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SIERRA LEONE.



Annual Report

ON THE

MEDICAL DEPARTMENT

FOR THE

YEAR ENDED 31st DECEMBER, 1908.



PRINTED BY
WATERLOW AND SONS LIMITED, LONDON WALL, LONDON,
1909.

SIERRA LEONE.

Annual Report

ON THE

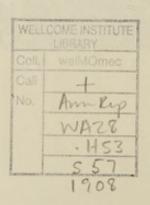
MEDICAL DEPARTMENT

FOR THE

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ANNUAL REPORT ON THE MEDICAL DEPARTMENT FOR THE YEAR ENDED 31st DECEMBER, 1908.

I have the honour to submit the annual Report on the Medical Department of this Colony for the year 1908.

1.—MEDICAL STAFF.

During my absence on leave from 3rd November, 1908, Dr. Kennan, Senior Medical Officer, acted as Principal Medical Officer.

The following changes, vacation leaves, &c., took place in the staff:-

- Dr. J. B. H. Davson, Medical Officer, was promoted Senior Medical Officer, Gold Coast Colony. He left the Colony on the 15th April.
- Dr. W. F. Todd's appointment as Medical Officer terminated on the 20th August.
- Dr. J. A. Scotland, Native Medical Officer, died at Kaballa in the Koinadugu District on the 7th February.
- Dr. J. S. Pearson, who arrived in the Colony on the 6th of May, was appointed Medical Officer, vice Dr. Davson promoted and transferred (Gold Coast).
- Dr. J. McConaghy, who arrived in the Colony on the 21st of October, was appointed Medical Officer, vice Dr. Todd.
- Dr. W. A. O. Taylor was appointed Native Medical Officer on the 13th of April, vice Dr. Scotland, deceased.
- Miss G. G. Micklethwaite, of the Nursing Staff, was appointed Matron, Colonial Hospital, vice Miss M. C. Roxburgh.
- The following Medical Officers, Drs. H. E. Arbuckle, J. F. W. Ward, and D. Burrows returned from leave of absence during the first part of the year.
- Drs. Wood-Mason, Allan, Kennan, (S.M.O.), Hunter, Orpen, Alexander, Campbell, Jackson-Moore and Murphy went on leave of absence during the year.

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OBITUARY.

With much regret I have to report the death of Dr. J. Allen Scotland, Native Medical Officer, who entered the public service on the 1st February, 1901, and served in various parts of the Colony and Protectorate up to the time of his death which took place at Kaballa in the Koinadugu District on the 7th February, 1908.

JUNIOR STAFF.

- Messrs. O. E. King, W. A. Macauley and C. H. Johnson were promoted first class Dispensers.
- Mr. T. L. Hooke, third class Dispenser, was promoted second class Dispenser.
- Messrs. E. H. Beccles, T. C. Williams, J. A. Anderson and E. F. Smith, first class Nurses, were promoted third class Dispensers.
- Messrs. J. A. Short and J. J. Nicols were also re-appointed third class Dispensers.
- Dispenser J. H. Johnson was promoted Assistant Resident Dispenser in the Gambia Colony.
- Mr. W. Z. Young, Resident Dispenser, was placed on the Pension List on the 13th of October, after serving twenty-four years.
- Mr. M. N. Lardner, Assistant Resident Dispenser, was promoted Resident Dispenser, vice Mr. Young.
- Mr. O. E. King, first class Dispenser, was promoted Assistant Resident Dispenser, vice Mr. Young.

Misses Lucretia Jones and Ellen Elliott, Nurses, resigned their appointments during the year.

The following Officers went on leave during the year :-

Dispensing Staff.—Messrs. T. L. Hooke, W. A. Macauley, W. Z. Young, and I. H. Wright.

Clerical Staff.—Messrs, G. M. Spilsbury and D. T. Betts, also Mr. A. R. Buckle of the Lunatic Asylum,

The Medical Staff of the Colony consisted of :-

Principal Medical Officer				1
Senior Medical Officer Medical Officers, West A	frican	Medical	Staff	1 12
Native Medical Officers				3
Total				17

2.—FINANCIAL STATEMENT.

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

REVENUE.	ACTUAL.				
	£	8.	d.		
Maintenance of Patients from other					
Colonies	709	5	5		
Hospital Receipts	96	9	3		
Maintenance of persons in Quar-					
antine	388	8	0		
Nursing Home Receipts	128	13	4		
Sale of Medicines		7	5		
Fees, Medical Student	5		0		
a coo, accurate contact					
Total	£1,423	3	5		
	west.		I I		
Expenditure.					
. Latinizations.			12		
	£	8.	d.		
Personal emoluments and other					
charges, Medical Department	15,501	1	11		
Hospitals and Dispensaries	4,962	7	3		
Personal emoluments, &c., Nursing					
Home	810	4	5		
Total !	E21,273	13	7		
			_		

3.—PUBLIC HEALTH.

The estimated population of the Colony proper for the year was 78,235. The total number of deaths registered in the Colony was 1,836. The total number of births registered was 1,257.

Registration outside Freetown is not compulsory. The death rate for Freetown with an estimated population of 37,682 is calculated to have been 22 per thousand; the birth rate to have been 16 per thousand, the total number of births registered being 632.

The following diseases were responsible for the largest proportion of deaths in Freetown:—

Malarial Fevers	 	 	150
Debility	 	 	98
Nervous System	 	 	95
Respiratory System	 	 	184
Circulatory ,,	 	 	45
Digestive System	 	 	87

The total number of deaths registered in Freetown was 840 exclusive of 6 deaths of persons on whose bodies Coroner's Inquests were held and 2 who were executed.

Of this total, 840, there were 222 deaths under one year, showing a death rate of 351 per thousand among infants.

The infantile death rate for the past seven years has been :-

1902	1903	1904	1905	1906	1907	1908
466	471	398	461	434	357	351.

EUROPEAN DEATH AND SICK RATE.

The total number of deaths among Europeans resident in the Colony during the year was 13.

And the causes of these were as follows :-

Malarial Fever			 	3
Blackwater Fever			 	1
Simple continued Fo	ever		 	1
Tuberculosis			 	1
Delirium Tremens			 	1
Pneumonia			 	1
Cardiac Failure			 	2
Apoplexy		***	 	1
Cirrhosis of Liver			 	1
Gun Shot (self inflic	cted)		 	1
				13
				-

The actual European resident population in the Colony is estimated at 550. The number of deaths from climatic causes was 4.

The following Table gives a comparative statement of European deaths during the past ten years.

Year.		Landed	Resident in	n Freetown.	Gar	Total.			
				from Vessels.	Climatic.	Otherwise.	Climatic.	Otherwise.	2011
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	_	8
1906		***		 3	2	1	1	1	8
1907	***			 * 2	3	3	2	3	11
1908				 * 1	1	6	3	2	12

^{*} These cases are not included in the total.

OFFICIAL SICK RATE.

The total official strength for the year was :-

Europeans Natives	 		 	160 546
		Total	 	706

Of the former there were 86 admissions on the sick list. Of the latter there were 587 admissions on the sick list. Freetown Official sick rate for the past five years is shown in the following tables :-

OFFICIAL SICK RATE FOR LAST FIVE YEARS.

ALL OFFICIALS.

		1904	1905	1906	1907	1908
Total number on sick list		372	366	308	372	405
,, of days on sick list		2,879	2,593	2,299	2,483	2,099
Average daily number on sick list		7.86	7.10	6.28		5.73
" number of days on sick list		7.74	7.08	7.46	6.67	5.16
", number of days on sick list		11.4	100	1 40	0.01	9.10
EUROPEAN	OF	FICIALS				
		1904	1905	1906	1907	1908
Total number on sick list		70	82	68	73	60
" of days on sick list		510	680	531	561	305
		1.39	1.8	1.45		.83
" number of days on sick list		7.28	7.28	7.80	7.68	5.08
NATIVE ()FF	CIALS.				
Total number on sick list		302	284	240	299	245
,, of days on sick list		2,369	1,913	1,768	1,922	1,787
						4.89
1 1 1		7.84	6.77	7.36	6.42	5.17
" number of days on sick list		1 04	011	1 90	0 42	011

The following invalidings and deaths occurred among officials:-

EUROPEANS.

	Inval	idings					2
	Deat	hs					2
Causes	of invalidings			patitis a			
,,	deaths		 Cir	rhosis c	of Liver	and	Pneumonia.

		NA	TIVES.				
	Invalidi Deaths					1	
Causes of invalid		 		_{T1}	ntestin		Paralysis. Obstruction.

The best way to represent in figures what the health of a constantly shifting small population is, is a matter of some difficulty. A new Return has been prepared this year which shows the percentage loss of working days to the service through ill-health of Europeans. (Sundays have been included as working days.)

The total number of European Officials who resided in the Colony or Protectorate during any portion of the year 1908 was 160, and the total number of days spent by them in residence was 36,576, while the number of such days spent on the sick list was 382, which shows that only 1.04 per cent. days were thus lost to the service. Nearly half the number of days on the sick list were so spent by 15 second class European Railway Officials. Notwithstanding the low sick rate, there were two deaths in the Colony and two invalidings. (1 death also occurred from Blackwater Fever while the Officer was on leave in England.)

Small-pox.—There was no epidemic of Small-pox in Freetown during the year and but few cases in the Protectorate.

Vaccination.—The lymph now obtained is that prepared at the Liverpool Institute of Comparative Pathology, and supplied in fortnightly consignments from Liverpool and stored in the "cool" room during the voyage. The result is eminently satisfactory; all Medical Officers report a very high percentage of successes. To test the degree to which the juvenile portion of the community of Freetown are protected, a census was recently obtained from the principals of some of the Schools, Male and Female; the result showed that out of 854 pupils about 90 per cent. had been vaccinated. This must be regarded as eminently satisfactory.

Total successful vaccinations for the year from Returns available :-

Colony Protectorate			 	3,294 1,023
	ole .	Total	 	4,317

QUARANTINE.

Reference to the information given under heading "Lazaretto" will show the work that was done by this Institution during the short period quarantine was maintained against Gold Coast ports on account of Plague existing there. As some misconception arose elsewhere as to the action taken at Freetown during the time, it may be as well to remark here that on no occasion was any person's luggage or cargo refused permission to land.

Deck passengers and native crew were sent for "observation" to the Lazaretto, as "surveillance" in a place like Freetown with persons having no fixed address is impossible.

Undoubtedly the maximum care was taken in this matter, but the peculiar circumstances of this port require special precautions, as it is a large coaling, watering and labour providing place at which ordinary ships lie close to shore in calm waters.

Further, less than the greatest care entails the maximum penalty on ships carrying passengers and cargo from here to Conakry and Dakar on their arrival at those ports, and this trade is most important to Freetown. There is a comparatively large military establishment at Freetown which deserves that nothing less than the maximum care shall be taken to protect it from imported infections epidemic disease. It seems desirable that not only a British inter-Colonial but an International inter-Colonial agreement regarding quarantine should be arranged for West Africa.

SANITATION OF FREETOWN.

The following returns show some of the work done by the Sanitary Inspectors of the Sanitary Department of the City Council during the year:—

Number of	Summonses				44
	Convictions				35
	fines			£7 16	s. 1d.
Persons ar	rested for comr	nitting	nuisan	ices	43
	f notices served				2,489
,,					
,,	dead animals	found	and b	uried	66

Professor W. J. Simpson visited Sierra Leone from 4th October to 2nd November on a special commission with reference to matters connected with the West African Medical Staff and Sanitation. Most of his time here was spent in Freetown and during his visit he thoroughly inspected the town and outskirts.

He also visited Bo, Kennema and Daru in the Protectorate. Dr. Kennan, Senior Medical Officer, was detailed to accompany him. Pending the receipt of his report it is not proposed to refer here to many of the important matters it is expected will be considered in the report, which with his recommendations is awaited with the greatest interest.

The comparative absence of the common house fly in Freetown is very striking to those especially who have had experience of this annoying pest and probable disease disseminator in other subtropical and tropical countries. Indeed, the house fly is less in evidence at all times of the year than it is in most places in England during the summer. To what this partial exemption is due does not readily appear. Cattle roam the streets, horses are not absent, and sheep and goats gambol over waste places. One never sees flies swarming on and over food exposed here. The Meat Markets, Vegetable and Produce Markets and Hospital wards provide few specimens. A few destitute poor reclining in the streets are not tormented by flies. I would like to be able to believe that our immunity from flies is due to the energy of the scavenging brigades, but I think it possible that some more "natural" enemy is chiefly accountable. The large number of fowls which are kept in the city, and which are mainly dependent for their food on their own energy in hunting for it, may partially account for the scarcity of the house flies.

The fowls are probably assisted by other natural enemies which feed on the larvæ.

A large masonry refuse incinerator was completed by the Government early in the year and handed over to the Sanitary Department of the Municipal Council for their use. Since then it has been doing good work. The Municipal Council at the end of the Municipal year (October 31st) took over the work of scavenging into its own hands instead of having it done by contract. There can be no doubt its action in this matter will be found to have been wise.

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A new Market building was completed in King Jimmy valley near the slaughter house. The building was designed and built by the Surveyor's Department of the Municipal Council. It is hoped that a Fish Market may soon be built. One is very much needed, as the present arrangements by which fish, &c., is sold in special streets named for the purpose "markets" leaves much to be desired.

A very great many things are still needed—Incinerators, refuse bins, "laundries," mules and carts, &c., &c., but all else pales before the transcendent necessity for draining and the solution of the question of night soil disposal. I do not wish to anticipate Professor Simpson's Sanitary Report, and will therefore not refer to these matters further here.

Progress was made with the new Cape sanitary station for Plague and Yellow Fever. A Hospital, Dispenser's house, European Isolation barri, kitchens, latrines, wash-houses, disinfecting chamber, mortuary and a Police guard house have been built.

A "Clayton" disinfecting machine has been obtained. Some work in rat destruction was undertaken while Plague was in the Gold Coast.

Drains.—Freetown affords a serious warning to other West African towns of the great mistake of introducing a good water supply before street drainage has been put in order. To some extent there is no "dry season for the drains leading from the stand pipes. Notwithstanding the use of spring taps, leakages, waste, spilling from filled and filling vessels will occur, enough to produce pools in rough drains and not enough to thoroughly and frequently flush them out. This mistake is repeated with monotonous frequency in the tropics though the result has been pointed out over and over again. The more liberal the supply the more serious the result in this respect. The more finances are strained to provide the supply the longer must the work of drainage be postponed. It would, I believe, be far better to postpone even for years the distribution of a stand pipe street supply than provide it before the drains are put in such thoroughly efficient order as it is necessary they should be to enable them to carry off the relatively small quantity of waste from stand pipes in the dry seasons. The provision of large section drains, which Engineers are so anxious to construct for the safe accommodation of "record" and maximum rain falls too frequently means exhausted financial resources long before the poorer streets of the town have been touched.

It is no impertinence for one who is responsible for the health of a tropical town to criticise the result of the "sanitary" work of Engineers.

BONTHE.

The sanitation of Bonthe is under the control of the Town Council, and remarks on the subject will be found in the Medical Officer's report.

PROTECTORATE.

A sanitation scheme for the towns in the Protectorate was formulated some years ago under the supervision of District Commissioners. I have no information regarding the progress of the scheme.

A grant-in-aid of £100 per annum is given towards the sanitation of Bo, and the labourers who work chiefly as scavengers and night soil removers for the European settlement are under the direction of the Medical Officer.

Leprosy seems to be on the increase, and it may be necessary to found Leper Colonies to treat and control these patients.

HILL STATION CANTONMENT.

The good points of the settlement have been maintained. Some slight additions have been made in drainage work, but much remains to be done. The fencing of compounds remains incomplete. The reason assigned is that original occupiers objected. But very little advance has been made during the year in extending the area cleared of "bush," but the ground already gone over has been kept in good order. Occupiers continue to show an increasing interest in their bungalow compounds and premises.

The "sanitary trenching ground" has been kept in good order.

