams which run through the city, and which are the principal means by which the supply of mosquitoes is

carried on from one rainy season to another, and stated that they were being dealt with by the formation of a central channel. On my return from leave, I found that this had been carried out along the greater part of Sanders Brook with most satisfactory results. Where formerly the water was spread out and formed a number of shallow pools in the hollows of the rock, in all of which Anopheles could be found, it is now collected in a central channel, and Anopheles are entirely absent. The other streams are now being taken in hand, and this work must be looked upon, so far as mosquito-borne diseases are concerned, as one of the most important which has yet been undertaken in connection with the sanitation of Freetown.

PREVENTION OF MALARIA AND ANTI-MOSQUITO MEASURES.

Prevention of malaria and anti-mosquito measures.

The paragraph given above deals with a most important improvement which has been effected, and a second equally important one which will affect the town generally is the inclusion in the new Sanitary Ordinance of a clause making it a punishable offence to have collections of water containing mosquito larvæ in a yard. This, if strictly enforced, will do much to diminish the supply of mosquitoes in the city, but it will have to be carried out with the utmost persistence, for the older natives are absolutely apathetic as to the dangers of mosquitoes, and it is useless to expect them to take any steps of their own accord.

Improvement in the street drains.

The *improvement in the street drains* is undoubtedly diminishing the number of breeding places.

Mosquito-proof houses.

The *mosquito-proof houses* have been of great benefit, and everyone who has to live in town should be provided with one.

Use of the mosquito net and the habitual use of quinine.

The *use of the mosquito-net* and *the habitual use of quinine* is becoming more universal.

With reference to the latter, my experience shows that on the whole five grains a day is the best form, and the one which is most likely to be adhered to. It is best taken in the early part of the day, just before the 11 o'clock breakfast, and in very few cases does it result in gastric disturbance. I have made a point of ascertaining from those about to proceed on leave their habits with reference to taking quinine, and I have found that almost without exception those individuals who have been in the habit of taking a daily dose of quinine have suffered to a very slight extent or not at all from malarial fever.

Segregation.

Segregation.—The bungalows are now complete, and the health of those who are fortunate enough to reside there has been very satisfactory. One or two cases of malarial fever have occurred there, but these have been invariably in officers who have been recently in the Protectorate, and I am not aware of any case being acquired in the cantonment.

It is much to be regretted that no European firm has yet seen its way to build a residence for their employés at Hill Station, though a large and desirable site has been reserved for them. It is to be hoped that this reluctance will soon be overcome.

Instructions in Hygiene and Sanitation.

Instructions in Hygiene and Sanitation.—No course of lectures was delivered in 1905, but the subject is being taken up in the schools, and prizes will be awarded for instructions in Sanitation. An illustrated handbook on the subject is now in the printer's hands. This is a most important step, for it is to the rising generation to whom we look for sanitary progress.

HOSPITALS AND DISPENSARIES.

Colonial Hospital, Freetown.—This was in charge of Dr. Hood for the greater part of the year, and latterly of Dr. Latchmore, who submits an interesting report. Colonial Hospital, Freetown.

He draws attention to the great advantage which has accrued from the presence of a Resident European Matron, and he expresses the opinion that, although the female nurses require an infinite amount of patient supervision, there is every reason to believe that competent nurses can be trained in the Hospital who will prove themselves equal to the duties devolving on them. The quarters of the female nurses are satisfactory, but the same cannot be said about the quarters for the male staff. They are dark and badly ventilated, and this no doubt accounts for much illness among the staff. A new block is, however, being built, with commodious well-lit and well-ventilated rooms, and this will do much to remedy this state of matters. Three deaths took place among the Hospital Staff during the year, all from tuberculosis.

The Wards in the male division have been well filled throughout the year, and have not unfrequently been overcrowded. This is especially the case with John's Ward, which is always congested owing to the numerous cases of foul ulcers, and other septic conditions, which cannot be admitted to other wards were surgical cases are being treated. The question of additional hospital accommodation for males is one which will have to be considered at no remote date.

Much good work is being done in the Female division, it will be seen from the following extract from the report :—

" *Grace's Ward.*—This ward receives female patients of all classes, and is " fulfilling a most important part of the hospital work owing to the increasing " work amongst the women and children in Freetown. Gynæcological cases " are increasing rapidly in numbers and much has been done to relieve the " truly terrible condition of the lower female classes, who through ignorance, " superstition and neglect develop the worst forms of disease. This work is " deserving of every attention and care on the part of the hospital staff. Grace's Ward.

" The ward is hardly ever without its beds full and at times urgent cases " have to be put temporarily on the floor on mattresses until a bed is at " liberty, the largest number of patients in the ward at one time being 20.

" *King Harman's Ward.*—This being the latest building has been brought " throughout up to date, the Maternity Ward is large and airy and supplies a " long felt want in Freetown. King Harman's Ward.

" The private wards in this block are very seldom occupied by Maternity " Paying Patients as the majority prefer to be attended at their own houses. " Special permission has, however, been granted in one or two instances to " treat Gynæcological private cases in the wards, the results being most " satisfactory, not only in comfort to the patients, but in perfection of operative " treatment and nursing, and also confidence of a good result on the part of " the Surgeon undertaking the case. This indeed is a model building."

A return showing the usual statistical tables is attached. 1,423 cases were treated as in patients, and Dr Latchmore remarks that :—" It is with " pleasure that I have to record a rapidly growing confidence amongst the " population of Freetown in European methods of treating disease. When " one considers that for a long period back they have had their own medicine " men or country treatment, combined with an inherent mistrust or rather " misconception of the white man's motives, it is a matter for congratulation " that such progress has been made.

" Especially is this the case in Surgical work at the Hospital. Nothing to " my mind can impress the native more than the immediate relief afforded by " the removal of a large Elephantoid growth he has had for years, or the relief " obtained in retention of urine or the setting of a fractured limb, the attention " paid to them in the hospital wards must have a lasting belief and faith in " this Institution provided by the Government for the relief of their suffering.

" That the fear of surgical operations is being dispelled there can be no " doubt whatever, on looking through the list of operations for the last 4 years " the figures are approximately as follows:—

" Operations under Chloroform.

" 1902	42
" 1903	126
" 1904	145
" 1905	178

" These show a steady increase and represent a great amount of difficult " and anxious labour on the part of the Medical Officers and Hospital Staff.

" Amongst the major operations for the year 1905, the following may " be mentioned as giving some idea of the nature of Surgical work in the " Colony:—

" Major Amputations	5
" Elephantiasis Scroti	5
" Abdominal Section	3
" Uterine Fibroids	1
" Imperforate Hymen	1
" Stricture of Urethra	26
" Radical cure of Hernia	2
" Do. Hydrocele	6
" Abscess	1
" Extirpation of Eye	2

" The 178 operations under chloroform are exclusive of minor operations " done in Out-Patients' Department."

Trypanosomiasis.

Trypanosomiasis.—Dr. Latchmore makes some remarks on the subject of Trypanosomiasis, which are of sufficient interest to be quoted in full:— " The year 1905 has been marked by an increase of cases of sleeping sickness " diagnosed and treated at the hospital. It is interesting to note that in " March, 1904, Dr. Renner and Major Smith, R.A.M.C., performed an opera- " tion for this disease, presumably the removal of enlarged Cornial Glands.