The removal of the temporary sub-prison with about twenty-five prisoners from Hill Station is contemplated. It is to be regretted that there is not more to show for their presence in the way of "bush clearing," and that this work, which is essential, will have to be done after their removal by paid labour. The Cantonment provides an example of the fact that while Officers almost invariably express their desire that separate and distinct sets of quarters should be allotted to each Official, some will nevertheless voluntarily arrange to receive during their whole tour guests who share the quarters intended for one Officer only. It seems questionable whether in the interest of Officers themselves such arrangements should be allowed to be made, though no one would think of objecting to an Officer offering occasional hospitality for short periods. There is a regrettable tendency on the part of occupiers to keep animals (more or less domesticated), dogs, cats, monkeys, parrots and fowls in their bungalow compounds; and in view of the fact that all such animals harbour parasites, and by the food scattered by them from their cages encourage rats, it will be necessary to limit this licence before the practice becomes even more general.

CLINE TOWN.

The Cline Town Cantonment consists of the Government Railway Works, shops, some offices, stores, sheds, the main line sidings and a station, as well as residential quarters for the European staff (average number about twenty). Barbed wire fences cut off the general enclosures from public roadways, while galvanized iron fencing surrounds some of the bungalows. It occupies a large part of a plateau between the hills and the river. The Cantonment is within the Municipal area. It is useless now to lament that more foresight was not shown in the early days of the Railway Development in securing a definite well-placed area capable of providing for more efficient segregation and greater expansion. Public highways pass through the Cantonment, to say nothing of the main line of railway with numerous sidings. Large galvanized iron sheds, covering workshops, stores, &c., are necessarily not far removed from Officials' quarters. Most sanitarians are aware of what railway works of all kinds in the tropics mean to a neighbourhood. In the "Journal of Tropical Medicine and Hygiene" of November 16th, 1908, under "Engineers and Malaria" it is stated that "despite the growing acceptance by the general public of sound ideas as to the "origin of malaria, the Engineering profession remains unregenerate and

"obdurate" and "it is as absurd to expect an Engineer or Architect to be a "competent judge of the sanitary potentialities of his work as it would be to ask a health officer to construct a cantilever bridge." This matter is gaining daily more attention from Health Authorities, and it is to be hoped that as Railway Engineers in the tropics appreciate more the "sanitary potentialities" of their work, that work will become involved in a routine which will effectually remove the sources of the present discontent on the part of sanitarians. Effort is being made at Cline Town to gradually fill in depressions, borrow pits, &c., which had been left chiefly between sidings. A general scheme of surface drainage has been prepared by the Maintenance Department and a few details of the work have been commenced. It is most devoutly to be hoped that this enterprise may be carried on energetically and to finality. there is a slight fall in the ground level towards the river the soil is of a retentive nature, and as sheds and bungalows become more numerous on an area, which it will prove expensive to greatly enlarge, it becomes a specially serious matter that the conditions ruling in the rainy season should be adequately provided for. The fact that a large cemetery has within recent years been opened close to the Cantonment, a public road only intervening, has been the subject of some local criticism, but a well-ordered cemetery, such as this one is, provides no sanitary danger; it might even be a useful segregation barrier; but unfortunately, placed as it is, it blocks for all time extension of the Cantonment in the very direction it is most desirable it should take place and in which it would have required least expenditure; i.e., away from native Cline Town. This condition cannot now be altered, and some perhaps not inconsiderable expense will almost certainly become necessary within comparatively few years. Railway works, extensions, new sidings, stores, &c. and new residential quarters cannot be provided indefinitely within a restricted area without a very undesirable crowding of all together.

QUARTERS FOR EUROPEAN OFFICIALS IN FREETOWN.

Few European Colonial Officials now live in Freetown, but some must always have quarters in the town. With the exception of the Director of Public Works, no European Official occupies quarters in a building owned by the Government (Government House excluded), though European Officials belonging to the Customs, Public Works, Police, Prison and Medical Departments reside in the town. In the interest of the health of Officials quartered in the city it is most desirable that proper accommodation in suitable Government-owned buildings should be provided for them. The number of suitable houses in private hands available is very small, and none are furnished. The surroundings of even the best of such houses render them eminently unsuitable for tenancy by Europeans.

GOVERNMENT "REST HOUSE," FREETOWN.

In view of the fact that the house rented as a temporary "Rest House" was found unsuitable on sanitary grounds it may not be out of place to refer here to the fact that arrangements have been made to provide a temporary "Rest House" in Freetown against which no similar sanitary objections will be possible. Rapid progress is being made in this direction.

NOTES ON ANTI-MALARIAL MEASURES IN 1908.

This branch of sanitation was attended to regularly during the year; it now, in fact, forms a very important part of the general sanitary work carried out in Freetown.

- 2. Special attention was paid to the removal from all premises of old tins, bottles, and similar refuse likely to act as breeding places for mosquitos, high weeds and grass were kept cut down, and all other forms of rubbish likely to attract and harbour insects constantly removed. The work of removal was not however as quickly and as efficiently performed as one would wish, owing to the absence of mule or oxen transport, and rubbish had to be removed by manual labour from the dustbins and other collecting places to the dumping grounds on the beach and the burning pits. In a large town built over a wide area this method of removal of rubbish proved tedious and unsatisfactory, the three Contractors who had the scavenging of the town not having provided animal transport for the work; I am however pleased to say that this important work has now been taken over by the Town Council, and mules and oxen for the removal of refuse are being provided.
- 3. A large masonry rubbish burner of conical shape has been erected during the year by the Government, and I am glad to say it has worked so well that several others of similar pattern are being built this year in suitable sites throughout the town.
- 4. Special precautions were taken to prevent washerwomen and others blocking up the natural water courses in order to form collections of water for washing in, thereby forming pools more or less stagnant and likely to act as mosquito breeding grounds.
- 5. Professor Simpson during his visit recommended that a drain be cut in the sloping ground at the base of the hills on the western side of the town in order to intercept the subsoil water percolating from the high ground to the lower flat lands known as the Grassfields. It is to be hoped when this work has been completed that the numerous stagnant pools that are now one of the features of this locality will disappear, producing a less water-logged state of the ground and fewer breeding places for mosquitos.
- 6. In my opinion the cesspits in their present defective form are one of the chief sources of the mosquitos met with in Freetown, and until they are subject to some strict law as to their construction they will continue to be so. Compared with Bathurst and many other places on the coast the number of mosquitos found in Freetown is not large, and common house flies and other diptera are remarkably few.
- 7. The repairs to the streets and reconstruction of the drains were continued during the year, the amount spent on these works being £2,607. 14s. 10d.

The following works were carried out by the Public Works Department:—

1,600 feet of new drains and concrete gutters.
4,360 ,, of non-masonry drains.
Repairs to the canals in the water courses.
164 culverts repaired and cleared.

There is still much to be done in improving the drains in Freetown as well as the streets.

8. Hygiene is now taught in all the Secondary Schools, the scholars attending them numbering a thousand. For the encouragement of the study of this subject, the sum of £180 was voted by the Government for distribution

as bonuses and prizes to the schools and scholars at the annual examination held in December. At the 1908 examination 68 candidates competed, with the following results:—

3	obtained	over	90	%	mar	ks	
16	,,	,,	80	%	and	under	91
18	"	,,	70			,,	81
13	,,	,,	60		,,	,,	71
7	,,	,,	50	7	"	,,	61
6	,,,	"	40		,,	17	51
4	,, T	ınder	41	%			

It may now be said that the teaching of Hygiene forms one of the regular subjects in the educational curricula of the schools of Freetown, and that keen interest is taken in it both by the teachers and scholars.

9. The death rate of Freetown for the year was calculated to be 22 per 1,000. 150 deaths were caused by malarial fevers as compared with 202 deaths from the same cause in 1907. The European residents numbered 550 and the number of deaths among them were as follows:—

Officials		 	 	2
Military		 	 	5
Commercial,	&c.	 	 	5

Of these deaths 4 were due to climatic causes. Showing a death rate of

 $21~{\rm per}~1{,}000~{\rm from~all~causes}$ 7~ ,, ~ ,, from climatic causes.

FREETOWN. METEOROLOGICAL RETURN FOR THE YEAR 1908.

			Твмрв	BATURE.			RAINI	ALL.	WE	NDS.	
	Solar Maximum.	Maximum on Grass,	Shade Maximum.	Shade Minimum.	Range.	Mean.	Amount in Inches.	Degree of Humidity.	General Direction.	Атогидо Force.	Remarks.
January Jebruary Jarch April Jay June July August Jeptember Jetober November December	 146·0 146·8 147·0	61·0 65·0 64·0 67·0 66·0 66·8 67·5 67·2 69·2 67·4 62·0	96·0 96·0 95·0 94·6 96·0 91·0 88·2 85·8 90·2 94·2 92·2 93·2	69·0 72·0 69·0 70·0 67·0 65·4 78·2 69·0 69·2 66·0 69·0 70·0	27·0 24·0 26·0 24·6 29·0 25·6 10·0 16·8 21·0 28·2 23·2 23·2	82·5 84·0 82·0 82·3 81·5 78·2 83·2 77·4 79·7 80·2 80·6 81·6	Nil. Nil ·49 ·98 11·29 17·69 34·34 36·65 29·74 8·39 3·32 Nil.	67 66 61 64 70 76 82 82 86 78 75	W W W W W SW W W W	1 1 1 2 1 1 2 3 3 3 2 2 1	
Total	 						142.89				

HOSPITALS AND DISPENSARIES.

COLONIAL HOSPITAL—FREETOWN.

(Extract from Report by Dr. Burrows.)

During the year the Colonial Hospital was in charge of the Senior Medical Officer, Dr. Kennan, from the beginning of the year to the first week in May, and from that date to the end of the year in charge of Dr. Burrows, who acted as Senior Medical Officer. Dr. Renner occupied, as usual, his useful post as Medical Officer to the female side of the Hospital during the entire year.

The following Medical Officers were attached to the Hospital for shorter periods viz:—Drs. Hunter, Murphy, Wood-Mason, Pearson, Taylor and McConaghy.

Matron.—Miss Roxburgh retired from the Service on January 27 and was succeeded by Miss Micklethwaite on June 24.

The disadvantages accruing from the interregnum of even a few months between the departure of the previous and the appointment of a new Matron are now so palpable, and the advantages of her presence and superintendence so great, especially in the maintenance of discipline among the junior staff, that it forces one to urge that no interregnum should ever supervene, as the good previously done is only too rapidly undone.

Consulting Room for Government Officers.—A separate room has been "devised" at the expense of the verandah space for this purpose and has already been productive of economy both of time and labour.

It is now possible for one Medical Officer to have control of all Official patients and to return them to duty sooner than if, as under the old order of things, they were under the observation of two or three Medical Officers in daily rotation.

Laboratory.—This useful department was organised during the year, and in the separate report attached details will be found of investigations of a purely clinical nature which amply justify the very small amount of money expended on it. It is to be hoped that greater liberality may be shown in future.

Ward Accommodation.—Separate bath rooms, latrines and clothing stores were devised by utilizing the space at the further ends of the verandahs of each ward. This has made it possible to abandon the unsightly and insanitary cabinets, which were placed in each verandah, an improvement of equal service to effective sanitation and to the maintenance of decency and privacy.

Accommodation of Nursing Staff.—Unfortunately, lack of both space and funds has rendered a much needed reform in this direction impossible. (As an alternative scheme, I would here suggest a possible solution of the difficulty. Contemporary needs in the early days perhaps rendered it imperative that the Apprentices and Male Nurses should live on the premises. I see no reason now why this practice should not be reconsidered. The work can just as effectually be performed, and the relief from the responsibilities attached to the superintendence of the private life of the young men attached to the Hospital would result in the better performance of the more essential professional duties of the staff, which have increased without any appreciable amelioration in the direction of an augmented staff. If the Male Nursing staff

were allowed to live outside, their progress and proficiency could just as easily be determined and the extra accommodation thus secured will be productive of much comfort to the Female Nurses, who would continue to live in the premises and whose ranks can be augmented to such an extent as would provide for almost the entire nursing of the Hospital. Dr. Kennan has proposed the division of the Male Apprentices into two classes, Dispensers and Dressers. I suggest the latter class be largely substituted by Female Nurses as in European Hospitals. It is a point, in my opinion, worthy of consideration. Of course, it would entail several sweeping alterations which need not necessarily interfere with the normal working of the Hospital but which must be in the long run conducive to such efficient economy as to warrant the appointment of a resident Medical Officer and two Assistant Matrons, contingencies which sooner or later must be faced, especially in view of the increasing sphere of activity and utility of the Hospital, and more so on the obstetric side.)

Surgical Operations.—During the year operations requiring an anæsthetic to the number of 135 were performed. A few operations for Elephantiasis Scroti and Amputations of the leg were performed under the influence of stovaine.

Captain Houghton, R.A.M.C., kindly demonstrated its use for spinal analgesia on these occasions. The analgesic result in each case was entirely satisfactory.

The list of Operations is as follows:-

or Operations is as follows .—		
Abscess, incisions for		 5
Amputations		 10
Buboes, incisions for		 2
Circumcisions		 18
Curetting		 3
Cataract		 1
Cellulitis, incisions for relief of		 2
Compound Fracture, setting		 1
Dilatation, Stricture of Urethra		 13
Dilatation, Stricture of Rectum		 2
Extirpation, filarial glands	***	 1
Extravasation of Urine, relief of		 3
Examination of injured joints		 2
Elephantiasis Scroti, removal		 6
Enucleation of eye ball		 2
Entropion, radical cure		 2
Fistula in Ano, incision		 2
Foreign bodies, removed	***	 5
Hæmatocele, radical cure		 1
Hæmorrhage, control of		 3
Herniotomy		 8
Hydrocele, radical cure		 2
Puncture of Liver, exploratory		 1
Plastic Operations		 2
Rupture of Perineum, suturing		 3
Rupture of Scrotum		 1
Scraping Ulcers		 2
Skin Grafting	***	 1
Synovitis, incision for		 1
Suturing, extensive wound of th	igh	 1
Taxis		 2
Tumours, various, removal of		 26

There was in addition one case in which tracheotomy was performed.

Among the foreign bodies removed was a needle which had been driven into the chest of a small boy. No point of entry could be discovered, but the outer end of the needle could be seen oscillating under the skin in the precordial area in strict time with the heartbeats.

Its removal was attended with no untoward effects.

Statistics.—Table 1.—This Return shows a falling off of 87 males and 32 females, or a total decrease of 119 patients.

Total for 1907 1,099 In-patients.
Do. 1908 980 do.

This may be in part explained by the fact that three of the largest wards in the Hospital were under repairs, in one case for over five weeks.

Tables 2 and 3.—The only point worthy of consideration is that there were 128 deaths, or an increase of 34 over the number of last year, but 28 died within 12 hours, and 21 within 24 hours of admission. These two numbers combined, 49 deaths, are 30 in excess of the corresponding deaths during 1907, so that the actual number of deaths among patients who had the advantage of continued treatment is practically the same as in 1907. The possibility of plague infected moribund cases being brought to Hospital was borne in mind and careful examination was made in this connection in every such case.

Table 7.—This Return shows an increase of 3,372 patients, both male and female, a substantial advance on the number for 1907 and still more so (of 5,985) on the number for 1906. The number of official Europeans requiring treatment shows an increase of 91 cases, while non-official Europeans show a decrease of 27 cases.

Table 8.—The increase in the total number of deaths as shown in Table 8 of 34 over the number for last year includes the following individual causes:—

 Tuberculosis
 ...
 increase of 2 deaths

 Respiratory diseases
 ...
 ,, 11
 ,,

 Digestive
 ...
 ...
 ,, 6
 ,,

 Parturition
 ...
 ,, 6
 ,,

The increase in deaths from "affections connected with Parturition" is accounted for by the fact that many of these cases are brought in a condition of collapse. There would appear to be a growing confidence in civilized methods in Midwifery practice (but their extensive application in the Hospital is unfortunately cramped).

Dr. Renner appends a special report on the useful work carried out by him in this Department. (Vide Table IX.)

General Remarks.—The Staff of the Hospital gave satisfaction during the year, but much remains to be desired. Efficient control of the Hospital will never be effectual without the appointment of a Resident Medical Officer.

Paying Outpatients.—The sum realised under this head amounted to only £10 1s. 11d. for the entire year. Considering that not more than 3d. is usually received from patients whose appearance would warrant the demand for this insignificant sum, then of the 21,499 outpatients treated there must be many who take advantage of the Hospital in applying "in forma pauperis."

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Work done in the Clinical Laboratory.—The small room adjoining the outpatients' waiting room was in constant use as a Laboratory where work of a purely Clinical nature was carried on during the year. With the limited and somewhat primitive apparatus, partly collected from the various Departments of the Hospital and private sources, a fairly workable set was devised for carrying out microscopic investigations and the Laboratory diary started in May shows 300 cases subjected to examination, the results of which were of great assistance to the medical staff of the Hospital. It is hoped, therefore, that our small beginning will justify any future demands for the supply of the necessary apparatus to equip a complete Clinical Laboratory, which is a "sine qua non" to a tropical hospital especially. For the investigation in the Laboratory of the 300 cases recorded from the 27th May to the end of 1908 the following Medical Officers were responsible:—

	Pearson	 	 10	cases.
Dr.	McConaghy	 	 8	,,
	Burrows	 	 282	,,

Of the 282 cases personally investigated 100 concerned specimens of fæces systematically examined with the idea of arriving at some estimate of the prevalence of Ankylostomiasis in Freetown. Details are given later.

Specimens.			Positive.	Negative.	Remarks.
Malaria—Benign Tertian			17	_	
,, Sub-Tertian			6	-	
" Quartan			1		
" Negative Bloods		***	_	49	Excluding Malarial Fevers.
Filaria Nocturna			1	_	
" Diurna			1		
" Perstans		***	1	-	
" Negative			_	13	
Sputum B. Tuberculosis		4.0	13	16	
" Pneumococci			2	_	
Ringworm				1	
Gonococci			10	1	1 Eye case.
Secretions for Pus			5	1	Vaginal, Peritoneal, Fracture, &c
Blood Counts			6		
Human Milk			_	1	For Pus.
Guinea Worm			-	1	
Amœba Coli			5		
Balantidium			2		
Tetanus				1	
Trypanosomiasis				4	
Blood Rape Case	***		-	1	No spermatozoa,
Dead Rats				2	Marie Control of the
Leprosy			1	1	and the second s
Hæmoglobin Estimates				1 100	Many.
Urine Pus			1	1	
Urine Bilharsiosis			1	2	
Ankylostomiasis			54	46	i.e., 54 per cent. of cases.

Malarial Fevers.—The 24 cases in which parasites were found seems a small number for so highly infected an area as Freetown. However, 49 cases gave negative results as regards parasites. The majority of these were adult natives in whom the parasites are not as a rule so readily found. In the case of one specimen taken from a child only five months old, and ten minutes before death, the infection exceeded anything I had ever seen. As many as six ring forms were found in one cell and quite 10–15 infected cells in each field.

Trypanosomiasis.—Four cases were examined in which the clinical manifestations were almost pathognomonic of the condition, but no parasites were found. Both blood and gland juice were examined.

Filariasis.—Of the 16 cases examined specifically, only three yielded positive results and fortunately of distinct varieties, viz., M.F. perstans, diurna and nocturna.

B. Pestis.—One suspicious bubo case in a Kroo sailor and two dead rats found in a street were examined and fortunately gave negative results.

Blood Counts and Hamoglobin Estimates were made in many cases and the information thus gained was of great clinical assistance.

Tuberculosis.—29 cases of sputum were examined in suspected cases of Phthisis from the wards and the B. Tuberculosis was found in 13 cases. This is a high percentage and when one reflects on the nature of the disease and the ravages likely to be made by an apparently recently introduced malady among a people hitherto considered almost immune in their natural and primitive surroundings, this result is a matter for serious consideration, especially as the artificial methods of living are spreading to the aborigines whose notions of ventilation in the construction of their so-called English houses cannot be considered adequate. The craze for clothing, when indeed it is not essential, is also possibly a potent factor in producing a less virile people, and there is a regrettable tendency to over-clothing, and means for the purchase of clothing are too often found at the expense of food. The habit of spitting one might style a local national pastime, it is generally deemed sufficient to obliterate traces of the mucus or sputum ejected by grinding it into the floor with the heel, but even this æsthetic proceeding is frequently neglected.

Bilharziosis.—Two cases were reported last year in the report on the Panguma District in which ova with both lateral and terminal spines were found. Two cases were found by me in Freetown, one strictly speaking early in January, 1909, but showed terminal spines only. One case came from the Mendi country (Panguma) and the other was a native sailor.

Amœba Coli and Balantidium were found in seven cases of dysentery. Five of these cases were Europeans, one of whom had pronounced Balantidium infection and the others Amœbic.

Ankylostomiasis.—100 specimens of faces were examined. They were taken from cases in the Hospital and from outside cases, and also some others from cesspits in the town, of old faces at the bottom of the pits and of scrapings from the superficial and recently deposited faces. Much has been said and written recently on this subject, especially with reference to its extensive prevalence among a large percentage of the inhabitants of certain areas without any of the cardinal and more serious concurrent symptoms being observed.

The same result has been noted in the series of 100 cases examined by me here. These were taken at random from all classes of Hospital patients and from a few outside cases, and were fairly representative of the entire community.

Ankylostome ova were discovered in 54 per cent. of cases, but in no instance was there observed any symptom directly attributable to the infection. As a matter of fact the faces giving the largest and most prolific supply of ova were those of a well-nourished, happy young Timini boy, who was admitted for an ulcer. It was noted that the better class of patients, who wore boots persistently, were infected to a less degree and that barefooted children and young adults furnished the larger proportion of cases. In view of the mode of infection this is only a natural result. No skin eruptions such as have been described as due to Ankylostomiasis were observed in any of these cases. Some condition may be wanted in the production of more severe constitutional break down, but all the necessary aids to it are present in the shape of a highly infected community, a

prolonged season of rain and the consequent pool formation, and a barefooted people. It is not safe to assume that the severe form of the disease will never supervene, but in any case the knowledge of the extensive presence and the potentialities of the parasite should constitute a sufficiently serious reason in urging more effective sanitation.

Experiments.—A few cases were submitted to test with a view of arriving at some idea of the strength of disinfectants required to arrest development of the ova and to kill the larvæ. Cyllin and Petrol were used and the results arrived at are briefly described in the Table following (vide Table attached):—

DISINFECTION OF ANKYLOSTOME STOOLS WITH CYLLIN.

Specimens.	Treated with pure Cyllin and Petrol.	Pure Petrol.	Water.	2 per cent. Watery sol. of Cyllin.	3 per cent. Watery sol. of Cyllin.	5 per cent. Watery sol. of Cyllin.
Faces from bottom of cess- pit contain- ing young and mature larvæ.	Larvæ killed immediately on contact.	(Under cover slip) Larvæ re- tracted on contact. No apparentafter effect.	Continued activity.	All larvæ killed within 1 minute.	All larvæ killed,	-
Fresh Faces. Large number of ova, in various stages of segmen- tation.			After 24 hours, many larvæ hatched. Advanced segmentation.	After 72 hours, No free larvæ but fully de veloped and alive in egg. When ova were ruptured by pressure larvæ es- capedand died at once.		After 24 hours. No free larvæ Retarded seg- mentation.
Do. (Another case.)	-	_	After 48 hours. Free larvæ and fully de- veloped larvæ in ova.	After 48 hours. Segmentation proceeding very slowly.	After 48 hours. Segmentation arrested. No larvæ.	_
Do,	-		4 days old. Many free larvæ and a few ova, more or less advanced.	4 days old. Larvæ dead in ova.	4 days old. No change. Segmentation completely arrested.	_

(Sgd.) D. BURROWS, W.A.M.S.,

Medical Officer, i/c

COLONIAL HOSPITAL LABORATORY.

Sierra Leone, 11th February, 1909.

NURSING HOME.

(FOR EUROPEANS).

There were 42 cases admitted during the year.

The numbers treated in the Home during the past six years were :-

	1903	1904	1905	1906	1907	1908
Cases	 76	90	79	59	66	42
Deaths	 nil	nil	3	2	4	3

The following shows the class from which patients were received:-

Government	Emplo	yees	Railw All ot	ay Dep	artmen	t	$\frac{8}{4}$ 12
Commercial I Shipping	Firms						29 1
							42

The diseases met with were as follows :-

Dysentery			***	 	2
Intermitten	t Feve	er .		 	19
Remittent	,,	***		 	1
Malarial Ca	chexia	ı		 	1
Blackwater	Fever			 	2
Febricula				 	3
Gonorrhœa				 	1
Myalgia				 	1
Tubercular				 	1
Diseases of	the C	Circulatory	System	 	1
2)		Respiratory	,,	 ***	1
,,		Digestive	,,	 	5
. "		enerative	***	 	1
Connective				 	2
Diseases of	the S	kin		 	1

The deaths were due to the following causes :-

Simple continued Fever	 	 1
Tubercular Pneumonia	 	 1
Cirrhosis of Liver	 	 1

RECEIPTS AND EXPENDITURE.

Expenditure				£810	4	5
Receipts				128	13	4
Deficit made up	by Go	vernme	nt	681	11	1

It will be seen that the Government Officials received into the Home constitute less than one-third of the total and they have been chiefly Railway Officials of the second Class, Platelayers, Drivers, &c. The Nursing Home continues to deserve the uncomplimentary remarks passed on it in the Report for 1907. It is a very expensive luxury. Nearly all the Government Officials

admitted are on salaries of less than £300 per annum; the charge for such is 7s. 6d. per diem (stimulants not included) and of this, the Official pays 2s. 6d. per diem, the Government paying the difference.

Three European Nurses are engaged for service in the Home.

The Military authorities have made other arrangements for the Hospital treatment of their European Officers, consequently, it is not to be expected that the Home will be of any further use to them.

THE GAOL.

(Extracted from Report by Dr. McConaghy.)

The daily routine and general conditions of the gaol during the year were those prevailing in former years. A large percentage of the sickness among the prisoners was malarial in character. There was also a considerable amount of Dysentery. Many of the other cases were minor ailments of various kinds.

There were no epidemics of a contagious character. The sanitation of the gaol was effectively carried out, the compound and cells being always clean. The quality of the food has been satisfactory. The daily average strength of prisoners during the year was 218. There were 262 patients (254 male and 8 female) treated in the Prison Hospital during the year and among these there were five deaths — Total number of out-patients treated was 4,227.

For the number of patients, with the diseases, treated during the year—Vide Tables.

KISSY INSTITUTIONS.

(Extracts from Report by Dr. W. F. Campbell.)

Lunatic Asylum.—There were 73 male and 40 female lunatics at the beginning of the year, 16 males and 9 females were admitted to the Asylum during the year and 11 deaths occurred showing a marked decrease in the number of deaths when compared with the number of the previous year. Taking into consideration the large number of inmates, it is worthy of note that there was no epidemic disease as experienced two years ago and there was no case of accident.

The work done by the lunatics continues the same, namely, garden and general work for the males and laundry and sewing work for the females.

Two patients died of Beri Beri, two of Heart Failure, two of general Dropsy, two of General Paralysis of the insane, one of Dysentery, and two of Asthenia. Six patients were placed under observation but as they showed no signs of insanity were discharged; seven patients were relieved and discharged to the care of their friends by order of the Principal Medical officer. One absconded.

Recapitulation :-

Remaining in the Asylum at the beginning of year	113
Patients admitted during the year	25
Patients relieved and discharged from the Asylum	7
Died	11
Patients placed under observation but showed no signs of	
insanity and were discharged to the care of their friends	6
Absconded	1
Remaining in the Asylum 1/1/09, 74 males and 39	
females total	113

Female Incurable Hospital.—At the beginning of the year there were 36 patients, 42 were admitted during the year, total number of deaths occurred 11, chiefly from Senility, Syphilitic Exhaustion and Paralysis.

There were three Lepers, one absconded, two discharged to the care of their friends. A Nurse is in charge of the inmates and the general work is done by the Male Attendants.

Male Incurable Hospital.—There were 85 patients at the beginning of the year and 85 were admitted during the year, and 50 deaths occurred; the deaths were mostly due to old age, Syphilis and Paralytic Exhaustion.

The death rate of this Institution is always high and it is to be attributed to the many admissions of elderly and debilitated people. During the year there were seven Lepers, one absconded, six remaining.

Lazaretto.—The number of persons placed in the Lazaretto under observation during the outbreak of Bubonic Plague at Acera, Gold Coast Colony, was as follows:—Men 1,062, Women 52, Children 34, total 1,148. But no development of the disease took place.

Small Pox Hospital.—During the year 17 cases of Chicken Pox were admitted. The disease was of a mild type and the patients were all aborigines and all discharged cured.

Dispensaries.—1,223 out-patients were seen at the Kissy Dispensary as against 1,120 the previous year. At Wellington 517 patients were attended to during the year, an increase of 82 over the previous year, the majority of these being minor ailments.

Changes in the Staff.—Assistant Matron Davies discharged in August and Lucinda Davies appointed. Attendants Cole and Collins discharged on medical grounds.

Labourers Toma and Tiller promoted to the ranks of Attendants. Horatio Thomas and Sylvanus Davies appointed Labourers.

Food Supply.—This has been very satisfactory; no complaint as to quality or promptitude of delivery.

The Garden.—The amount realised for vegetables sold during the year was £7. 19s. 6d.

European Staff at Clines.—The health of the Europeans at Clines has on the whole been satisfactory. *One was invalided and two deaths occurred.

^{*} These are included in the invalidings and deaths previously mentioned.

REPORT ON THE KING-HARMAN MATERNITY WARDS OF THE COLONIAL HOSPITAL.

PRINCIPAL MEDICAL OFFICER.

I have the honour to submit the following Report on the work done in the King-Harman Maternity Wards as a Special Department of the Female Division of the Colonial Hospital during the year 1908. This is the first time that a separate Report of this kind has been submitted since its inauguration seven years ago.

- The Wards consist of a Public Ward of five beds and a Private Ward containing one bed, but capable of holding two beds. No private patient was admitted during the year.
- 3. The total number of patients admitted during the year into the Public Ward was 57 against 60 for the previous year. Of these 26 were Primapara and 31 Multipara. The condition of the mothers on admission may be classified as follows:—

Good 11, Fair 32, Weak 10, Moribund 4-Total 57.

The deaths amongst these were 10 due to the following causes :-

- (1.) Exhaustion 4; of these (a) Two after delivery outside, Placenta being retained, died within an hour of admission: (b) One dying half an hour after admission and before delivery: (c) One dying after Podalic Version (Transverse Presentation).
- (2.) Puerperal Fever 2, Eclampsia 1, Puerperal Peritonitis 1, Acute Bronchitis 1, Mitral Regurgitation 1.

These deaths were due in the majority of cases to preventable causes, such as, ignorance as revealed by the cases on admission, delay, carelessness, and filth.

Five operations were performed, 4 by Forceps, and 1 by Podalic Version.

(4.) The admissions into the King-Harman Wards during the past seven years have been as follows:—

Year.			A	dmissions.
1902	 	 	 	47
1903	 	 	 	29
1904	 	 	 	61
1905	 	 	 	74
1906	 	 	 	46
1907	 	 	 	60
1908	 	 	 	57
			Total	374

Total 374

These figures show that as yet the full advantage of this important branch of the Colonial Hospital has not been widely known and fully appreciated as it should have been during the period of its existence. This is not to be wondered at when it is considered what great prejudice against the Hospital, largely due to the native customs and traditions, exists amongst the larger section of the community, numbering about 47,000, and composed of from 50

to 60 different tribes each having its own tribal traditions and customs as to the manner of treatment to be given to a patient during the period of pregnancy and parturition. Among these traditions and customs which obtain among the Aborigines and lower class of Creoles may be mentioned:—

- (a.) "Sadaka," or charity as it is called, that is, the making of offerings to departed relatives before the period of parturition.
- (b.) The drinking during the stage of parturition of certain decoctions.
- (c.) The oiling externally of the parturient abdomen so as to render easy passage for the birth of the child.
- (d.) The belief that the after-birth should never be burnt but buried in the earth with the uterine surface turned upwards or otherwise the patient will become sterile.
- (e.) The bathing or squeezing of the patient with hot water for a certain period in order to effect, as they suppose, the closing of the pelvic joints, which in their opinion have become loosened and require special attention.
- (f.) The "Kommorjahdaying," or bringing into the "Parlour" or open air of the child on the seventh day if a female and on the ninth day if a male, when there must be feasting and rejoicing with neighbours and friends, and in the case of some native tribes, dancing.