" In August, 1905, Dr. Todd, returning from the Congo, made a Gland " Puncture in a case of enlarged Cornial Glands during the operation of " removal, and found the ' Trypanosome Gambiense.' That the Tsetse Fly, " ' Glossina Palpalis ' exists in the Colony is an undoubted fact; some have " been caught within three miles of Freetown, but hospital statistics do " not show that the disease is on the increase. There are several cases of " Trypanosomiasis attending hospital at the time of writing who were gland " punctured and glands removed in 1905, they were treated with Atoxyl in " gradually increasing doses, beginning with $\frac{1}{6}$-lb. grain Hypodermically every " other day and increased to $\frac{1}{2}$-gr. daily for two to three weeks without toxic " effects, but whether the disease was checked or advanced symptoms delayed " by this it is impossible to determine at present; suffice it to say that the " patients are young and are not devoloping cerebral symptoms, and appear to " be in good health. Eleven cases have been treated, with three deaths. These " cases will be kept under observation."

The prevalence of Trypanosomiasis is one of considerable importance to this Colony, in view of the presence of Tsetse Fly in many localities, and the question arises, is the disease one which has existed for many years, or one of recent introduction? Some six or seven years ago I was called upon for a report as to the prevalence of Sleeping Sickness in this country, and as a result of very careful enquiries, in which I was assisted by the medical officers in the Protectorate, it was found that the disease was one which was unknown in the Protectorate. In Freetown and at Sherbro the hospital returns showed the occurrence of one or two cases at very long intervals, and in most of these it was ascertained that the patient had been out of the Colony for lengthened periods, several of them in the Congo. It is extremely improbable that a disease in which the final stage, sleeping, is such a prominent and characteristic one, could have been overlooked by the native population, and I was forced to the conclusion that Sleeping Sickness was not a disease of this Colony. Now, a considerable number of cases have been recognised, the diagnosis being made by puncture of the cervical glands. In many no nervous symptoms have been present, in a few the patients have been brought to the hospital suffering from acute mania, and in all the cases which have died the final sleeping stage has been well marked.

I am inclined to the opinion that the disease is one of comparatively recent introduction, and I believe the explanation is to be found in the following facts:—

From ten to twelve years ago there was a very large emigration of natives from the Protectorate to the Congo Free State, where they were employed as labourers in railway construction, as soldiers, and in other capacities. These emigrants were indentured for a limited number of years, and on the completion of their contract, the survivors, for there was a considerable mortality among them, returned to Freetown, and one or two of the cases of well defined sleeping sickness occurred among those returned emigrants. Some five or six years ago, owing to the depletion of the Protectorate and the consequent lack of native labour, this emigration was stopped by law, since when the communication with the Congo has been comparatively limited.

I conclude then that the disease was introduced from the Congo Free State, where it is very prevalent, some years ago, that cases were distributed over the Country where the Tsetse Fly has now been shown to exist, and that the disease is now slowly spreading.

Fortunately we have an easy method of diagnosis in the early stages in puncture of the cervical glands, and it is clear that prompt isolation of all such cases under conditions which will prevent access of uninfected Tsetse Flies is the only possible method of preventing the spread of the disease, for it is impracticable to attempt to deal with the extermination of Tsetse, in such an enormous tract of country as the Protectorate.

Syphilis and Gonorrhœa have as usual been very prevalent and play an important part in the causation of ill-health. Rheumatism is also very common, and Malarial fever especially in children is of frequent occurrence. Quinine is given freely with beneficial results, but as I have pointed out in previous reports it is difficult to get the natives to use it in considerable quantities. This is no doubt a matter of time and education.

The general sanitary condition of the Hospital has been good, and the water supply satisfactory.

A very large number of out-patients, 8,374, was seen, of whom the greater proportion are paupers. It has been found, however, that a certain number of people attend the Hospital who are well able to pay, and a new departure was

made this year by charging a small sum for medicines in such cases. This is a step in the right direction for it is an unfortunate fact that there is a tendency on the part of the people of this Colony to look to the Government to do everything for them and very little inclination towards self-help. This is no doubt a relic of the times when the population consisted mainly of liberated slaves who were dependent solely on the Government for their subsistence, and will it is hoped disappear with education, but the tendency is so evil in its pauperising effects that it should be combatted in every possible way. Last year I drew attention to the absence of philanthropic effects of the natives, and I regret to state that my remarks still hold good.

Phthisis has been fairly prevalent, and 65 cases of pneumonia were treated in the wards during the year.

Post Mortems are now regularly performed when it is possible to obtain permission, and a number of interesting and instructive cases are recorded. Two of these are detailed in the appendix.

Dr. Latchmore rightly draws attention to the necessity of having a skilled pathologist attached to the Colonial Hospital. It is a physical impossibility for the limited staff of two Medical men, with a large hospital to attend to, a large out-patient clinique, medical attendance on Government officers and their wives, and other duties, to give that time which is absolutely necessary in our present state of knowledge, to the Microscopic work requisite for correct diagnosis and treatment.

There is a very wide field for scientific research at the Colonial Hospital, and a vast amount of clinical material which would well repay investigation. Malignant disease which appears to be increasing among the civilized population, Trypanosomiasis, unclassified fevers of irregular type which are frequent, intestinal parasites, and filarial diseases are all subjects which are well worth careful study, and I trust that this addition to the medical staff, which I have advocated for some years past will soon be permitted by the improving financial condition of the Colony.

Lastly I wish to draw attention to the excellent work done by Drs. Hood and Latchmore in connection with the Hospital and by the native Medical Officer, Dr. Renner. Dr. Hood, the Senior Medical Officer, deserves very great credit for the very efficient state to which he has brought the Hospital, in the face of very considerable difficulties.

The Post Mortem Room.

The Post Mortem Room.—Post Mortem Records have been kept during the year, and there have been many interesting and instructive cases.

Case 1. Rupture of Splenic Abscess.

Patient was admitted under Dr. Renner, complaining of pain over abdomen, which was distended, tender on pressure, but resonant on percussion. There was a history of four days absolute constipation. His condition was so bad that no operation could be entertained, and he died a few hours after admission.

Post Mortem. Spleen weighed 14 oz.

This was a large cavity in the upper surface, filled with a recent blood clot the size of an orange, the sides of the cavity were thick and rough. The Peritoneal cavity contained about two pints of blood and clots. The abscess had evidently ruptured and caused fatal hæmorrhage.

Case 2. Acute Intestinal Obstruction.

Patient, a Timne man, 38 years of age, had been treated in the hospital in 1903 for appendicitis, but refused operation. On admission, there was dulness and pain in right iliac fossa, fæcal vomiting and abdominal distension. He refused all operative treatment for 48 hours, his condition rapidly becoming worse. Having at last obtained the patient's consent, Dr. Renner performed enterotomy; a large quantity of liquid fæces were evacuated and allowed to drain into absorbent wool dressings. The distressing symptoms were entirely relieved, but patient gradually sank, and died next day.

Post Mortem. The cæcum, lower part of small intestine, was bound down in right iliac fossa by dense adhesions, and this formed the seat of obstruction. The operation wound was perfectly secure, and there was no general peritonitis.

The Gaol, Freetown.

The Gaol, Freetown.—A very short report is submitted by Dr. Renner.