If it is a normal case of labour the native midwife becomes a persona grata in the family; she is supplied with her daily liquor at night during the period she remains with the patients, which is from seven to nine days.

It is not to be wondered therefore that the Colonial Hospital with its European method of treatment does not find favour as yet amongst them. In fact the Hospital is dreaded by many of them not only for the reasons above given but principally because it is believed that it is in the Hospital that the Fetish man with his terrible medicine which he can send by occult means, and also the Witches, have power to inflict dire disease on, or increase the malady or ailment of, the patient. Ridiculous as it is and may appear, this superstitious belief is so ingrained in their minds that in my opinion it will take all the combined and continuous efforts of the Schools and Churches for many years to eradicate it. For the only hope that such a belief will be dispelled lies in the diffusion of knowledge of physical laws and hygiene, and greater enlightenment generally of the people, and this can only be commenced in the Schools and among the rising generation.

Ministers of religion could help considerably towards this end.

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In this connection, it may not be out of place to mention that while the Government have commendably led the way by the granting of prizes and rewards to pupils in the Secondary Schools who succeed in passing the annual examination in hygiene, it would serve to popularize the subject and do increased good if the teaching of the subject was made compulsory in both the Elementary and Secondary Schools. For anything that would enable the boys and girls to know of their own bodies and bodily organs would also help to undermine and ultimately remove the terrible incubus or nightmare of superstition which weighs upon a large section of the native community.

With respect to the educated middle class Creoles it is my belief that many of them do not avail themselves of the advantage of the King-Harman Wards, partly on account of a natural delicacy, and partly from the wrong idea entertained by them that sufficient privacy will not be afforded to them there. It is to be hoped that with fuller, clearer knowledge of the methods of treatment pursued in this branch of the Hospital, the apprehension and objection of this section will gradually give way to increasing confidence and eventually disappear.

- (5) Viewing this subject from the standpoint of the Medical profession, I am happy to say that one of the objects for which the King-Harman Wards were established namely—the training of native women and girls as nurse-tenders, nurses and midwives—is now being carried out under the able direction of Miss G. E. Micklethwaite, the Matron, who has realised the importance of this duty; for we have under training eight young women, five as staff resident nurses and three as probationers. The idea of being a trained nurse is gradually taking possession of the young women of the middle class and we are having more applications for admission than heretofore, and this is due to the fact that, on the recommendation of the Principal Medical Officer, the executive has approved and made provision in next year's Estimates for an allowance to be granted to probationers which will be of great assistance in procuring necessaries, such as boots and other articles. It will take some time before the highly educated native ladies, whose family could support them without such aid, come into the Hospital to do the drudgery work which is a necessary part of the training of a nurse, although locally it is not so severe as ladies in England have to undergo.
- (6) On the whole I am of opinion, notwithstanding the drawbacks I have mentioned, that this branch has a great future of usefulness before it and will yet adequately meet a great and increasingly felt want in the community and more than justify its establishment. With a view to illustrate my remarks in paragraph 4, I append the notes of a case treated by a native midwife or granny with the aid of relatives (Appendix A) and a description of the customary management of labour by native midwives. (Appendix B).

(Signd.) W. RENNER,

Medical Officer in charge of

KING-HARMAN WARDS.

SHERBRO.

(Extract from Report by Dr. C. B. HUNTER.)

The Staff-Medical Officer, Dr. Davson, was in charge of the District from 1st January to 10th April, when he was relieved by Medical Officer, Dr. Jackson-Moore, and he having completed his annual tour, Dr. Hunter resumed charge at the middle of October.

Dispenser Frazer was transferred in June, his place being taken by Dispenser Short.

Male Nurse Caulker resigned and left the service at the end of November and Nurse Fewry was appointed in his place.

Female Nurse Johnson has been working here throughout the year.

Health of European Residents.—The District Commissioner and the Assistant District Commissioners have not been on the Sick List at any time of the year.

The Medical Officer kept good health.

The Commercial Firms in the District employed about 25 or 30 Europeans whose health on the whole has been satisfactory, one death only having occurred among them, due to Pneumonia.

Health of Native Officials.—There were 140 admissions to treatment from the Staff of Native Officials during the year, mostly of short periods, due mainly to malarial forms of fever, chills and minor ailments. There was one death in the Police contingent, due to Debility following Epileptic attacks.

Hospital Buildings.—These have been kept in a satisfactory state of repair during the year.

Operations.—There were 21 major operations performed during the year as follows:—

Inguinal Hernia, radical cure		 	7
Elephantiasis Scroti, removed		 	4
Large Abscesses, opened and drained	1	 ***	4
Lipoma, removed	***	 	2
Hydrocele, radical cure		 	2
Amputation of leg		 	1
Ligaturing for Aneurism		 ***	1

There were 4 deaths after operations, 2 of these for Hernia and 2 for Abscess.

Admissions to Hospital.—There were 185 In-patients and 2,495 Out-patients given treatment throughout the year; a large number of the In-patients were cases of Ulcers of a Syphilitic nature.

Hospital Fees.—The sum of £24 19s. 1d. has been collected from in-and-out-patients showing an increase over former years.

Small Pox Hospital.—There were no cases admitted to this Institution during the year.

Epidemics.—There have been no epidemics in the District during the year.

Vaccination.—During the latter months of the year there have been regular fortnightly supplies of lymph received, and vaccination has been successfully carried on, in and around Bonthe, although the people do not agree readily to have it done; with a little perseverance, however, a considerable number have been vaccinated.

The Gaol.—There have been no deaths among the prisoners during the year and no serious case of illness, but at times the cells have been overcrowded, as many as 10 and 12 in one cell during the night.

Sanitation.—The Municipal Board of Bonthe look after the sanitation of the town and it may be considered a clean one. The Sanitary Inspectors do their work very well. Concrete surface drains are being fixed in the sides of the streets as funds are available. A public Slaughter House has been erected which was much required, as cattle were killed for consumption at any places which suited the convenience of the butchers and these were not subject to inspection.

BATKANU.

The District was under the charge of Dr. W. F. Todd till August 11, upon which date Dr. Wood-Mason, who writes the report, took over charge from him. The barracks for the Court Messengers are well laid out, the houses being arranged at good intervals in the form of a square, with enough space inside to form a parade ground. In the centre of this space the Meteorological Station has been fixed. The houses have recently been rethatched, and mud-The barracks are, if anything, somewhat too near the European quarters. I frequently find fully fed anopheles in my house. The distance to the nearest native house is not more than 200 yards, probably less. number of Europeans in the Station for the year was five, two District Commissioners, two Medical Officers, and one unofficial inhabitant. With the exception of Dr. Todd, who had to go into the Nursing Home, Freetown, the health has been good. In this connection, I should like to point out the liability to lesser degrees of scurvy in this station. This remark applies only to those officers, e.g., Medical Officers, who remain in the station most of the time, and is based on the following reasons:-Fresh meat is only obtainable once a month, vegetables are extremely difficult to get, the people refusing to sell, because they think that by holding them up they can get higher prices.

Eggs are scarce and frequently bad when sold.

The symptoms noticed were soft, painful, bleeding gums, some anæmia, subcutaneous hæmorrhage from slight or no cause and a tendency to blood-stained stools. These symptoms all cleared up when limes are obtained and lime juice taken, but reappear if lime juice run out. Limes are very scarce here. The reason for the scarcity of food and the consequent reliance on tinned food is that, though the geographical centre of the District, Batkanu is situated in the most sparsely populated part of it.

The native Staff numbered 59; their health was good. There were no deaths among the European or Native Officials.

The quarters for the Europeans are good, but exceedingly hot.

The house occupied by the Assistant District Commissioner is only raised from the ground about two feet. The Prison is in a dilapidated condition, not being strong enough to last another wet season and is, I understand, to be rebuilt. It is not sufficiently large for the requirements of the District. The cells average 500 cubic feet in capacity but are insufficiently ventilated. The health of the prisoners has been good.

The Hospital buildings have recently been repaired and repainted. The accommodation is sufficient for the District.

Dispenser John relieved Dispenser Thomas, who was transferred to Kaballa in November.

The amount realised for sale of medicines during the year was £8. 6s. 3d., being an apparent decrease when compared with the amount for 1907 (£10. 2s. 9d.) of £1. 6s. 8d.

The number of out-patients treated was 921, being a decrease of 304 as compared with the number seen in 1907; of these 921, 266 were officials (14 Europeans, 452 Natives) and 655 Paupers.

15 in-patients were treated in Hospital, 10 were Court Messengers and five Paupers. There were no deaths.

In reality, considered in proportion to the number of people attended, there is an increase. The amount collected during the rainy season is small, but increases rapidly as the dry weather sets in, the wet season and the "Hungry season" are coincident in time. The people are becoming used to the idea of paying something towards the cost of the medicines supplied.

There was no outbreak of Small Pox in the District during the year.

Vaccination has been performed regularly during the year. 324 were done altogether, 218 being successful, 24 failed and 20 were not seen. I did 195, with 163 successes, 19 failed and 13 not seen. The lymph supplied from Liverpool was good.

A large part of the District remains without any protection from Small Pox.

Sanitation.—The pail system only is used by Officials, the pails being emptied daily into the trenches in the trenching ground. Garbage and house refuse is buried in pits which, when full, are either covered in with earth and the contents left to dry, or if dry enough, the contents are burnt in the pits.

A weekly inspection of the Prison and Barracks is carried out.

Water Supply.—The water supply is taken from a stream in the wet weather, care being taken to see that the people do not pollute it by bathing and washing clothes at or above the place where the water is withdrawn. In the dry season the water has to be taken from the river, which is at no time clean. Special care is taken to boil and filter this water.

Officers, when on patrol in the District, reaching a town where they are to spend the night, are given a house, usually the Chief's. The houses are built with a circular part from which a small room opens on each side. The Officer is given the central circular part, and the Chief and his family insist on occupying the side rooms. I have pointed out to the District Commissioner the unpleasantness and danger of this proceeding and explained that the houses are generally full of mosquitos, which have recently fed on infected children, or are, at any rate, infected, and will in all probability infect the Officer. I have also drawn attention to the difficulty of dislodging the native family without risking a disturbance, and recommend that special houses should be built and kept for the use of Europeans, and that natives should not at any time be allowed to occupy them.

MOYAMBA.

(Dr. J. F. WARD submits the Report.)

I took over charge of this District from Dr. Wood-Mason on February 12th.

European Officials.—There have been an average of seven European Officials resident in this District during the year under survey, and the health of these has been good, except the District Commissioner who had to be invalided for Dysentery. Six European Officials were placed on the Sick List during the year, and the average duration of illness was six days.

Native Officials.—The number of Native Officials placed on the Sick List during the year was 31 with an average illness of eight days. Taking into account the number of Native Officials, those of the Railway being included, this is by no means a bad record. The illness amongst the Station Staff at Rotifunk was entirely above the average but this is not to be attributed to overcrowding.

Deaths.—I have to record with regret the death of two Native Officials during the year, one the Chief Clerk to the District Commissioner, Ronietta, the other, the Interpreter of the Central District, from Cancer of the Stomach. The cause of death in the first-mentioned case was chronic Interstitial Nephritis and Cirrhosis of the Liver.

Blackwater Fever.—Two cases of Blackwater Fever, both in Europeans, occurred, one among the Officials and the other the non-Officials, the latter unhappily with a fatal result. The health of the non-Official Europeans leaves much to be desired, doubtless due to the protracted periods for which they remain out here.

Total number of Out-patients' Attendances.—The total number of outpatients during the year was 2,108, an increase of 1,208 over the figures for 1907. Of these 307 were Officials.

In-patients.—The number of in-patients during the year was 16.

Hospital.—This, a frame work building with a verandah on three sides, and comprising a large ward capable of holding eight beds, Dispensary, Orderly's Room and Store Room, was in process of construction when I assumed charge of the District. To it have been added during the year a Post Mortem Room, Kitchen and Latrine.

Gaol.—The floors of the cells (beaten mud) are much below the surrounding level, and the cells themselves both dark and damp.

A new gaol is, I hear, shortly to be built.

Officials' Quarters.—The District Commissioner's quarters are a small wood and corrugated iron building raised on piles on masonry. This is situated on the brow of a hill over a quarter of a mile from his Office. The Medical Officer and two Assistant District Commissioners are housed in a barrack-like building which is sadly in need of repair, I had almost said rebuilding, and admits of little or no privacy. Situated at a convenient distance from the Hospital and the other Officers, this building compares unfavourably with the quarters of the Railway Staff as regards accessories in the shape of sun and rain blinds.

Water Supply.—The water supply of Moyamba has always been far from satisfactory, derived as it is from a small stream to the south of the Cantonments. This stream has a catchment area studded over with "fakkais" and farm "simbecks" and at this season of the year especially the water therefrom requires precipitation of solids prior to careful boiling and filtering. I believe there is under consideration a scheme for the conveyance of water by means of pipes from an upland lake to the level of Cantonments.

Sanitation.—The sanitation of the towns of Moyamba and Sembehun is attended to by the Chiefs. This has been kept up to a fairly high standard during the year, though there have been occasional lapses from grace.

Conservancy.—The method of night soil disposal adopted by the aborigines of Moyamba and Sembehun is that hallowed by custom.

Vaccination.—Visits have been paid to various towns in the district for purposes of vaccination. Over 200 vaccinations have been performed during the year most of which have been successful. The people are, I think, inclined to submit themselves more readily than in former years. It has been brought to my notice that on one occasion at least some enterprising individual has gone round subsequently demanding in the name of the Government the sum of 1d. from each vaccinated person. I regret to have to report that my efforts to trace the author of this outrage have not been successful.

Small Pox.—A small outbreak of this disease (6 cases) occurred in the town of Boia during the year, but was soon quenched. Three such cases also occurred at Headquarters during the closing days of the year, one of which, a female, declared that she had had it previously.

Leprosy.—Looking back over a period of some ten and a-half years I find evidence of this disease having made extensive inroads amongst the aboriginal The local theories regarding the casual factors in this disease are many and quaint, though all seem to be subservient to Witchcraft in its various forms. The most sensible of the people attribute the disease to the eating of foul food and drinking of impure water, though even these are firmly persuaded that Witchcraft is at the bottom of all. In the course of conversation with some of the greybeards I was informed that whereas in the days prior to our assumption of the Protectorate, segregation was rigidly enforced, this was not the case now as the Chiefs feared the displeasure of the Government should they drive these unfortunates out of their towns. Needless to say I have exercised all my powers of oratory to combat this idea of theirs and have advised them to establish Leper Reservation Colonies. Some such scheme is, I am persuaded, urgently required for as matters are at present the afflicted mate with the healthy, and it is not unusual to see children of quite tender years with early signs of this disease.

Appended are the names of a few of the towns in which were found Lepers:—

> Kwallu Bahama Benduma Mokaindu Mawoto Kogbotoma

Farawahu Gondama Taninahun. G'borgjaima Wendeh Fanima Jagbrahun, &c.

besides the fakkais around these. Paramount Chief Lamboi assisted me in ascertaining the chief centres of the disease.

DARU.

Daru, the Headquarters of the West African Frontier Force in Sierra Leone, has been during the year under the Medical charge of Drs. Orpen, Pearson, Allan and Alexander; the latter furnishes the Report.

The Company at Kanre Lahun has also been visited each month and Officials when sick in the vicinity have been attended at their own houses by the Medical Officer. With the exception of one death, a private of the W.A.F.F., the year has been an exceptionally healthy one; the large amount of minor sickness amongst the troops being due to the severe nature of their work. The principal complaints treated were Rheumatism, Intermittent Malarial Fever, Abdominal Troubles and wounds of the feet.

The River Moa overflowed its bank in September and this apparently caused a slight outbreak of Dysentery amongst the troops and their wives who draw their water for domestic purposes from the river. These cases, nearly a dozen in number, were without exception treated with large doses of Ipecacuanha and recovered completely in the space of two or three days.

Health of Officials.—This has been remarkably good; 4 Europeans were on the Sick List for 18 days against a total of 21 days in the preceding year, whilst 4 native Officials were on the Sick List 20 days against 55 days in 1907. All recovered and there was no invaliding during the year.

Small Pox and Vaccination.—Only one case of Small Pox was seen in the District; 114 people were vaccinated in the latter part of the year, the lymph used being of excellent quality.

Hospital.—The Hospital, situated near the river, has been throughout the year in bad state of repair. It is entirely a native structure and it is hoped that the proposed permanent building will soon be erected. During the year 1,159 persons were treated, an increase of 59 over the previous year.

BO AND KENNEMA.

(Extract from Report by Dr. H. E. Arbuckle.)

The stations have been in my charge since the beginning of February, previously they were in charge of Dr. Allan.

Bo.—The number of European Officials resident in Bo is 11, the number of coloured excluding daily labourers is 136, but in addition there are Railway Officials in various stations, who come under the charge of the Medical Officer. Their health has been very good, as only 10 Europeans were on the Sick List for a total of 40 days, and 27 coloured Officials, including those of Kennema, for a period of 324 days. The diseases commonest among them were Dysentery and Malarial. At Bo there is a room in the Dispensary with two beds set aside as a Hospital for Europeans.

There is also a Native Hospital with 7 beds, this building is of mud walls with a thatched roof. During the year there have been 83 in-patients with 4 deaths, the average stay of each patient in Hospital being 17 days; the Native

Hospital has been occupied chiefly by surgical cases. There have been 24 Operations, 19 under Chloroform, and 5 under Eucaine. The Operations under Chloroform included:—

3 Elephantiasis Scroti.

6 Inguinal Hernia, radical cure.

1 Irreducible Inguinal Hernia, radical cure.

3 Hydrocele of tunica vaginalis ,,

1 Amputation of hand.

1 Stitching extensive wounds.

2 Circumcisions.

1 Repair of crushed foot.

1 Amputation of toe.

Under Eucaine :-

1 Lipoma of scalp.

2 Scrotal Abscess.

2 Perineal Abscess.

The out-patients numbered 840; this is less than last year.

The total amount collected in fees from out-patients for the whole year was only £3. 5s. 3d. The commonest diseases are those of the Digestive system, Constipation, and Muscular Rheumatism.

The Medical Officer in Bo has charge of the school for sons of Chiefs; the number of boys is 100, and Native teachers 8.

The boys come from all parts of the Protectorate, and sometimes bring with them, on their first arrival, diseases prevalent in the different districts.

Their health has been very good, and the boys look bright and happy. The boys live in houses about 300 yards from the European Compound, the number of boys to one house being four or five.

The pail system of sanitation is in force. The number of entries in the out-patients' book is only 223, there have been only seven boys confined to the Hospital, their diseases being Phimosis, 2 Lacerated wound, Enteric Fever, Pneumonia, 2 Dysentery. The total number of days in Hospital is 116. In the dry season, Jiggers are common but the boys are inspected periodically by their School Masters and Medical Officer and Jiggers removed and Compound disinfected. Scabies and Ringworm are sometimes seen especially in new boys, but lately the boys have reported themselves as soon as there have been any sign of either disease, and thus the diseases are kept from spreading. Fortunately the boys have a big bathing pond which they are very fond of using. Ankylostomiasis is fairly common amongst the boys, but only two boys had any symptom of the disease. I have examined the faces of 43 boys and have found the eggs of Ankylostomes in 24, a percentage of 56.

The Principal of the School tells me that the parents of the boys who come to Bo are surprised at the health of the boys, and are beginning to regard the white man's medicine with more favour.

Water Supply.—The Water Supply of Bo is most unsatisfactory.

There are 11 officials, and two Trading Firms who are entitled by their leases to a supply of water, the amount of which is quite insufficient at present. Water for washing is supplied daily by the Sanitary Gang from a well in the swamp near the school-boys' Compound. Drinking water from the Concrete tank is supplied daily to those bungalows without tanks, or where the [248137]

tanks are run dry. If the number of pupils in the school increases, or if the dry season is prolonged a fresh supply of water will be needed for the school, in addition to the present one.

The Bungalows are all of wood and iron, in more or less disrepair and in the rains most of the houses leak. The houses are built along two sides of a square, and five houses are so placed that they get the maximum of sunshine and minimum of shade, three of these houses so placed, have an open iron grating in the ceiling (they are the school, the Judge's, and the Medical Officer's bungalows) so that for about three feet in each down the centre of the ceiling there is only iron roofing with nothing under it to keep off the heat. Consequently, in the middle of the day it is almost impossible to stop inside these houses in the dry season, and one has to get underneath the house for shelter! It is only on cloudy days that the inside of these houses is cooler than the outer shade. For the last three months the maximum and minimum temperatures have been recorded in the Medical Officer's bungalow, and the daily averages for that period have been 94°.4 and 71°.7 the outside shade temperature being 88°.5 and 69°.4 for the corresponding period.

Sanitation.—At Bo there is a Sanitary Gang of 11 men and 2 headmen. Each bungalow has an outside earth closet, which is cleared every morning before daylight and the excreta taken to a trenching ground near the Railway line. House and Kitchen rubbish is placed in boxes near the Kitchen and cleared periodically by the Sanitary Gang; and the refuse is thrown into two open pits. The Gang keep the European Compound clean, repair the roads and bridges and during the dry season carry water to the bungalows.

Vaccination.—During the year there has been no outbreak of Small Pox in the District. Vaccination has been carried out, 236 having been successfully vaccinated in and around Bo. The lymph which has been supplied during the latter half of the year is very good, almost every case being successful.

Meteorological.—At the beginning of the year a set of Meteorological Instruments was sent here; the thermometers are in an iron wire cage about 4 feet from the ground in a palm thatched shelter, which is situated in an open space. The readings are taken twice at 9.0 a.m. and 5.0 p.m. The readings only began in February so that a full year's record is not given. The hottest month was March, the coolest was August, the highest temperature recorded was 99°.2, twice in March, the lowest being 62°.5 in December. The minimum temperature for the whole year keeps about 70° never varying much, the maximum varies with the season. The total rainfall was 110.5" the rainiest months being August and September. The greatest amount in a day being 3.64 in August.

Diptera.—During the year over 100 blood sucking diptera, chiefly tabanidæ, have been sent to England. The tabanidæ are most numerous in March, April and May and again in September, October and November, but in much fewer numbers, sand flies (similidæ) were noticed, especially in earth closets in April, May and June. Glossinæ have not been seen in and around Bo, but at Kennema, during September and October, I caught two of the species, G. morsitans. I hear that about the Sewa River at Baoma, Glossinæ are present. Mosquitos are not plentiful in Bo, all tins, &c., being carefully taken up, placed in a pit and covered: also all hollows in the trees in the Compound that can retain water are filled up with sand periodically, especially in the rainy season. The Railway Station yard is inspected to prevent collections of water in empty casks, tins, &c.

KENNEMA.

Weekly visits were made to Kennema during the year. The number of European Officials was 2, coloured 55. Their health was fairly good. The number of out-patients for the year was 842. The chief diseases being—Constipation, Muscular Rheumatism, Ulceration of Skin and Scabies. There is no Hospital of any description at Kennema and those patients requiring Hospital treatment were obliged to come to Bo; for complaints not bad enough to require removal to Bo, but bad enough to unfit a man for duty, the patients remained in their own houses, and were attended by the Dispenser. The total number of days lost by these complaints was 3. Two Court Messengers died, one of Cerebral Thrombosis and one of Nephritis and Dysentery. One was invalided, suffering from disseminated spinal Sclerosis. The prisoners in the gaol have been healthy. A new stone gaol is being built, which is dry and cool. The Europeans now live in two stone bungalows on a hill; the bungalows are cool and pleasant, a great contrast to the houses in Bo. The Clerks and Court Messengers live in native houses well laid out.

Water Supply.—The water supply is very good being obtained from a mountain stream which is uncontaminated. The water is brought to the bungalows in pipes.

Sanitation.—The arrangements for the disposal of excreta consist of the pail system of closet for Europeans and Clerks, which are cleared every morning by prisoners, and the contents taken to a trenching ground; for the Court Messengers there is a cesspit but I believe it is little used, the Mendi custom being to go to a stream or the "bush" instead of a regular cesspit or latrine.

Vaccination.—Vaccination has been carried out fairly well, 327 cases being successful in and around Kennema.

KABALLA.

(Dr. Orpen furnishes the Report.)

Out-patients.—During the year the number of cases treated at the outpatients' Department at Kaballa was 1,423. In comparing this with the number treated in 1907, it shows an increase for the year of 110. The admissions to Hospital during the year were 49, this shows a decrease when compared with 1907 of 66. During the year, there was one death in Hospital, a Frontier; the cause being Pneumonia.

Death.—I regret to have to record the death of Dr. J. Allen Scotland, Medical Officer in charge of Koinadugu District, which took place on the 7th of February.

Invalidings.—In July, Lieut. Hewit, W.A.F.F., was invalided home suffering from Malarial Fever.

General.—Dr. Murphy was in charge of the station for the greater part of the year, arriving in February and proceeding on leave in November, being relieved by me. In November, Dispenser John was transferred to Batkanu and Dispenser Thomas to Kaballa.

The health of the station and District during the year has been good. There has been no epidemic. There have been but few really serious cases, the majority of cases being but slight ailments amongst the men. of the W.A.F.F. and Court Messengers, such as Bronchitis, cut hands and feet, &c., &c. The amount of Malarial cases is roughly about the same as last year, but

Rheumatism shows a decrease of 6 cases. Recently, an inspection of all the soldiers and Court Messengers was held with a view of ascertaining the amount of venereal diseases. I am glad to be able to report that the result was good; the result being only 4 per cent. infected.

Water Supply.—The water of this station is excellent, the best I have seen.

Conservancy.—Pails are used in the Government quarters and are regularly emptied every morning by the prison gang. In the Barracks, pits are used. These are filled in every morning and inspected at regular intervals.

Patrols were made during the year in various directions and vaccination carried on; as regards the number of successful cases it is hard to judge, as when the Medical Officer is patrolling he usually does not return by the same route as he started by, but judging from the excellent results that I have obtained from the lymph, when vaccinating locally, I should say a very large proportion indeed was successful.

The cases one sees whilst on patrol are chiefly Ulcers, Fever, Rheumatism and skin affections.

One case of Leprosy was noticed. The Chief was advised as to isolation, &c. I believe there are more cases of this disease than one at first realises, the late Dr. Scotland reported several cases. Whilst on patrol, a large number of Tse-tse flies was obtained, some of them (the best preserved) were forwarded to the Colonial Hospital.

No case of Trypanosomiasis was observed.

Gaol.—As regards the gaol, there has been no sickness of any importance, neither has there been any epidemic, but I would recommend that the prisoners should be supplied with an extra blanket at night as the fall in temperature here is very considerable and they feel the cold very much.

Out-patients' fees.—The total number of fees collected from the out-patients during the year was 10s. 9d.

A microscope and accessories have recently been sent to Kaballa to replace the one which was destroyed by the fire which did so much other damage there some time ago. Though the stimulus afforded by a microscope was absent for some time Dr. Murphy and myself have been energetic meanwhile in doing such work, collecting flies, &c., as can be done without one.

MAKONDO.

(By Dr. J. S. Pearson.)

Owing to the shortness of appointment here, I regret that I cannot furnish much information regarding this temporary headquarters. This is quite a new station, the old station at Panguma was done away with last March and this was chosen as a temporary headquarters of the Central District. There are only two Europeans here, the District Commissioner and the Medical Officer. The country people do not use the Hospital much, and the Medical Officer is unable to tell whether there is much illness or not.

The number of out-patients treated was 399 and in-patients 19.

In these numbers must be included some patients who were treated at Panguma during the first three months of the year.

DISPENSARY DISTRICTS IN THE PENINSULA.

York.—Dispenser J. F. Johnson was in charge till transferred to the Gambia Colony. Dispenser M. P. Neville took charge on 24th January. An outbreak of whooping cough occurred in June and July. No Small Pox was seen during the year. 166 children were vaccinated of which cases 114 were successful. Sussex was visited fortnightly in January and February and weekly since then.

Hastings.—Dispenser E. G. Luke visited bi-weekly from Waterloo.

There was no outbreak of infectious disease and no case of Small Pox. The health of Civil Officers and the general public was good.

Vaccination cases were mostly successful.

Kent.—Dispenser M. O. Frazer in charge. Tombo was regularly visited. Yaws (Frambœsia) is noted as a prevalent disease, 37 cases having been seen. Vaccination—93 cases out of 109 were successful.

There was no outbreak of any epidemic disease.

Regent.—Dispenser J. J. Nicol took over charge from Dispenser Hooke in June. The general health of the public was fair. Vaccination—of 139 cases 124 were successful.

Mano Salija.—Dispenser J. P. Metzger was in charge. The health of Officers has been satisfactory. There has been no epidemic disease.

Waterloo.—Dispenser E. G. Luke in charge. The principal Medical Officer visited Waterloo on the 27th February. The health of officers and the general public was good. "Six Miles" was visited weekly.

There was no case of Small Pox. Most of the Vaccination cases were successful. The Gaol is kept clean and in good order, and the prisoners kept good health.

Dublin (Bananas Islands).—This new Dispensary was opened on 11th November, Dispenser W. Alongo Macauley being put in charge. He reports an unusual prevalence of Syphilis. Vaccination was carried on by arm-to-arm, the lymph supplied was very satisfactory.

In the Appendices will be found:—

- A.—Notes of a case treated by a native Midwife or Granny with the aid of relatives.
- B.—Management of labour by native Midwives.

By Dr. W. Renner.

C.—A record of the research work done by the various Medical Officers during the year.

I have to thank Dr. Kennan, Senior Medical Officer, for drawing up the material for this report during my absence on leave.

R. M. FORDE, Principal Medical Officer.

Colonial Medical Department, Freetown, Sierra Leone, 18th June, 1909.

APPENDIX. A

NOTES OF A CASE TREATED BY A NATIVE MIDWIFE OR GRANNY WITH THE AID OF RELATIVES.

By Dr. Renner.

Patient Fatmata a Primapara and Joloff aged 26 years was admitted into the Colonial Hospital on Tuesday, the 1st September, 1908, at 8.45 a.m. in the second stage of Labour, temperature normal, pulse 108, having slight pains at long and irregular intervals, bladder full, bowels constipated, Os Uteri fully dilated, head presenting on perinæum, external genital parts very much swollen and in a dirty condition. Three hours after admission pains ceased altogether; her bowels were last moved on the 28th August, when pains commenced, the membranes ruptured on the morning of the 29th, urine last past on the 30th August. Patient stated that Labour began the morning of the 28th August, that is five days before admission; pains were slight at first, but on the 29th and 30th August they were very severe; after that the pains became less frequent and less severe. Her friends becoming anxious at the birth not taking place on the night of the 29th, had recourse to the following treatment according to native custom:—

They applied palm oil over the abdomen, gave her some native medicines to drink, then plugged the vagina with spice beaten up with burnt feather and native black soap which is strongly alkaline, made sit over a pot of boiling water so as to steam the parts and body. This treatment was continued off and on from the 29th August to the 1st of September, when they decided to bring her to the Hospital.

Treatment pursued on admission:—The vagina was first douched free of the native medicine placed in it, the bladder was relieved of urine containing a large quantity of blood, and as the pains ceased entirely, the matron at once sent for Dr. Renner, who applied forceps and delivered a male child. After the delivery, temperature of patient began to rise gradually until it reached 103 degrees, pulse 146; six hours after delivery temperature came down to about normal and pulse to 120; lochial discharge was brownish and offensive containing parts of feather and spice, &c., the vaginal surface was swollen, raw and very painful, the surface of the external genital organs was blistered: patient suffered from incontinence of urine for three or four days. By the 11th September she was able to retain her urine, which she passed containing a large quantity of pus. She complained of pain over the left iliac region on the 21st which was acute, the temperature which on the two previous days had become normal rose again to 101 degrees, the urine still contained a large quantity of pus. During the next eight days, that is from the 21st to 29th, the temperature gradually fell, the pus gradually disappeared, her general condition improved from day to day and she was discharged from Hospital on the 17th October. At one time during the progress of this patient, her condition was very serious and I may say that she was saved by the unremitting care and sympathetic attendance of the matron Miss Micklethwaite, who sacrificed her night's rest to watch and carry out my directions.