Three cases of small-pox occurred in the early part of the year. These were promptly isolated, and no extension of the disease took place.

There were 7 patients remaining on the 1st January, and 114 admitted, a total of 121 under treatment. Six deaths took place, a death-rate of 4·9 per cent.

There were 5,279 attendances at the out-patient room, the majority being trifling ailments.

The prevailing diseases were malarial fever, dysentery, diarrhœa, and bronchitis. The usual tables are attached.

The sanitary condition of the Gaol was satisfactory, as far as that can be said of an antiquated building with no proper sanitary appliances, and the water supply was ample and good.

NURSING HOME.

At the beginning of the year, there was one case remaining over from 1904, and 78 admissions during the year, a total of 79 under treatment, as compared with 76 in 1903, and 90 in 1904.

Among these three deaths took place, a death-rate of 3·3 per cent. The causes of death were as follows:—Appendicitis 1 (landed very seriously ill from steamer and died the same day), blackwater fever 1, and remittent fever 1 (admitted with hyperpyrexia and died the same day). Excluding the two who died on the day of admission, and whose condition was hopeless, the percentage of recoveries is very high.

Admissions from some form of malarial fever predominate. The following table gives a brief record of the diseases:—

Malarial Fever	40
Blackwater Fever	1
Malarial Cachexia	2
Anæmia	1
Debility	4
Bronchitis	3
Lymphadenitis	4
Cellulitis	3
Nervous Affection	4
Digestive Diseases...	7
Miscellaneous	10
	79

The following shows the classes from which patients are derived :—

Government Officers	4
Mercantile Firms	19
Shipping	4
Railway	29
Military	16
Telegraph	2
Clergy and others	5
Total ...	79

It will be observed that the Railway Officials furnish the greater proportion of the admissions, this being due not merely to the fact that their employment exposes them to greater risk, but because it is found advisable to admit them for serious minor ailments, as they are unable to obtain proper treatment in their own houses.

The Nursing Home has undoubtedly supplied a long-felt want in the community, and its benefits are now very fully appreciated by the European community.

KISSY INSTITUTIONS.

Lunatic Asylum.

Lunatic Asylum.—There were 116 inmates in the beginning of the year, and 47 admissions during 1905, a total of 163 under treatment. Of these, 11 were discharged cured, 3 relieved, 3 not relieved (for transference to West Indies), and 19 deaths, leaving a total of 127 at the end of the year. It is interesting to note that several cases of trypanosomiasis were found among the inmates, and in two cases of acute mania brought to me for examination I found enlarged cervical glands, which were found on puncture to contain trypanosoma. After the acutely maniacal stage subsided, other nervous symptoms developed, and the patients died in a comatose state.

The rebuilding of the Asylum is progressing very slowly, but when completed it will form an asylum more in accordance with modern requirements than the old dilapidated and insanitary buildings which were in existence when I first took over this appointment. Six new confinement cells have been added, which are satisfactory.

The work done by the lunatics consists in gardening, and general work for the females. It is hoped to extend the laundry work very considerably when the new female block is completed.

Male Incurable Hospital.

Male Incurable Hospital.—163 patients were under treatment, with 76 discharges and 27 deaths. The death-rate is always high, owing to the admission of old and debilitated people.

The old building is in a very unsatisfactory state, but a new wooden building has been added, which will contain a limited number of inmates. This, though by no means an ideal construction, will be a considerable improvement on the old building, and will be occupied as soon as a boundary wall is completed.

Small-pox Hospital.

Small-pox Hospital.—As already pointed out, a very serious outbreak of small-pox took place in Freetown and the surrounding country. 462 males and 167 females were under treatment during the year, the result being that the building was very seriously overcrowded for a considerable period. Of these 130 died, a death-rate of 20·6 per cent., a remarkably low death-rate

considering the very serious nature of many cases, and the advanced stage in which many were admitted. The low death-rate says much for the care and ability with which the patients were attended by Dr. Twynam, the Medical Officer in charge.

The Small-pox Hospital is however unsuited for the reception of better-class patients, and an extension is required.

Female Incurable Hospital.—This is an old and dilapidated building, to the condition of which attention has been drawn for many years. 73 were under treatment during the year, among whom 9 deaths occurred. Female Incurable Hospital.

Lazaretto.—This was occupied three times by the native crews and passengers of steamers which have been in communication with ports infected with yellow fever. No development of the disease took place. It is also used from time to time as an observation ward for doubtful cases of small-pox. The Lazaretto.

Dispensary.—1,031 out-patients were seen, as against 1,037 the previous year. Bi-weekly visits were also paid to Wellington for the purpose of affording out-patients relief. Dispensary.

SHERBRO.

Dr. Davson was in charge during the greater part of the year, being relieved by Dr. Burrows, who submits the Annual Report. Sherbro.

Colonial Hospital.—218 in-patients were under treatment, as compared with 174 in 1904, and 4,913 out-patients were attended to. Colonial Hospital.

Public Health.—Dr. Burrows reports that on the whole the health of the European residents appears to have been better than it has been for several years, and that the members of the trading firms have been the chief sufferers. The European and native officials have kept good health. Of the latter only 15 have been on the sick list. Public Health

Small-pox appeared from time to time, but, owing to the active measures in the way of vaccination, which were adopted, no epidemic took place. Dr. Burrows recommends the appointment of a travelling vaccinator for the district, a suggestion with which I agree. Small-pox.

Sanitation.—Dr. Burrows again draws attention to the evils of the prevailing cesspit system, and points out that little can be hoped for in the way of improved sanitation until this matter is dealt with, and a pail system substituted. The water supply is bad, consisting as it does of surface wells contaminated by sewage and surface drainage. He again recommends the provision of deep wells properly lined and built in. Rain-water is stored in tanks by some of the firms and provides a satisfactory though limited source of supply, but this method is not suited to the requirements of a large town. Sanitation.

The swamps round the town are still untouched, and it is suggested that they should be filled up by utilising them as a dumping ground for the yard and street surface of the town. To do this, sanitary carts and dust-bins are required, and it is advisable that this matter should be seriously taken up by the Municipal Board of Sherbro, in whom the sanitary administration now vests. Owing to the proximity of the swamp, and the presence of numerous surface wells, mosquitoes abound in Bonthe, but no active anti-mosquito measures appear to be taken.

The Gaol. *The Gaol.*—The general health has been good and the sanitary condition satisfactory.

Dispensaries. *Dispensaries.*— Eight Dispensaries under the care of Dispensers trained in the Colonial Hospital were open during the year, and visits were paid to outlying districts. A table is attached showing the total attendance at all the Dispensaries in the Colony and Protectorate.

PROTECTORATE.

Ronietta District, Moyamba. *Ronietta District, Moyamba.*—Dr. Greenidge reports that the town was burned down in the early part of the year, and that the District Commissioner has insisted on the houses being rebuilt regularly and considerable distances apart, and that a great improvement is being effected in this way.

The health of the European and native Officials has been good, no one at any time being seriously ill. 165 in-patients were treated in the Hospital, as compared with 131 the previous year, and 2,090 out-patients were attended to as against 1,898, again showing an increase, which Dr. Greenidge attributes to a growing appreciation among the natives of the value of European treatment. One case of blackwater fever occurred, which ended in recovery.