(Sgd.) W. RENNER, M.D.,

Medical Officer in charge of

KING-HARMAN WARDS.

APPENDIX B.

MANAGEMENT OF LABOUR BY NATIVE MIDWIVES.

As the parturient period approaches or there is the first indication of Uterine pain, the friends of the patient at once engage a "Granny" or midwife. On her arrival she ascertains whether her patient is a primapara or multipara otherwise locally called "Komra." If a primapara, she knows at once that the labour will be quick and there should be no difficulty; she examines the abdomen externally and declares that the belly "don fordom" that is, the patient has arrived at full time and the stage of parturition is about to take or is taking place. She now directs her patient to walk up and down the room, her hair loosened if plaited, as this would hinder the child's progress, a cloth is tied firmly above the Fundus Uteri over the false ribs, this, as she says, to prevent any attempt of the child to ascend up into the chest, but really the object is to assist to fix the ribs during the expulsory stage. She next prepares some oil or uses palm oil to anoint the external abdominal surface; this is to render the pain more effective but not excessive. If the patient is inclined to vomit, it should not be encouraged as it would produce decayed teeth or cause them to be weakened or loosened. To prevent this vomiting, the gizzard of a fowl is burnt down to cinders and pulverized, to this is added powdered "Atari" or Aligator Pepper; it is then mixed with a little palm oil or honey and given to the patient to lick. As the case progresses, the patient is given to drink a basin of water, when it becomes a slippery fluid; this juice is supposed to have the action of rendering the vaginal passage free, by exciting the free secretion of the vaginal mucous and thus render the passage slippery for the quick exit of the child. In case the patient complains of weakness "Agidi" or the native maize flour cooked is given to her to drink.

II. With the advent of the second stage—rupture of the membranes—the patient is now made to sit in a semi inclined plane on a "Kata" (cushion or nest) which is made from any kind of cloth or rags by the midwife or granny, who now sits on a low stool supporting the patient from the back, while her feet rest firmly on the floor or ground, and she is made to take deep and full inspiration at every pain. Another midwife or relative anoints again the external abdominal surface, making a sweeping movement from the back and well above the uterus, with a firm but swift and gentle motion with both hands and at the same time pressing the uterus forward, downward and outward to the pelvic outlet.

With several such movements accompanying the pain, the birth is completed.

III. The umbilical cord is next cut with a razor and tied, the length of feetal attachment of the cord is to be from 3 to 4 inches: this is important, especially in the male, so as not to render the penis a diminutive organ. If the placenta is not expelled within half an hour from the birth of the child, the midwife either pulls on the cord or excites vomiting by means of a feather or finger, &c. In some cases also to effect vomiting she takes a "fufu" stick and puts it down the patient's throat. The "fufu" stick is what is used in cooking the Cassava flour into fufu; it varies in size and length, the ordinary length is about 30 inches with a circumference about 4 inches. The part which is used in the patient's throat is the end that is well worn out by constant usage. If the placenta is not expelled by this means the midwife addresses in the following manner:—"Way you sit dom pan tap da for; Ente you don do you woke, cam don"—(that is, "Why do you remain above? Haven't you finished your work? Come down"). She says this whilst holding the cord. On these words being said the placenta may be expelled.

This is supposed to be by Hypnotic influence. If these measures fail, the patient is removed to the Hospital or if the friends can afford the expense, a Doctor is sent for to remove the placenta. In the majority of cases this is found to be almost loosened and to be removable by a little abdominal pressure. The placenta being now expelled the patient is given some liquid Agidi or cold water to drink. A binder is applied to the abdomen above the contracted uterus, a napkin is made and applied and the patient walks to her bed. With some tribes she is at once made to wash with cold water if the birth takes place in the bush by some stream. In such a case when she gets home a fire is made and she lies down before it. With some other tribes, in case the first stage is prolonged, the patient is made to hang by the hands to the cross rafter or beam of the hut and to jump down. This is done with the object of hastening the labour and it invariably results in rupturing the membranes and converting head presentation to transverse presentation in which case the patient is at once taken to the Hospital,

(Sgd.) W. RENNER, M.D.,

Medical Officer in charge of

KING-HARMAN WARDS.

APPENDIX C.

RESEARCH RECORD, 1908.

	Name of Medical Officer.		Station,		Nature of Study. Communicated to
Dr.	Arbuckle		Во		"Heart Lesions amongst Natives of the Protectorate of Sierra Leone." Journ. Trop. Med., October 1, 1908.
22	Allan		Daru		Glossinæ—collection Freetown.
33	Hunter		Bonthe		Biting flies " British Museum.
"	J. C. Murphy	7	Kaballa		" " " Liverpool School Tro- pical Medicine.
"	R. Orpen		99),))))))))))
"	11		,,	***	"An Unusual Case of Annals of Liverpool School of Tropical Medicine (illustrated).
33	Ward		Moyamba		Biting flies—collection Liverpool School Tro- pical Medicine.
**	Renner		Freetown		Tumour of Breast Dublin.
"	11		29		Parotid Tumour—"mixed" Liverpool School Tro- pical Medicine.
37	Murphy		Kaballa		Cysticercus Infected Beef Freetown. Ticks, Cattle, Rats, Dog, Cat ,,
33	Burrows		Freetown		Ankylostomiasis Clinical Laboratory. Malarial, and various Freetown.
"	Jackson-Moo	re	Bonthe		200 Biting flies Liverpool School Tro- pical Medicine.
29	Wood-Mason		Batkanu		Biting flies " " "

HOSPITAL RETURNS, 1908.

Annual Medical and Surgical Returns, Colonial Hospital, Freetown. Table No. 1.

			Males.	Females.	Total.
Patients remaining in Hospital, admitted during the year		 	21 705	10 244	31 949
Total number treated	 	 	726	254	980
Of these were—		-			
Cured	 	 	306	145	451
Relieved	 ***	 	236	43	279
Not relieved		 	65	14	79
Died	 	 	94	34	128
Remaining in Hospital 31-12-08	 	 •••	25	18	43
Total number treated	 	 	726	254	980

Table No. 2.

								Males.	Females
Average	stay,	in days,	of	Patients	discharged		 	 12.18	18:31
**	"	"	,,	"	died		 	 6.85	10.23
	22	12	"	"	remaining	***	 	 23.08	23.83
Daily av	erage	in Hosp	ita				 	 27.70	13.16

Table No. 3.

1.—Rate per cent. of Patients (128) died of total number (980) treated, 13-06.

				12 hours.	24 hours.	48 hours.	72 hours.	Total.
2.—Patients who died within t after admission :—	he foll	lowing l	hours					
Males Females				15 13	19 2	7 2	4 3	45 20
Total				28	21	9	7	65

Table No. 4.

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

***	***	***	***	***	13
	***	•••	***		5
Tot	al				18
			Total	Total	Total

Table No. 5.

HOSPITAL RETURNS, 1908.

INTERN PATIENTS.

RETURN OF DISEASES AND DEATHS TREATED AT THE COLONIAL HOSPITAL, 1908.

	Remaining in Hospital	Year's	Total.	Total	Remaining in Hospita
Diseases.	at end of 1907.	Admissions.	Deaths.	Cases Treated,	at end of 1908.
General Diseases— Malarial Intermittent Fever Malarial Remittent Fever Malarial Cachexia Septicæmia Tubercle Syphilis—Primary Syphilis—Secondary Syphilis—Tertiary Gonorrhea Alcoholism Rheumatism Rheumatism Rheumatis Arthritis Pernicious Anæmia	2 2	48 23 1 2 16 7 8 20 12 1 47 2	5 2 	50 23 1 2 16 7 8 20 12 1 50 2	1 1 - 2 - 3 - 1 1
Carried forward	5	188	19	193	9 .

RETURN OF DISEASES AND DEATHS IN 1908 AT THE COLONIAL HOSPITAL—contd.

Brought forward 5 188 19 193					Remaining in Hospital	Year's	Total.	Total Cases	Remainin in Hospit
General Disrases - continued Debility	Dis	enses.				Admissions.	Deaths.	Treated.	at end o 1908.
Debality 1	Brot	ight for	ward		5	188	19	193	9
Debility 1	GENERAL DISEASE	s—contin	nued.						
Erysipelas					1	20		21	1
Trypanosomiasis			***		_	2	2		
Bilharziasis					-	1		1	-
Filariasis	Trypanosomiasis		***			*	1	1	150
Exhaustion — 1	W2019				No. of the last of		-	1	-
Mucoid Cyst				0,995	_		1	1	_
Insolation							_	1 17	
Lipoma	T-1-23								-
Sarcoma									1
Fibroma	Sarcoma				_		-		
Influenza	Fibroma				-		_		-
Neuritis	Influenza				-		-	5	100000
Neuritis									100
Cunctional Nervous Diseases	Manuelale					,		1	1
Epilepsy	reurius	***	***	•••	-	1	_		1
Epilepsy	UNCTIONAL NERV	ous Disa	ASES-						1
Apoplexy					_	2		2	-
Paraplegia					-		-	-	-
Facial Paralysis	Paraplegia				_	2	1	2	-
Bulbar Paralysis			***		-	8	-		-
Locomotor Ataxy 2 3 5 5 6				***	-				1
Cerebral Thrombosis				***	0.000		1		-
Cerebral Tumors			***	***	2				-
Concussion of the Brain					-				
Meningitis					1		1		
Neuralgia									
Myelitis									
Sciatica					_		1	2	
Tetanus	Charles and an artist of the control				1	_			_
Melancholia — 1 — 1 — 1 — 1 — 1 — 1 — 1 — 1 — 1 — 1 — 2 — 2 — 2 — 2 — 2 — 2 — 2 — 2 — 2 — 2 — 2 — 2 — 2 — 2 — 2 — 1 — 2 — 2 — 2	Tetanus				1	11	5	12	-
Melancholia 1 1 1 1 1 1 </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>									
Mental Aberration	Melancholia				5112	1		1	1
Diseases of the Eye—									
Conjunctivitis	DACHEN ZEOUTING			***	_	1	10000		
Conjunctivitis	DISEASES OF THE I	Ече—							The same
Ophthalmia					-	2	_	2	
Corneal Ulcer	Ophthalmia	***				1		1	-
Pterygium		***	***	-	-		-		-
Diseases of the Kose— Epistaxis 2		***	***	***	-		-		-
Diseases of the Nose—	Pterygium		***	***	-	1	-	1	-
Diseases of the Nose—	hopieno on sur	Fan							1
Epistaxis	PISEASES OF THE	LIAK-						1	1
Epistaxis		8			1000	16.			
Coryza — 1 — 1 —		NOSE-		1	1 2 4		117	The state of	12/11/14
					-		-		-
e e	Coryza	***	***	1	-	1	-	1	-
	e a				197	4	41111		13

RETURN OF DISEASES AND DEATHS IN 1908 AT THE COLONIAL HOSPITAL—contd.

					Remaining in Hospital	Year's	Total.	Total Cases	Remaining in Hospita
1	Disea	505.			at end of 1907.	Admissions.	Deaths.	Treated.	at end of 1908.
1	Broug	ht for	rward		11	281	37	292	13
IRCULATORY S	YSTEM	_							
Mitral Regu	rgitat	ion			_	13	4	13	1
Carotid Ane					_	1	1	1	-
Cardiac Syn				***	-	1	1	1	-
Palpitation	***	***	***		_	3	-	3	-
RESPIRATORY S	YSTEN								
Pleurisy				***	_	2	700	2	1
Pneumonia					1	47	18	48	1
Pleuro-Pneu			***	***	-	8	4	8	3
Asthma Bronchitis			***		-	4	7	4 41	1
Bronchiectas	ia.			***		41 2	-	2	1
Dronemectas	18	***	***	***		2	_	1	
DIGESTIVE SYS	тем-								
					-	20	7	20	-
Colic					-	3	-	3	-
Ankylostom		***	***	***	_	6 6	1	6	-
Dyspepsia Constipation	***		***	***		7		7	
Reducible H			***		2	13		15	1
Strangulated					_	3	2	3	
Cirrhosis of						8	3	8	_
Hepatitis						9	2	9	1
Dental Abso	ess					1	-	1	-
Gastritis					-	1	-	1	-
Intestinal O	bstruc	ction			-	1	1	1	-
					-	4	2	4	-
Malignant I Stricture of				***		1	1	1 1	1
Hæmorrhoid			***	***		2	1	2	_
44						5	4	5	
Fistula in A						1	_	1	_
Pharyngitis						1	-	1	-
Tape Worms	š					2	_	2	1
Round Wor	ms	***	***		_	1		1	-
Jaundice			***		-	1	_	1	120
LYMPHATIC SY	STEM-	_			61		10		
Adenitis					_	9		9	-
Perisplenitis						2		2	-
Splenitis					_	3	-	3	-
Lymphangit					_	2	-	2	-
Parotitis				***	-	3	and a	3 5	-
Bubo		***	***	***	-	5	-	9	
JRINARY SYST Retention o		ne			Mary and		1000	4	1
29 1515		ne	***			1		1	
Bright's Dis						23	8	23	4
·					1	1	_	1	-
Extravasati					1	i	1	1	-
				-				-	-
			ward		14	554	106	568	28

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RETURN OF DISEASES AND DEATHS IN 1908 AT THE COLONIAL HOSPITAL—contd.

Discases,			Remaining in Hospital	Year's	Total.	Total Cases	Remaining in Hospital
			at end of 1907.	Admissions,	Deaths.	Treated.	at end of 1908.
Brought for	ward		14	554	106	568	28
MALE ORGANS OF GENERA	TION-						
Paraphimosis Phimosis	***	***	1	18		18	1
Ulcer of Penis	***	***		5		5	1
Oedema of Penis				1		1	_
Elephantiasis of Scrotum			- 1	7	2	8	1
Rupture of Scrotum	***		-	1	_	1	-
Hydrocele			-	3	-	3	-
Orchitis	***			9	-	9	_
Stricture Epididymitis		***	1	25		26	2
Epididymius		•••		1	-	1	_
FEMALE ORGANS OF GENER	ATION-						
Cancer of Uterus	441			1	1	1	-
Endometritis			-	2	-	2	-
Parametritis Conical Cervix Uteri	***		_	2	-	2	-
Disordered Menses	***			1	-	1	-
Caruncle of Meatus Urin	neina	***		2		2	-
Disorders of Pregnancy		***	1	ĩ	1	2	1
Abortion			_	2		2	1
Threatened Abortion				2	_	2	
Abscess of Breast				3	_	3	
Carcinoma of Breast			-	1		1	
Parturition			_	44	2	44	_
Puerperal Eclampsia			-	1	1	1	-
After Pains	***		-	1	1	1	-
False Pains Retained Placenta	***	***	_	1 6	2	1	-
recained Placenta	***	***		0	2	6	_
ORGANS OF LOCOMOTION-						4 - 6 - 6	
Necrosis			-	5	-	à	1
Synovitis Periostitis			1	4		5	-
	***	***	-	2	-	2	1
Bursitis	***	***	-	1	-	1	-
CONNECTIVE TISSUE-							
Abscess			1	21	_	22	The latest the same of the sam
Cellulitis			2	7	2	9	1
Carbuncle			_	1	_	1	_
		-		100			
DISEASES OF THE SKIN-							artik.
Ulcers Eczema			4	111	3	115	5
Whithou				1	-	1	-
wintiow	***		_			1	
NJURIES, GENERAL-				-			
Scald			1000	- 1	-	1	****
Burn	***		7-	5	3	5	-
Carried forwar	urd	200	26	854	124	880	41

RETURN OF DISEASES AND DEATHS IN 1908 AT THE COLONIAL HOSPITAL—contd.

	-	Remaining in Hospital	Year's	Total.	Total Cases	Remaining in Hospita
Diseases.		at end of 1907.	Admissions.	Deaths.	Treated.	at end of 1908.
Brought forward		26	854	124	880	41
Injuries, Local—					10000	
Contused Wound		1 -	14	_	15	-
Incised ,,		1	11	_	12	-
Lacerated ,,		3	1	_	4	_
Punctured ,,		-	4	_	4	-
Gunshot "			2	_	2	_
Simple Fracture of Leg		-	2	_	2	-
,, ,, ,, Arm			2	_	2	
Compound Fracture of Leg			2	-	2	-
,, ,, ,, Arm			1	-	1	-
Dislocation		-	1	-	1	-
Contusions		-	16	-	16	
Sprains		-	7	_	7	1
Laceration of Vagina			1	-	1	1
Rupture of Spleen			1	1	1	-
Insect Bite		-	2	-	2	-
Unclassified		_	28	2	28	1
					Tent	
Grand Total		31	949	127	980	43

Table No. 6.

Surgical Operations.—(Under Chloroform and other Anæsthetics).

Colonial Hospital, 1908.

	Remain- ing in Hospital, 31-12-07.	Number Admitted.	Total.	Successful.	Not Re- lieved.	Diea.	Remain- ing in Hospital, 31-12-08
Abscess, Opening of	_	5	5	5	_	_	_
Amputations	1	8	9	8	-	-	1
Buboes, Incisions for	-	2	2	2	_	-	-
Curetting	The state of the s	3	3	3	_	-	_
Cataract, Removal of		1	1	1		-	-
Compound Fracture, Setting of	200	1	1	1		_	_
Dilatation, Stricture of Urethra		13	14	13	-	_	1
Dilatation, Stricture of Rectum		2	2	1	-	_	1
Elephantiasis of Scrotum, Removal							
of	1	4	5	4		1	-
Entropion, Radical Cure	-	2	2	2		-	_
Enucleation of Eyeball		2	2	2	-	-	-
Examination of Injured Joints		2	2	2		-	
Extravasation of Urine, Relief of	-	3	3	3		_	_
Fistula in Ano, Incision	-	2	2	2			
Hæmatocele, Radical Cure	_	1	1	1	-	_	
Hæmorrhage, Control of	-	3	3	3	-	-	-
Carried forward	3	54	57	53	_	1	3

Table No. 6-continued.

	Remain- ing in Hospital, 31-12-07.	Number Admitted.	Total.	Successful.	Not Re- lieved.	Died.	Remain- ing in Hospital, 31-12-08.
Brought forward	3	54	57	53	_	1	3
Hernia, Reduction of Herniotomy Hydrocele, Radical Cure Plastic Operations Puncture of Liver, Exploratory Rupture of Perinæum, Suturing Rupture of Scrotum, Suturing Scraping of Ulcers Skin Grafting Suturing, Extensive Wound of Thigh Synovitis, Incisions for Tracheotomy Tumours, Various, Removal of	- 2 - - - - - - - - - - - - - - - - - -	2 6 2 2 1 3 1 2 1 1 1 1 1 2 1	2 8 2 2 1 3 1 2 1 1 2 1 2 1 2	2 7 2 1 1 3 1 2 1 1 1 1 1 2 1			1
MINOR OPERATIONS. Circumcisions Cellulitis, Incisions for Relief of Foreign Body, Removal of	1 1 —	18 2 5	19 3 5	19 3 5			=
Total	8	128	136	128	1	2	5
Under Spinal Analgesic, Stovaine:—							
Amputations Elephantiasis of Scrotum,	-	2	2	2	-	-	-
Removal of Extirpation of Filarial Glands Herniotomy		2 1 2	2 1 2	$-\frac{1}{2}$	=		1 _
Grand Total	8	135	143	133	1	3	6

Table No. 7.

STATUS OF IN AND OUT-PATIENTS TREATED AT THE COLONIAL HOSPITAL DURING THE YEAR 1908.

	Euro	PEANS.					NATIVES.				
	Officials.	Non-	Offic	ials.	Frontier	Civil	Pay Pa	tients.	Pau	pers.	
	Omerais.	Officials.	M.	F.	Police.	Police.	M.	F.	M.	F.	Total.
In-Patients Out-Patients	 001	18 5	67 2,520	192	2 3	76 1,073	49 296	5 382	514 9,821	249 6,923	980 21,599
TOTAL	 384	23	2,587	192	5	1,149	345	387	10,335	7,172	22,579

Table No. 8.

Summary of Diseases and Deaths at the Colonial Hospital in 1908.

(In-Patients.)

		Dise					Year	s Total.
		Disc	ases.				Cases.	Deaths.
GENERAL DI	SEASES	_						1
Malarial I	nterm	ittent F	ever				50	5
" 1	Remitt	ent	**				23	2
Syphilis			"				35	3
Gonorrhos							12	
Debility	****					200	21	2
Rheumati			***	***		***	50	ī
Tubercle		***	***		***	**	16	5
Other Dis	20000	***	***	***	***		29	8
Other Dis	CHROCS		***	***	***	***	20	0
LOCAL DISE.	ASES							
Diseases o		one See	tom			-	47	11
		latory		***			18	6
.,,		iratory		***	***	***	105	30
"				***		***	99	24
",	Dige		"	***	***	***	24	
"		phatic	**	***	***	***	30	9
"	Urin		"		***			
.,,	Male	Organi	s of Gen	eration	***	***	73	3
,,		ile "		11	***		12	1
**			of Locor		***		13	-
**			ive Tiss	ues			32	2
"	- 3.2	Skin					117	3
"	Eye		***	***			6	-
"	Ear				**		-	-
	Nose			***			3	-
Affections	conne	cted wi					7	-
"	,		Part	urition			52	7
Poisons			***				-	-
Injuries							78	4
Unclassifie	ed						28	2
						1000		100
	7	Cours	TOTAL				980	128

Table No. 9.

RETURN OF OBSTETRIC CASES TREATED IN THE COLONIAL HOSPITAL DURING THE YEAR 1908.

	RANK.		Diseases, &c., conne Pregnancy and Par			LABOUR.			DELI	VERY.	
Prima Paræ.	Multi Parse.	TOTAL.	Diseases, &c.	No.	TOTAL.	Presentation.	No.	Normal.	Forceps.		Podalie Version
26	31	57	Puerperal Fever Retained Placenta Abortion Threstened Abortion False Pains After Pains Exhaustion	6 2 2 1 1		Vertex Breech	40 - 3 - 1	34 - 3	6	1-1-1-1	
00	35		TOTAL		13	TOTAL	44	37	6	,LT	I

Table No. 10.

RETURN OF DISEASES. (Out-Patients.)

Year 1908.

District Dispensary, Freetown.

Total Number Treated Subsequent Attendances

OFFICIALS.	C. POLICE.	F. POLICE.	PAUPERS.	
 2,057	480	3	8,093	$= 10,633 \ = 11,005 \ = 21,638.$
 1,041	593	-	9,371	= 11,005(= 21,000.

REGISTERED NUMBER OF NEW CASES. TOTALS.

	Offic	ials,	C.P.	olice.	F. P	olice.	Pau	pers.	Offic	cials.	C. P	olice.	F.P	olice.	Pauj	pers.
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
SENERAL DISEASES Small Pox Cow Pox Chicken Pox Measles Influenza Whooping Cough Mumps Dysentery	- 1 - 15 3 2 15	_ _ _ 1 1 _	_ _ 1 _ 8 _ _ 4	1111111	11111111	11111111	- 2 1 - 18 60 3 16		775	55	189		1	_	1196	100
Quotidian Tertian Quartan Irregular Type not recognised	33 5 — 35	2 - 3	6 - 7		1111		7 4 -4	7 2 - 5								
recognised Remittent Malarial Cachexia Blackwater Fever (Hæmoglobinuric	287 34 —	14 12 —	68 8 —	=	=	111	178 32 —	161 20 —								
Fever) Febricula Beri-Beri	+	=	=	=	=	=										
Syphilis, Tertiary (a) Primary (b) Secondary Gonorrhea	1 10	= =	2 - 1 1	=			30 27 34 70	17 18 24 24								
Ganglion Lipoma Ainhum	Ξ	=	=		111		 2 2	2 - 2			-17					
Alcoholism Debility Malformation	73	6	12	H -	-		64	80							100	
Rheumatism Non-Malignant	261	15	70	_	1		609	530	1							
New Growth Malignant New Growth	_	_	1 -	1 -	-	-	2 -	1 -			7 44	- 10				
Tubercle Leprosy Yaws Anæmia			111		111	111	18 - 2 7	5 -2 9								
Diabetes Trypanosomiasis	=	=	=	-	_	-	-	1			- 6					
Total carried forward									775	55	189	_	1	_	1196	100

T			

												TOT.	ALS.			
	Offic	ials.	C. P	olice.	F.Pe	olice.	Pauj	pers.	Offic	ials.	C. P	olice.	F.P	olice.	Paup	ers.
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Total brought forward									775	55	189	_	1	_	1196	1000
LOCAL DISEASES—																
NERVOUS SYSTEM-	-	-	-	-	-	-	-	-	42	3	9	-	-	-	66	57
Apoplexy	1	=	=	=	=	_	-3	=								
Paralysis Neuralgia	30		7	=	_	=	7 41	7 35								
Vertigo Epilepsy	-1	_	1	_	=	=	-1	1 2								
Tetanus	-	-	-	-	_	-	4	2								
Insomnia	_	_	_	_	_	_	1	1								
Melancholia Headache		=	1	=	_	_	- 9	- 9								
Eve— Conjunctivitis	32	-	11	=	_	=	- 63	39	35	1	12	_	-	-	71	42
Ititis	2	_	_	-	_	-	1	2								
Presbyopia Cataract	_	=	1	_	=	=	- 2	_1								
Squint Ophthalmia	_	_	_	_	=	_	1 2	_								
Gonorrheal Oph-	1						2									
thalmia	•			-			-									
Ear-	-	_	_	_	_	-	_	_	19	-	8	-	-	-	59	48
Inflammation Ext. Meatus	16	_	8	_	_	_	48	41								
Deafness Otorrhœa	3	=	_	=	_	=	7	1 6								
Otorrinea III																
Nose—	_	-	_	-	_	-	-	-,	5	-	1	-	-	-	10	8
Epistaxis Coryza	-4	=	1	_	=	=	5 4	5								
Ozœna	1	-	-	-	-	-	1	2								
CIRCULATORY SYSTEM		_	_	_	_	_	_	_	5	1	8	_	_	_	36	28
Pericarditis Valvular Disease	-4	-	-4	-	_	=		- 12								
Hypertrophy	_	-	-	_	-	-	-	_								
Palpitation Aneurism	_1	=	4	_	=	=	14	16								
RESPIRATORY SYSTEM	_	_	_	_	_	_	_	_	191	22	42	_	_	_	484	414
Laryngitis	190	22	38	=	=	=	466	400	1							
Asthma	1	_	1	_	-	-	4	6								
Pneumonia Pleurisy	_	=	1	_	=	=	10	1								
DIGESTIVE SYSTEM-	_		_	_	_	_	_	_	401	30	97	_	1		796	787
Stomatitis	_3	-	=	_	-	=	28	14								
Caries of Tooth	5	-	-	-	-	-	32	25								
Gumboil Toothache	44	_	10	=	_	_	12 112	97								
										-		-			_	
Total carried forward									1473	112	366	-	2	770	2718	2384
En				1			100				100	1		10	-	

TOTALS.

												TOT	ALS.			
	Offic	ials.	C. P	olice.	F.P	olice.	Pau	pers.	Offic	ials.	C.Pe	olice.	F.P	olice.	Pau	pers.
			30	-	3.5	-	7.	**	30	-		**		-	31	-
	М.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Patal basesht formand									1479	110	200		2		2718	0924
Fotal brought forward Sore Throat	19	_	10	_	_	_	32	44	1473	112	366		-	TO	2110	2001
Quinsy	10		1		_		13									
Pharyngitis	5		1	-	-	-	6	3								
Dyspepsia	128	20	12	-	-	-	146	283		-	-					
Tongue Tie		-	_	-	-	-	2									
Enteritis Hernia	6	1	3				36	_1								
Diarrhea	49	1	18				48	44								
Constipation	89	3	39	_	_		194	127								
Colie	3	-	_	-	_	-	8	13								
Piles	4	-	-		-	-	11	5								
Fistula in Ano		-	-	-	-	-	1	-								
Hepatitis Jaundice	12	_	1	_	_	_	15 16	9 8								
Ankylostomiasis	1						1	1								
Ascites	_	-	-	_	_	_	î									
Appendicitis	1	-	-	-	-	-	-	-								
Round Worm	9	2	2	-	-	-	73	82								
Tape Worm	2	1	-	-	1	-	6	6								
LYMPHATIC SYSTEM-									6	1	6	200	1200	1000	53	24
Hypertrophy of									0	1	0				00	
Spleen	-		3	-		_	3	1								
Inflammation of		40						82								
Glands	6	1	1	-	-	-	34	23								
Suppuration of Glands			2				16									
Glands						STATE .	10	-								
Тиукоп-																
Goitre	-	-	-	-	-	-	-	-								
Tinanan Granna									1						07	c
URINARY SYSTEM— Nephritis		_	_			_	4		1	-	-	-	-	-	27	6
Bright's Disease	1	-		_	_	_	11	5								
Cystitis	-	_		-	-	_	10	-								
Retention of Urine		-	-	-	-	-	1	1								
Hæmaturia	-	-	-	-	-	-	1	-								
GENERATIVE SYSTEM					- 10				8	6	5				110	84
MALE, Stricture of								-	0	0	"				110	04
Urethra	3	-	-		-		17	_								
Urinary Fistula	1	-	-	-	-	-	3	-		- 1						
Phimosis (non-		- 44	200		200		10	300								
Gonorrheal) Ulcer of Penis			_	_	-	-	15	_								
Hydrocele			1				19									
Elephantiasis of			3													
Scrotum		-			-	-	2	-								
Orchitis (non-			-				0.0									
Gonorrhœal) Urethritis	4	-	4		-		32	-1								
Urethritis				-			-	1								
Female. Inflam-									=							
mation of Ovary	-	-	-		-	-	-	-								
Endometritis	-	-	-	-	-	-	-	11								
Metritis Displacements		4	_	_	_	_	_	14								
Amenorrhoa								26							1	
Dysmenorrhœa	-	1		_	_			7								
Menorrhagia	-	-	-	-	-	-	-	13								
Affections connected																
with Pregnancy	-	-	-	-	-	-	-	11								
Affections connected with Parturition		1	-	42.55	12.31	-										
The state of the s		*														
Total carried forward	1								1488	119	377	-	2	-	2908	2498
								1				-				

TOTALS.

-												TOT	ALS.	2		
	Offic	ials.	C. Pe	olice.	F. Pe	olice.	Paup	ers.	Offic	ials.	C. Po	lice.	F.Po	lice.	Paup	ers.
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Total brought forward									1488	119	377	_	2	_	2908	2498
Female Breast— Inflammation			1					0								18
Abscess	=	=	=	=	=	=	=	9	_	-	_	_	-			10
ORGANS OF LOCOMO-																
TION-									4	-	4	-	-	-	14	9
Periostitis	3	-	-	-	-	-	3	3								
Ostitis Caries	-	-	-	-	-	-	5	2								
37 .			=	_	=	=	1	-2								
Synovitis	1		4		_		4									
Elephantiasis Pedis		_			_		î	2								
Bursitis	-	-	-	-	-	-	-	-		-	-					
Connective Tissue-									14	_	5	_	_	_	82	34
Cellulitis	1	-	1	-	-	-	3	4			1500					
Abscess	13	-	4	-	-	-	79	30								
SKIN-						-			87	_	30	_		_	630	252
Eczema	11	-	5	-	-	-	53	5								
Psoriasis	-	-	-	-	-	-	2	-								
Herpes	2	-	-	-	-	-	7	-								
Ulcer	26	-	14		-	-	445				-					
Boil	16	-	3		-	-	12	9						-		
Whitlow	11	-	1	-	-	-	30	12								
Ring Worm	-01		3	-	-	-	19	3 4								
Scabies Dhobie Itch	21	-	4	-	_	_	55	4								
Downstitie					_		3									
Corns							1									
POISONS	_	-	-	_	-	-	_	_								
INJURIES-							-		121	1	46	-	-	-	668	366
Human Bite	1	-	-	-	-	-	10					100				
Dog Bite	-	-	4	-	-	-	5									
Burn		-	1	-	-	-	10	6				1 3				
Bruise				-	-	-	82									
Wounds—Incised	25		11	-	-	-	206				-					
" Contused		=	4	-	-	-	216 61									
" Lacerated " Gun-Shot		-	2	-		-	1	13								
Dunaturad			2				29	- 8				-				
Sprain	16		6				46									
Dislocation	_	_	-		-	_	1	2								
Fracture	_	_	1	_	_	-	1	3								
Insect Bite	4	-	-	-	-	-	-	-		-			100			
OPERATIONS	_	_	_	_	_	_	_	_	_	_	_	_	_	_	-	-
Not not Dismosal	100		10	1	1		326	257	196	0	16		1		326	257
Not yet Diagnosed No Appreciable Disease	196				-	=	13				2	=	-	=	13	
gn.									1000	101	400		3		1643	3452
TOTAL		1		-		-			1926	131	480	-	3	1	4041	0102
Subsequent Attend-				_					959	82	593	_	_	_	5477	3894
ANCES				1				-	-00	- 02						
GENERAL TOTAL				_		-			2885	213	1073	-	3	-	10118	7346
-			1		1	1					1	-	1	_		

GAOL HOSPITAL, FREETOWN.