Sanitation. *Sanitation.*—Dr. Greenidge remarks that " Sanitation in the Protectorate is apparently a subject the native mind has as yet failed to grasp." Visits are, however, paid by the District Commissioner and the Medical Officer, and a circular has been issued by His Excellency the Governor, laying down the lines for a model bush town and suggesting elementary sanitary regulations. Prizes have been offered for the best-kept town, and these measures will no doubt in time do much to improve the sanitary conditions of the districts. Constant supervision and inspection are, however, necessary; for, while chiefs are in the habit of making promises very freely, they are very apt to fail in carrying them out, and the Medical Officers should be encouraged to go on patrol as much as possible consistent with the performance of their duties at Headquarters.

Bandajuma. *Bandajuma.*—A short report is submitted by Dr. Hunter, and a supplementary report by Dr. Gray, who was in charge of the district during the greater part of the year.

There were 74 cases treated in the District Hospital, and 1,006 out-patients were attended to, as compared with 2,478 the previous year. This decrease was due to a misapprehension on the part of Dr. Gray, with reference to a circular on the subject of medical attendance to paupers when *on patrol*.

Dr. Gray reports " that the general health of the district was good, and that of the European Officials was excellent. There were no serious cases of malarial or other fever, and no Europeans were invalided home."

There was an outbreak of small-pox in the district, but it did not become extensive at any time. Dr. Gray appears to have taken very active measures to cope with it, and vaccination was extensively performed.

Panguma. *Panguma.*—This is reported on by Drs. Wood-Mason and Burrows. There were 111 admissions to the District Hospital with 3 deaths, and 1,333 out-patients were seen.

The site of the District Headquarters has been unfavourably reported on, owing to being surrounded by swamps, and it is contemplated changing it.

Dr. Burrows reports that a bungalow is being built for Government Officials, but that it appears to provide for only one room, and a closed-in verandah for each officer, and that this is hardly compatible with comfort. It is also apparently intended to house two officers under one roof. Experience has shown that this is open to many objections, and I am strongly of opinion that each officer should have a separate bungalow.

The European Staff has enjoyed excellent health. The health of the native staff has been also satisfactory.

Sanitation.—Dr. Burrows states that "attempts to introduce trench closets as advocated by His Excellency the Governor have proved abortive, though initiated after great effort. A decided improvement was effected in the disposal of refuse and sweepings, but the people soon reverted to their old custom of utilizing the street close by as a water closet, and those further away returned to the bush." Sanitation.

It will take years of persistent effort to instil the most elementary principles of sanitation into the aborigines, but no doubt an improvement will be effected in time.

Karine.—This district was latterly in charge of Dr. Campbell. Karine.

There were 2,486 new cases seen, a decrease of 540 over the previous year, this being explained by the fact that the station was without a resident medical officer for some considerable time. There were 83 admissions in the Station Hospital, as against 80 the previous year.

The health of the station, both European and native, has been exceptionally good. There were no deaths.

The sanitation of headquarters is satisfactory, with the exception of the cesspit system, which prevails in the cantonment. It should be no difficult matter to alter this.

Koinadugu.—Dr. Ward was in charge of this station during the year. Koinadugu.

116 in-patients and 596 out-patients were attended to. The health of the Europeans was most satisfactory.

An outbreak of small-pox occurred, and 28 cases were treated in a temporary hospital. Vaccination was carried out as far as possible in the district.

The site has been removed from its old position to a more elevated one, and Dr. Ward considers that a vast improvement has been effected. The water supply is of remarkably good quality, and there is little liability to contamination. The earth closet is generally used, except in the case of some native officers, who adhere to the cesspit system with which they have been familiar in Freetown.

The reports from the Protectorate, therefore, show that the general health of the different stations has been satisfactory, and that the improvement which was reported last year has been well maintained.

Sanitation is making certain, if slow, progress, and within the next few years there should be a marked improvement to record.

In concluding what will in all probability be my last Annual Report on this Colony, I would venture to express the opinion that very considerable progress has been made in all directions in connection with the work of the Medical Department.

When I arrived, in 1895, there were three medical officers in the service besides myself; there are now fifteen. Additional dispensaries have been opened, and regular visits are now paid to outlying and hitherto unvisited districts.

The Colonial Hospital has been improved and extended, a maternity ward has been added, new quarters for the staff have been built, a resident European matron has been appointed, and the emoluments and conditions of service of the nursing staff have been much improved.

A Nursing Home for Europeans, with trained European nurses, was started in 1899, and has been of the greatest value to the community.

The greater part of the Lunatic Asylum has been rebuilt, medical officers have been stationed in different parts of the Protectorate, and the natives show, by the increasing numbers which attend, a great and growing appreciation of the benefits of European treatment.

The sanitation of Freetown has been greatly improved, though much remains to be done. A good plentiful water supply has been inaugurated, the surface drainage has been improved, and the water-courses dealt with. The removal of refuse has been done much more satisfactorily, and special attention has been given to the removal of vessels capable of breeding mosquitoes. A scheme of education in Hygiene and Sanitation has begun, and will eventually be of the greatest benefit. A comprehensive sanitary law has been passed, which will do much to facilitate sanitary work.

Lastly, a mountain railway has been constructed, and a cantonment built on the hills, thus permitting of the Europeans residing in the hills and of their segregation from infected natives.

Minor improvements have been effected, into the details of which I need not enter, but I venture to think that the above represents a record of sanitary progress to which I am justified in looking back with some degree of satisfaction.

W. F. PROUT,

Principal Medical Officer,

Sierra Leone.

Medical Department,

18*th May*, 1906.

RETURN OF DISEASES. (Out-Patients.)

For the Year 1905. FREETOWN.

TOTAL NUMBER TREATED	Officials.	C. Police.	F. Police.	Paupers.	
	1,947 + 158	893	190	4,873 + 4,590	= 12,651.

REGISTERED NUMBER OF NEW CASES.

	Officials.		C. Police.		F. Police.		Paupers.		TOTALS. Officials.		C. Police.		F. Police.		Paupers.	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
GENERAL DISEASES	—	—	—	—	—	—	—	—	612	57	189	—	37	—	967	986
Small Pox ...	3	—	1	—	1	—	58	12								
Cow Pox	—	—	—	—	—	—	—	—								
Chicken Pox ..	—	—	1	—	2	—	1	1								
Measles	—	—	—	—	—	—	1	—								
Influenza	—	—	—	—	—	—	—	—								
Whooping Cough...	2	—	—	—	—	—	36	52								
Mumps	—	—	1	—	—	—	3	1								
Dysentery... ...	—	—	3	—	—	—	6	5								
Intermittent Fever	287	27	78	—	6	—	157	178								
Remittent Fever ...	18	—	5	—	2	—	3	5								
Beri-Beri	1	—	1	—	—	—	2	1								
Syphilis—						—										
(a) Primary	1	—	—	—	—	—	7	2								
(b) Secondary	1	—	—	—	—	—	3	3								
(c) Tertiary ...	—	—	—	—	—	—	28	16								
Gonorrhœa ...	23	2	8	—	5		55	—								
Tape Worm ...	—	—	—	—	—	—	—	—								
Round Worm ...	—	—	—	—	—	—	—	—								
Alcoholism ...	1	—	—	—	—	—	6	—								
Debility	76	14	12	—	1	—	56	88								
Malformation ...	—	—	—	—	—	—	2	2								
Rheumatism ...	184	14	74	—	20	—	445	534								
Non-Malignant New Growth ...	—	—	—	—	—	—	4	2								
Malignant New Growth... ...	—	—	—	—	—	—	2	2								
Tubercle	3	—	1	—	—	—	15	7								
Leprosy	—	—	—	—	—	—	1	1								
Yaws	—	—	—	—	—	—	6	7								
Anæmia	1	—	4	—	—	—	7	8								
Diabetes	—	—	—	—	—	—	—	2								
Parasites	11	—	—	—	—	—	47	41								
Other Diseases ...	—	—	—	—	—	—	16	16								
Total carried forward	—	—	—	—	—	—	—	—	612	57	189	—	37	—	967	986

	Officials.		C. Police.		F. Police.		Paupers.		TOTALS. Officials.		C. Police.		F. Police.		Paupers.	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Total brought forward	—	—	—	—	—	—	—	—	612	57	189	—	37	—	967	986
LOCAL DISEASES—																
Nervous System—	—	—	—	—	—	—	—	—	25	3	9	—	1	—	37	46
Meningitis ...	—	—	—	—	—	—	—	1								
Hysteria	—	—	—	—	—	—	1	—								
Apoplexy	—	—	—	—	—	—	—	1								
Paralysis	1	—	—	—	—	—	1	2								
Neuralgia	20	2	9	—	—	—	25	34								
Vertigo	2	—	—	—	1	—	1	1								
Epilepsy	—	—	—	—	—	—	4	1								
Tetanus	—	—	—	—	—	—	3	3								
Insomnia	—	1	—	—	—	—	—	—								
Mania	1	—	—	—	—	—	1	1								
Melancholia ...	—	—	—	—	—	—	—	—								
Idiocy	—	—	—	—	—	—	—	2								
Headache ...	1	—	—	—	—	—	1	—								
Eye—	—	—	—	—	—	—	—	—	18	3	4	—	7	—	73	52
Conjunctivitis ...																
Iritis																
Keratitis																
Cataract																
Squint																
Ear—	—	—	—	—	—	—	—	—	7	—	4	—	1	—	31	39
Inflammation Ext. Meatus																
Deafness																
Nose—	—	—	—	—	—	—	—	—	4	—	—	—	—	—	6	6
Epistaxis																
Coryza																
Circulatory System	—	—	—	—	—	—	—	—	7	1	—	—	—	—	16	18
Pericarditis ...																
Valvular Disease ...																
Hypertrophy ...																
Palpitation ...																
Aneurism																
Respiratory System	—	—	—	—	—	—	—	—	151	11	44	—	12	—	371	330
Laryngitis ...																
Bronchitis																
Asthma																
Pneumonia ...																
Pleurisy																
Digestive System—	—	—	—	—	—	—	—	—	334	36	81	—	18	—	549	547
Stomatitis																
Teething																
Caries of Tooth ...																
Gumboil																
Toothache																
Total carried forward	—	—	—	—	—	—	—	—	1158	111	331	—	76	—	2050	2024

	Officials.		C. Police.		F. Police.		Paupers.		TOTALS. Officials.		C. Police.		F. Police.		Paupers.	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Total brought forward	—	—	—	—	—	—	—	—	1158	111	331	—	76	—	2050	2024
Sore Throat ...																
Quinsy																
Pharyngitis ...																
Dyspepsia... ...																
Enteritis																
Hernia																
Diarrhœa																
Constipation ...																
Colic																
Piles																
Fistula in Ano ...																
Hepatitis																
Jaundice																
Ascites																
Peritonitis ...																
Lymphatic System—	—	—	—	—	—	—	—	—	6	1	5	—	1	—	73	47
Hypertrophy of Spleen																
Inflammation of Glands																
Suppuration of Glands																
Thyroid—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	1
Goitre																
Urinary System—	—	—	—	—	—	—	—	—	6	1	4	—	—	—	46	13
Nephritis																
Bright's Disease ...																
Cystitis																
Incontinence of Urine																
Generative System	—	—	—	—	—	—	—	—	7	—	—	—	2	—	119	—
Male. Stricture of Urethra ...																
Urinary Fistula ...																
Phimosis (non-Gonorrhœal) ...																
Ulcer of Penis ...																
Hydrocele... ...																
Varicocele ...																
Orchitis (non-Gonorrhœal) ...																
Female. Inflammation of Ovary	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	145
Metritis																
Displacements ...																
Amenorrhœa ...																
Dysmenorrhœa ...																
Menorrhagia ...																
Affections connected with Pregnancy ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Affections connected with Parturition ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total carried forward	—	—	—	—	—	—	—	—	1177	114	340	—	79	—	2289	2230

	Officials.		C. Police.		F. Police.		Paupers.		TOTALS. Officials.		C. Police.		F. Police.		Paupers.	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Total brought forward	—	—	—	—	—	—	—	—	1177	114	340	—	79	—	2289	2230
FEMALE BREAST—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	26
Inflammation ...																
Abscess																
ORGANS OF LOCOMOTION—	—	—	—	—	—	—	—	—	4	—	1	—	1	—	21	18
Ostitis				*												
Caries																
Necrosis																
Synovitis																
Club Foot... ...																
Bursitis																
CONNECTIVE TISSUE—	—	—	—	—	—	—	—	—	6	—	1	—	—	—	108	62
Cellulitis																
Abscess																
SKIN—	—	—	—	—	—	—	—	—	53	1	27	—	5	—	438	150
Eczema																
Psoriasis																
Herpes																
Ulcer																
Boil																
Whitlow																
Ring Worm ...																
Scabies																
POISONS	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	3
INJURIES—	—	—	—	—	—	—	—	—	94	1	27	—	5	—	633	276
Heat Stroke ...																
Privation																
Burn																
Bruise																
Wounds—Incised																
„ Contused																
„ Gun-Shot																
Sprain																
Dislocation ...																
Fracture																
OPERATIONS ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Not yet Diagnosed ...	—	—	—	—	—	—	—	—	4	—	—	—	1	—	35	26
No Appreciable Disease	—	—	—	—	—	—	—	—	4	—	10	—	—	—	51	38
TOTAL ...	—	—	—	—	—	—	—	—	1342	116	406	—	91	—	3576	2829
SUBSEQUENT ATTENDANCES	—	—	—	—	—	—	—	—	605	42	487	—	99	—	1297	1761
GENERAL TOTAL	—	—	—	—	—	—	—	—	1947	158	893	—	190	—	4873	4590

HOSPITAL RETURNS, 1905.

Annual Medical and Surgical Returns, Colonial Hospital, Freetown.

Table No. 1.

	Males.	Females.	Total.
Patients remaining in Hospital on 31-12-04	42	23	65
Patients admitted during the year 1905	935	423	1,358
Total number treated	977	446	1,423
Cured	537	213	750
Relieved	214	119	333
Not relieved	57	41	98
Died	126	49	175
Remaining on 31-12-05	43	24	67
Total number treated	977	446	1,423

Table No. 2.

	Males.	Females.
Average stay, in days, of Patients discharged	17·316	16·717
" " " " " died	13·547	9·836
" " " " " remaining	30·651	21·3
Daily average in Hospital	43·605	20·767

Table No. 3.

1.—Rate per cent. of Patients (175) died in total number (1,423) treated, 12 39.

	12 hours.	24 hours.	48 hours.	72 hours.	Total.
2.—Patients who died within the following hours after admission :—					
Males	8	12	8	9	37
Females	8	10	3	6	27
Total	16	22	11	15	64

Table No. 4.

Number of Destitute Persons sent by the Police and Sanitary Authorities, and transferred to the Hospital at Kissy.

Males	11
Females	7
Total...	18

Table No. 5.

RETURN OF DISEASES AND DEATHS IN 1905 AT THE COLONIAL HOSPITAL.

Diseases.	Remaining in Hospital at end of 1904.	Year's Total.		Total Cases Treated.	Remaining in Hospital at end of 1905.
		Admissions.	Deaths.		
GENERAL DISEASES—					
Dysentery	1	17	10	18	2
Intermittent Fever	2	69	—	71	—
Remittent Fever	—	28	1	28	—
Febricula	—	8	—	8	—
Pyæmia	—	5	1	5	—
Septicæmia	—	3	—	3	—
Tetanus	1	6	1	7	—
Tubercle	—	28	8	28	3
Yaws	—	1	—	1	—
Syphilis—					
(*a*) Primary	—	3	—	3	—
(*b*) Secondary	—	—	—	—	—
(*c*) Tertiary	2	13	1	15	1
Gonorrhœa	1	11	—	12	—
Alcoholism	—	4	1	4	—
Rheumatism	4	110	5	114	5
Anæmia	1	5	1	6	1
Debility	2	33	7	35	1
Starvation	—	3	3	3	—
Small Pox	—	10	—	10	—
Sarcoma	1	6	2	7	—
Erysipelas	—	3	1	3	—
Measles	1	—	—	1	—
Trypanosomiasis	—	11	3	11	4
Other Diseases	—	7	1	7	—
DISEASES OF THE NERVOUS SYSTEM—					
Neuritis	—	5	3	5	2
FUNCTIONAL NERVOUS DISEASES—					
Paralysis	1	24	9	25	—
Epilepsy	—	5	3	5	—
Neuralgia	—	2	—	2	—
Apoplexy	—	7	3	7	—
Meningitis	1	6	2	7	1
Hysteria	—	2	—	2	—
Shock	—	3	—	3	—
MENTAL DISORDERS—					
Mania	—	10	—	10	1
Mental Aberration	—	1	—	1	—
DISEASES OF THE EAR—					
Otorrhœa	—	1	—	1	—
DISEASES OF THE EYE—					
Conjunctivitis	—	6	—	6	1
Iritis	1	2	—	3	—
Cataract	—	1	—	1	—
Ophthalmitis	—	4	—	4	—
Panopthalmitis	—	2	—	2	—
Corneal Ulcer	—	3	—	3	—
Carried forward	19	468	66	487	22

RETURN OF DISEASES AND DEATHS IN 1905 AT THE COLONIAL HOSPITAL—*contd.*

—	Remaining in Hospital at end of 1904.	Year's Total.		Total Cases Treated.	Remaining in Hospital at end of 1905.
		Admissions.	Deaths.		
Brought forward ...	19	468	66	487	22
DISEASES OF THE NOSE—					
Catarrh	—	1	—	1	—
Epistaxis	—	—	—	—	—
DISEASES OF THE CIRCULATORY SYSTEM—					
Mitral Regurgitation	—	8	4	8	2
Cardiac Syncope	—	1	1	1	—
Pericarditis	—	2	1	2	—
Aortic Diseases	1	2	—	3	1
Aneurism	—	3	1	3	—
Cardiac Diseases	—	2	—	2	—
Palpitation	—	1	—	1	—
DISEASES OF THE RESPIRATORY SYSTEM—					
Pleurisy	—	5	—	5	—
Pneumonia	1	64	26	65	1
Bronchitis	2	43	1	45	2
Asthma	—	2	—	2	—
Pertusis	1	1	—	2	—
DISEASES OF THE DIGESTIVE SYSTEM—					
Diarrhœa	4	41	13	45	3
Colic	—	14	—	14	—
Dyspepsia	1	14	—	15	1
Constipation	—	6	—	6	—
Hernia	1	12	—	13	1
Fistula in Ano	—	1	—	1	—
Gastritis	—	2	—	2	—
Hæmorrhoids	1	5	—	6	—
Abscess of Liver	—	1	—	1	—
Cirrhosis of Liver	—	3	2	3	1
Peritonitis	1	12	10	13	—
Jaundice	—	2	—	2	—
Vertigo	—	5	—	5	—
Ascitis	—	7	2	7	—
Appendicitis	—	—	—	—	—
Tonsillitis	1	1	—	2	1
Abdominal Tumour...	—	1	—	1	—
Hepatitis	—	9	1	9	—
Enteritis	—	4	2	4	—
Intestinal Obstruction	—	3	2	3	1
Prolapsus Recti	—	1	—	1	—
Perityphlitis	—	2	—	2	—
DISEASES OF THE LYMPHATIC SYSTEM—					
Adenitis	—	13	—	13	2
Rupture of Spleen	—	1	1	1	—
Lymphangitis	—	14	—	14	1
Spleenitis	—	2	—	2	—
URINARY SYSTEM—					
Chronic Nephritis	1	12	2	13	—
Bright's	1	31	17	32	2
Urinary Fistula	—	3	—	3	—
Uræmic Coma	1	2	2	3	—
Carried forward ...	36	827	154	863	41

RETURN OF DISEASES AND DEATHS IN 1905 AT THE COLONIAL HOSPITAL—*contd.*

—	Remaining in Hospital at end of 1904.	Year's Total.		Total Cases Treated.	Remaining in Hospital at end of 1905.
		Admissions.	Deaths.		
Brought forward ...	36	827	154	863	41
GENERATIVE—MALE—					
Stricture	2	10	2	12	2
Orchitis	—	4	—	4	—
Hydrocele	1	7	—	8	—
Extravasation of Urine	—	—	—	—	—
Ulcer of Penis	—	2	—	2	—
Phymosis	4	2	—	6	1
Elephantiasis of Scrotum	—	4	—	4	—
Retention of Urine	—	1	—	1	—
GENERATIVE—FEMALE—					
Leucorrhea	—	2	—	2	1
Retained Placenta	—	4	—	4	—
Disordered Menses	1	3	—	4	1
Parturition	1	49	—	50	1
Endo-metritis	—	8	—	8	1
Abortion	—	9	1	9	—
Abscess of Breast	—	8	—	8	—
Prolapsus Uteri	1	1	—	2	—
Other Uterine Diseases	—	9	—	9	—
Pregnancy	—	5	—	5	—
Vaginitis	—	2	—	2	—
Ovarian Cyst	—	1	—	1	1
ORGANS OF LOCOMOTION—					
Necrosis	—	4	—	4	—
Cellulitis	—	10	1	10	1
Abscess	—	37	1	37	3
Synovitis	1	7	—	8	1
DISEASES OF THE SKIN—					
Ulcer...	9	115	2	124	7
Boil	—	6	—	6	—
Eczema	2	6	—	8	—
Whitlow	—	6	—	6	—
Anihum	—	2	—	2	—
Craw Craw	1	2	—	3	—
INJURIES GENERAL—					
Fire Burn	—	5	2	5	—
INJURIES LOCAL—					
Contused Wound	—	11	—	11	—
Incised Wound	1	8	—	9	—
Lacerated Wound	1	3	—	4	—
Punctured Wound	1	8	1	9	—
Gunshot Wound	—	1	—	1	—
Fractured Thigh	2	7	—	9	—
Fractured Leg	—	3	—	3	—
Fractured Ribs	—	1	—	1	—
Other Fractures	—	5	2	5	—
Human Bite	—	1	—	1	—
Insect Bite	—	—	—	—	—
Contusion	—	27	—	27	—
Dislocation	—	3	—	3	—
Sprain	—	7	—	7	—
Bruise	—	8	—	8	—
Scald	—	2	1	2	—
Carried forward ...	64	1,253	167	1,317	61

RETURN OF DISEASES AND DEATHS IN 1905 AT THE COLONIAL HOSPITAL—*contd.*

—	Remaining in Hospital at end of 1904.	Year's Total.		Total Cases Treated.	Remaining in Hospital at end of 1905.
		Admissions.	Deaths.		
Brought Forward ...	64	1,253	167	1,317	61
SURGICAL OPERATIONS	1	80	8	81	4
POISONS	—	4	—	4	—
PARASITES—					
Dhobi Itch	—	1	—	1	—
Tape Worm	—	1	—	1	—
Guinea Worm	—	1	—	1	—
Round Worm	—	2	—	2	—
NO APPRECIABLE DISEASES	—	16	—	16	2
Total ..	65	1,358	175	1,423	67

Table No. 6.

SURGICAL OPERATIONS.

	Remaining.	Number.	Total.	Successful.	Relieved.	Not Relieved.	Died.
Abscess, Opening of	—	4	4	4	—	—	—
Abscess of Liver, Exploration into	—	2	2	2	—	—	—
Amputation of Leg	—	5	5	5	—	—	—
Amputation of Thigh	—	1	1	—	—	—	1
Amputation of Fore-arm	—	1	1	1	—	—	—
Amputation of Little Toe (Anihum)	—	4	4	4	—	—	—
Amputation of Little Finger ...	—	5	5	5	—	—	—
Abdominal Section	—	2	2	1	—	—	1
Catheterization	—	15	15	—	14	—	1
Elephantiasis of Scrotum	—	5	5	5	—	—	—
Extirpation of Eyeball	—	2	2	2	—	—	—
Fatty Tumour, Excision of ...	—	4	4	4	—	—	—
Gun Shot Wound	—	1	1	1	—	—	—
Herniotomy	—	3	3	—	3	—	—
Hæmorrhoids	—	1	1	1	—	—	—
Hydrocele Radical Cure	—	6	6	5	—	—	1
Keloid of Neck, Removal of ...	—	3	3	2	1	—	—
Perineal Section	—	5	5	3	1	—	1
Sequestrotomy	—	6	6	6	—	—	—
Ulcer, Scraped	—	11	11	11	—	—	—
Endo metritis, Curetting	—	12	12	12	—	—	—
Sarcoma Removed	1	1	2	2	—	—	—
Ankylosis Extended	—	2	2	—	2	—	—
Enlarged Spleen Punctured ...	—	1	1	—	1	—	—
Elephantiasis of Vulva Amputation	—	1	1	1	—	—	—
Lymphangitis Incision	—	8	8	6	2	—	—
Intestinal Obstruction	—	1	1	—	—	—	1
Retained Placenta Removed ...	—	1	1	1	—	—	—
Mastitis Incision	—	3	3	3	—	—	—
Total ...	1	116	117	87	24	—	6

	Remaining.	Number.	Total.	Successful.	Relieved.	Not Relieved.	Died.
Abscesses Opened	—	20	20	20	—	—	—
Foreign Body removed	—	1	1	1	—	—	—
Teeth Extraction	—	4	4	3	1	—	—
Catheterization	—	5	5	—	5	—	—
Circumcision	—	16	16	15	—	—	1
Cellulitis Incision	—	3	3	3	—	—	—
Bubo, Opening of	—	3	3	3	—	—	—
Granuloma Plastic	—	1	1	—	1	—	—
Skin Grafting	—	1	1	1	—	—	—
Whitlow, Incision of	—	1	1	—	1	—	—
Rupture of Vagina Lapirotomy ...	—	1	1	—	—	—	1
Fistula of Vagina Suturing ...	—	1	1	1	—	—	—
Incised Wound Plugged	—	1	1	1	—	—	—
Imperforated Hymen Incision ...	—	2	2	2	—	—	—
Syphilitic Node Tibio Grooved ...	—	1	1	—	1	—	—
Total ...	—	61	61	50	9	—	2

Table No. 7.

STATUS OF IN- AND OUT-PATIENTS TREATED AT THE COLONIAL HOSPITAL DURING 1905.

	Europeans.		Natives.								
	Officials.	Non-Officials.	Officials.		Frontier Police.	Civil Police.	Pay Patients.		Paupers.		
			M.	F.			M.	F.	M.	F.	
In-Patients ...	—	19	142	1	32	131	65	18	1,080	646	2,134
Out-Patients ...	239	—	1,100	100	89	440	366	825	3,219	1,996	8,374
TOTAL ...	239	19	1,242	101	121	571	431	843	4,299	2,642	10,508

Return showing Out-Patients treated in the various Dispensaries of the Colony and Protectorate except the Colonial Hospital.

Diseases.	Male.	Female.
General Diseases—		
Small Pox	184	118
Cow Pox	24	8
Chicken Pox	4	7
Measles	24	27
Influenza	—	—
Whooping Cough	56	40
Mumps	6	11
Dysentery	69	39
Fever Intermittent	561	352
„ Remittent	40	34
Beri Beri	4	—
Syphilis—		
Primary	26	26
Secondary	21	34
Tertiary	188	205
Gonorrhœa	370	8
Alcoholism	4	—
Debility	131	136
Rheumatism	1,491	975
Non-Malignant New Growth	5	9
Malignant New Growth	3	3
Tubercle	9	5
Leprosy	11	3
Yaws	46	35
Anæmia	12	21
Malformation	—	—
Other Diseases	5	5
Local Diseases—		
Nervous System—		
Meningitis	—	1
Neuritis	1	6
Apoplexy	1	—
Paralysis	11	12
Neuralgia	96	68
Vertigo	18	11
Epilepsy	4	—
Tetanus	2	2
Convulsion	1	—
Mania	7	1
Concussion of Brain	1	—
Insomnia	1	—
Amblyopia	3	2
Cramp	1	2
Torticollis	4	—
Hysteria	—	4
Headache	38	22
Idiocy	—	—
Diseases of the Eye	114	48
„ „ Ear	80	86
„ „ Nose	56	34
„ „ Circulatory System	103	100
„ „ Respiratory „	1,181	983
„ „ Digestive „	2,830	2,354
„ „ Lymphatic „	173	61
Carried Forward	8,020	5,898

RETURN SHOWING OUT-PATIENTS TREATED IN THE VARIOUS DISPENSARIES OF THE COLONY AND PROTECTORATE EXCEPT THE COLONIAL HOSPITAL—*continued.*

Diseases.	Male.	Female.
Brought forward	8,020	5,898
Thyroid	2	2
Urinary System	44	11
Generative „	351	293
Female Breast	—	25
Organs of Locomotion	109	64
Connective Tissue	82	86
Skin	1,231	809
Poisons	5	—
Injuries	859	211
Surgical Operations	6	—
Parasites	534	812
Not yet diagnosed	29	32
No appreciable Diseases	106	68
TOTAL	11,378	8,311
Subsequent Attendances	11,088	8,245
GRAND TOTAL	22,466	16,556

Return showing In-patients treated in all the Hospitals of the Colony and Protectorate except Colonial Hospital during 1905.

	Diseases.	Remaining in Hospital at end of 1904.	Yearly Total. Admissions.	Yearly Total. Deaths.	Total Cases Treated.	Remaining in Hospital at end of 1905.	Remarks.
General Diseases.	Small Pox	9	673	135	682	7	
	Chicken Pox	—	1	—	1	—	
	Measles	—	1	—	1	—	
	Influenza	—	—	—	—	—	
	Cholera	—	—	—	—	—	
	Dysentery	—	13	2	13	1	
	Febricula	—	2	—	2	—	
	Fever, Intermittent ...	1	89	1	90	1	
	„ Remittent ...	1	16	—	17	2	
	Beri Beri	—	5	2	5	—	
	Erysipelas	—	1	—	1	—	
	Tetanus	1	—	—	1	—	
	Tubercle	—	4	3	4	—	
	Leprosy	10	—	—	10	4	
	Yaws	—	1	—	1	—	
	Syphilis—						
	(*a*) Primary ...	1	2	—	3	—	
	(*b*) Secondary ...	25	29	4	54	28	
	(*c*) Inherited ...	—	2	—	2	—	
	Gonorrhœa	4	43	—	47	2	
	Alcoholism	—	1	—	1	—	
	Rheumatism	7	83	2	90	9	
	Non-Malignant New Growth	2	3	1	5	—	
	Malignant New Growth	—	—	—	—	—	
	Anæmia	1	2	—	3	—	
	Debility	5	17	6	22	5	
	Septicæmia	—	—	—	—	—	
	Other Diseases... ...	1	2	—	3	—	
Local Diseases. Diseases of the Nervous System. Sub-section 1.	Neuritis	2	9	1	11	3	
	Meningitis ...	—	2	1	2	—	
	Congestion of Brain	—	1	1	1	—	
	Hydrocephalus ...	—	—	—	—	—	
	Abscess of Brain...	—	—	—	—	—	
Sub-section 2.	Functional Nervous Disorders—						
	Apoplexy... ...	—	—	—	—	—	
	Paralysis	11	5	2	16	9	
	Chorea	1	—	—	1	1	
	Epilepsy	3	5	2	8	1	
	Neuralgia ...	—	2	—	2	—	
	Hysteria	—	1	—	1	—	
	Locomotor Ataxia	5	—	2	5	3	
	Hemiplegia ...	5	6	2	11	6	
Sub-section 3.	Mental Diseases—						
	Idiocy	1	—	—	1	1	
	Mania	1	—	—	1	—	
	Dementia... ...	1	2	1	3	1	
	Other Diseases ...	—	2	—	2	—	
	Carried forward ...	98	1,025	168	1,123	84	

RETURN SHOWING IN-PATIENTS TREATED IN ALL THE HOSPITALS OF THE COLONY AND PROTECTORATE EXCEPT COLONIAL HOSPITAL DURING 1905—*cont.*

	Diseases.	Remaining in Hospital at end of 1904.	Yearly Total. Admissions.	Yearly Total. Deaths.	Total Cases Treated.	Remaining in Hospital at end of 1905.	Remarks.
	Brought forward...	98	1,025	168	1,123	84	
LOCAL DISEASES.	Diseases of the Eye	3	14	—	17	2	
	„ „ Ear	—	1	—	1	—	
	„ „ Nose ...	—	1	—	1	—	
	„ „ Circulatory System	—	18	6	18	1	
	„ „ Respiratory System	4	74	2	78	1	
	„ „ Digestive System	4	89	3	93	1	
	„ „ Lymphatic System	1	50	1	51	3	
	„ „ Urinary System	1	15	—	16	1	
	Generative, Male	16	62	2	78	3	
	„ Female	1	6	—	7	—	
	Organs of Locomotion ...	3	12	1	15	—	
	Cellular Tissue	1	41	1	42	2	
	Skin	31	71	6	102	15	
	Injuries General	—	2	—	2	—	
	„ Local	4	57	1	61	3	
	Surgical Operations	5	18	2	23	1	
	Poisons	—	—	—	—	—	
	Parasites	1	3	—	4	—	
	N. A. D.	2	5	—	7	3	
	Thyroid	—	1	—	1	—	
	Grand Total	175	1,565	193	1,740	120	

Table I.

TABLE SHOWING THE INFANTILE MORTALITY.

——	24 Hours and under.		1 Day to 1 Week.		1 to 2 Weeks.		2 to 3 Weeks.		3 Weeks to 1 Month.		1 to 2 Months.		2 to 3 Months.		3 to 4 Months.		4 to 5 Months.		5 to 6 Months.		6 to 7 Months.		7 to 8 Months.		8 to 9 Months.		9 to 10 Months.		10 to 11 Months.		11 to 12 Months.		Total.
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	
January	7	6	5	3	—	—	1	—	—	—	—	1	1	—	—	—	—	—	1	2	1	1	—	1	—	—	—	1	—	1	—	1	33
February	3	1	6	3	1	2	—	1	1	—	—	1	2	1	2	—	—	1	1	—	—	1	—	1	—	1	1	—	—	—	—	1	31
March	5	2	5	3	1	1	2	—	1	1	—	1	1	—	1	1	1	1	1	—	1	—	—	—	—	—	—	1	—	—	—	—	30
April	—	1	2	1	1	1	—	—	2	1	1	1	1	—	2	—	1	2	—	4	—	—	—	1	1	—	1	1	—	—	—	2	27
May	2	5	7	2	1	2	1	—	—	—	4	2	—	1	—	—	1	1	—	2	—	1	—	2	1	1	—	—	—	1	1	—	38
June	3	—	1	—	2	—	1	—	—	1	1	2	1	2	1	1	1	2	2	—	1	1	1	—	—	2	1	2	—	—	—	1	30
July	—	3	1	1	—	2	—	—	—	—	2	—	3	—	1	—	—	—	—	2	2	—	—	—	1	—	—	2	—	2	1	—	23
August	1	3	1	2	—	1	—	—	1	1	1	1	—	1	—	2	—	3	—	—	—	—	—	—	2	1	1	—	—	—	—	—	22
September	3	—	1	2	—	1	—	1	—	—	—	1	1	—	—	—	—	—	—	2	—	1	1	—	—	—	1	—	—	—	1	1	17
October	3	3	5	4	—	1	—	—	—	1	—	3	—	—	—	—	1	—	—	—	—	1	—	—	—	—	1	—	—	—	—	—	23
November	3	—	1	2	1	—	—	—	—	—	—	1	—	—	1	1	2	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	13
December	—	1	2	1	1	—	1	—	—	2	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	9
TOTAL	30	25	37	24	8	11	6	2	5	7	9	14	10	5	8	5	8	10	5	13	5	6	2	5	5	5	6	7	—	4	3	6	296