ANNUAL MEDICAL RETURN FOR 1908.

Table No. 1.

	Males.	Females.	Total.
Patients remaining in Hospital, 1st January, 1908, admitted ", ", during the year	7 247	-8	7 255
	254	8	262
Of these were discharged—	28	4	32
Relieved	212	4	216
Not Relieved	3 5	_	3
Died	5	-	3 5 6
Remaining in Hospital on 31st December, 1908	6	-	6
	254	8	262
Daily average of Prisoners in Prison during 1908			. 218
Number of Externs (Old Cases) treated during 1908			. 4,227

GAOL HOSPITAL, FREETOWN.

Table No. 2.

RETURN OF SICK PRISONERS SEEN AND EXAMINED BY THE MEDICAL OFFICER DURING 1908.

the state of the s				-	
	Quarter ending March.	Quarter ending June.	Quarter ending September.	Quarter ending December.	Total.
Reported Sick daily	362	357	460	467	1,646
lick placed under observation	58	142	101	113	414
Sick admitted into Hospital	57	61	68	71	257
Convalescents on Light Labour	75	73	137	156	441
Examined for Solitary Confinement	30	68	126	119	343
Seen in Solitary Confinement	28	68	125	115	336
Examined for Corporal Punishment	2	1	1	-	4
New Comers, including Remands and	010	001	000	074	
Trials	219	231	228	274	952
Number of Condemned Prisoners seen	1	1			2
Total	832	1,002	1,246	1,315	4,395
Reported Sick daily					1,646
Convalescents on Light Labour					441
No. of Externs					4,227
Total No. of Out-Patients treated d	luring 1908				6,314
Daily Average					17

RETURN SHOWING IN-PATIENTS TREATED IN ALL THE HOSPITALS OF THE COLONY AND PROTECTORATE, EXCEPT COLONIAL HOSPITAL, DURING 1908.

	Diseases.	Remaining in Hospital	Yearly	Total.	Total Cases	Remaining in Hospital	Remarks.
-		at end of 1907.	Admis- sions.	Deaths.	Treated.	at end of 1908.	Trouisi as.
	Small Pox Chicken Pox Dysentery		3 20 68	<u>-</u>	3 20 70	2 -1	
DISPOSES.	Malarial Fevers— Intermittent Remittent Blackwater Beri Beri	1 = =	99 6 1 2	= - 1	100 6 1 2	2 -	
1	Tubercle Syphilis— Primary Secondary	_	1 	_	1 	_	
GENERAL	Tertiary	27 3 9 14 9	25 21 1 65 28	11 2 - 6 9	52 24 10 79 37	28 6 11 11	
	Sleeping Sickness Anæmia Other Diseases	=	3 1 2	Ξ	3 1 2		
OLO.	Apoplexy Paralysis Epilepsy Neuralgia Locomotor Ataxia Idiocy Idiocy Obserminated Sclerosis Cother Diseases		4 8 4 9 2 —	11 - 1 -	4 34 5 14 5 1	17 1 4 3 1	
The state of the s	Diseases of the Eye	1 —	14	Ξ	15	=	
	" " Circula- tory System	_	23	6	23	1	
	" " Respira- tory System	-	80	7	82	3	
	" " Digestive System	5	76	8	81	7	
-	" " Lymphatie System	2	26	_	28	3	
1	" " Urinary System	1	23	3	24	1	
	Carried forward	112	616	68	728	103	

RETURN SHOWING IN-PATIENTS TREATED IN ALL THE HOSPITALS OF THE COLONY AND PROTECTORATE, EXCEPT COLONIAL HOSPITAL, DURING 1908—cont.

	Diseases.	Remaining in Hospital	Yearly	Total.	Total Remaining in Hospital	in Hospital	Remarks.
		at end of 1907.	Admis- sions.	Deaths.	Treated.	at end of 1908.	
	Brought forward.	112	616	68	728	103	
Ď.	Diseases of the Generative System—Ma	le —	36	1	36	1	
DISEASES.	System—Fema	le 1	_	-	1	-	
E	C m:	1	16	1	17	2	
=	COL 1	20	42 67	1 2 4	87	24	
		1	7		8		
1	" Local	4	51	1	55	2	
LOCAL	Surgical Operations		26	4	26	-	
_	Unclassified	4	8	5	12	4	
-	Total	145	869	86	1,014	136	

RETURN SHOWING OUT-PATIENTS TREATED IN THE VARIOUS DISPENSARIES OF THE COLONY AND PROTECTORATE, EXCEPT THE COLONIAL HOSPITAL, DURING THE YEAR 1908.

		DISEAS	28.				Male.	Female.
GENERAL DISEASE								
Small Pox Cow Pox	***	***	***	***			1 3	
Chicken Pox					***		8	5
Measles							2	1
Influenza	***	***		***			1	-
Whooping Cou	gh			***			92	79
Mumps	***	***	***	***			13 140	12 78
Dysentery Febricula			***	***	***	***	24	7
Malarial Fevers		***				***		
Intermittent				***			739	495
Remittent							24	18
Blackwater		***					2	-
Syphilis— Primary							11	10
Secondary							38	19
Tertiary							178	228
Gonorrhea							333	37
Debility		***	***			***	209	240
Rheumatism Gout	***	***	***	***	***	***	1,578	1,254
Non-Malignant	New	Growt	h				2	3
Malignant New							4	_
Tubercle		***					11	3
Leprosy			***	***	***	****	14	3
Yaws Anæmia	***		***	***	***		75 24	41 49
Malformations							2	2
Diabetes							_	4
Other Diseases	***				***		5	3
LOCAL DISEASES-	_							
Nervous System								4
Neurasthenia			***	***	***		10	1
Apoplexy Paralysis		***	•••			***	11	3 12
Neuralgia							172	176
Vertigo							4	15
Epilepsy	***		***				6	-
Mania							1	
Convulsions Hydrocephal		***					1	1
Tetanus							1	1
Spinal Sclero							5	4
Torticollis			***				10	1
Hysteria	***	***	***	***	***	***	0.5	2
Headache Diseases of the	Eve	***	•••	•••	***	***	85 152	39 88
	Ear	***					148	117
29 29	Nose				***		60	45
11 11	Circul	latory	System				66	85
25 25	Respi	ratory					1,290	1,052
,, ,,	Diges		22		***		3,988	3,609
29 99	Lymp	THEFT	"	***		***	198	96

RETURN SHOWING OUT-PATIENTS TREATED IN THE VARIOUS DISPENSARIES OF THE COLONY AND PROTECTORATE, EXCEPT THE COLONIAL HOSPITAL, DURING THE YEAR 1908—continued.

	Dist	ASES.				Male.	Female.
Br	rought forwa	ard				9,746	7,939
Diseases of the	Urinary Sy	ystem		***		38	15
" "	Generative	,,				270	396
11 11	Thyroid Gl	and			***	_	1
11 11	Female Br	east		***	***	-	22
22 22	Organs of	Locomoti	ion	****		132	96
" "	Connective				***	183	116
	Skin			***		1,898	1,351
Parasites						_	4
Poisons		***	***			7	1
Injuries						1,139	404
Surgical Operati	ons—						The same of
Not yet diagr	nosed		***			18	15
No appreciabl	e Diseases					46	35
	TOTAL					13,476	10,395
Subsequent A	ttendances					14,714	8,730
	GRAND	TOTAL				28,190	19,125

VITAL STATISTICS—FREETOWN, 1908.

TABLE SHOWING THE INFANTILE MORTALITY.

		1			1.0											
		Torar.		98	==	15	14	20	21	26	20	12	62	17	23	04 04 04
*		11 to 12 Months.	24	-	1	1	1	1	1	1	-	1	1	1	-	0.3
			M	1	1	-	1	1	1	1	1	-	1	1	1	-
		10 to 11 Months.	24	1	1	1	1	-	1	-	-	1	1	1	1	0.8
			M.	-	1	1	1	1	1	1	1	1	1	1	1	
		9 to 10 Months.	pi .	1	1	-	1	0.4	-	-	1	1	1	1	-	78
			M.	1	1	1	1	1	+	-	1	1	П	-	-	+
		8 to 9 Months.	E.	1	1	-	1	1	1	-	1	1	1	1	1	0.4
			M.	-	1	1	1	1	1	1	¢4	-	1	1	1	4
		7 to 8 Months.	0.i	-	-	1	1	1	1	1	1	1	1	-	-	0.8
		Mo.	M.	1	1	-	1	1	1	-	G.S	1	1	1	-	10
		6 to 7 Months.	24	1	1	64	1	-	0.3		-	1	-	1	1	9
			M.	-	6.3	-	-	-	0.1	-		1	-	1	1	10
	TY.	5 to 6 Months.	14	1	1	1	1	1	-	1		1	01		-	-#
	Mortality.		M.		1	-	1	1	1	-	1	1	-	1	-	03
	ORT	4 to 5 Months.	56		-	1	1	03	1	-	1		1	-	1	4
	Me	Mo W	M.	-	-	1	1	1	1	-	1	-	1	-	-	64
	SHOWING THE INFANTILE	3 to 4 Months.	24	-	1	-	-	-	03	-	-	6.4		1	1	0
		. Mc	X.	-	1	1	1	1	1	1	C4	1	1	+	0.4	44
H		2 to 3 Months.	24	-	1	0.1	0.3	-	1	-	1	1	-	1	1	00
Table I.		M. Me	M.	1	+	-	+	00	-	6.0	-	-	63	+	_	6
T_a		1 to 2 Months.	pri	1	-	-	- 1	1	1	0.8	-	-	4	-	6.0	=
			N.	-	-	-	+	1	-	-		1	-	1	-	9
		3 to 4 Weeks.	24	-	+	1	+	-	1	+	1	1	1	-	-	60
	ном	-	. M.	-	-	-	-	-	-	1	-	1	1	1	-	0.3
		2 to 3 Weeks.	L F.	1	-	1	-	1	-	-	1	1	-	1	1	00
	TABLE		. M.		-	1	_	-		-		-	-	-	-	
67	TA	1 to 2 Weeks.	M. F.	-	-	-	-	1 1		4 1	-	-	-	6.3	-	0
		3.3	E. M	4	-	-	1	0.3	-	-	-	-	-	1	4	4
		Day	M. F	03	63	0.4	4	-	03	_	_	-	00	01	01	24 14 10
		24 Hours 1 Day to and 1 Week. v	F. N	04	04	63	-	6.8	_	09	4	1	60	-	9	98
		4 Hours and under.	M. 1	10	09		-#	1	63	*	1	63	-	00	_	03
		64	~	:	:	:	:	:	:	:	-	-	:	:	1	50
				130	. 0											
				;	:	:	:	:	:	:	1	:	:	.:	:	1
	-															
				1	:	:	:	:	-	:	:	:	:	1	1	1
				:	:	:	:	:	:	:	:	:	;	:	:	TOTAL
		1		-		:	:		:	:	:	-				
				January	February	March	April	May	June	July	August	September	October	November	December	
[24	8137]			2	A	7	V	9	2	2	A	32	0	4	-	8

VITAL STATISTICS—FREETOWN, 1908.

Table II.

TABLE SHOWING THE MORTALITY OVER 12 MONTHS.

TOTAL.		19	48	422	40	254	29	22	20	20	11	99	20	618
75	F.	1	00	00	1	6,1	01	9	0.5	01	0	00	10	88
Over 75 Years.	N.	01	-	1	-	-	6.1	63	ю	-	1	-	1	16
12 12	E-	63	6.3	-	63	-	-	1	_	1	4	**	00	50
65 to 75 Years.	M.	1	cq	1	-	-	-	-	1	1	-	10	63	16
o 65 irs.	D.	1	1	-	1	9	gq.	4	60	01	9	20	64	325
55 to 65 Years.	M.	10	1	04	65	-	G.S	60	1	00	-	60	-	24
5 55 Mrs.	P.	1	-	+	63	0.1	6.5	01	+	63	6.5	60	-	80
45 to 55 Years.	M.	9	-	00	G3	62	10	6.3	+	63	6.2	+	9	43
35 to 45 Years.	E.	80	4	4	4	60	e4	2	00	60	9	1	1	43
35 to You	M.	1	60	62	60	C1	9	-	9	00	9	0.4	60	20
25 to 35 Years.	12	C4	1-	G.J.	60	-	10	C4	Cd.	*	6	00	9	46
25 t Yes	M.	4	œ	7	4	4	80	00	9	2	10	9	7	11
20 to 25 Years.	34	¢4	1	0.5	-	64	0.5	-	1	-	1	0.9	0.4	17
20 t Ye	M.	-	01	-	1	1	10	1	1	-	-	10	C1	21
15 to 20 Years.	F.	50	-	-	1	1	60	1	1	-	1	1	-	12
15 t Ye	M.	63	1	1	4	-	1	4	G3	1	00	1	1	19
10 to 15 Years.	E.	-	-	1	-	-	60	-	1	1	¢4	-	1	11
10 t	M.	1	1	-	1	1	1	1	-	1	-	1	1	00
5 to 10 Years.	pi pi	60	-	1	1	1	-	-	1	-	64	03	1	11
S to Ye	K.	63	-	e1	1	1	-	1	1	-	1	-	e4	10
1 to 5 Years.	Di.	01	-	01	2	-	10	9	9	1-	61	0.3	63	43
I K	M.	63	-	60	G.S	1	-	1-	4	00	-	60	01	37
		:	:	•	:	•			:		:			:
1		;	:	:	:	:	:	:	:	:	:	:		:
		:	:	:	:	:	:	:	:	:	:	:	:	TOTAL
		January	February	March	April	May	June	July	August	September	October	November	December	To

VITAL STATISTICS—FREETOWN, 1908.

Table III.

TABLE SHOWING THE MORTALITY DUE TO DIFFERENT DISEASES UP TO THE AGE OF FIVE YEARS.

Torar.		7.3	22	1	52	29	20	63	1	1	6	301
-	-	15	-	1	1	00	10	63	-	-	-	01
1 to 5 Years.	M. F	4	1		-	*#	**	3	-	1	-	77
	F. M	-	-	1	1	-	-	_	1	-	1	20 07
11 to 12 Months.	-	-	-	-	1	-	1000	1	-	1	-	-
1 11 8. M	F. M.		1	1	-	1	1	1	-	1	-	01
10 to 11 Months.			1	1	1	- 3350	1	1000	-	-	-	
	F. M.	!	1	-	-	-	1	01	-	-	-	#
9 to 10 Months.	-		1	-		64		-	1	+	1	-14
9. N	F. M.		-	-	200	-	-		-	-	-	O1
8 to 9 Months.		-	-	1	1	-	-	1	1	-	1	1 4
s. M. s	. M.	01		1	1	1			1	-	1	01
7 to 8 Months.	E.	01	-	-	1	1	-	64	-	1	1	10
	N.		-	1	1	63	-		-	1	1	9
6 to 7 Months.	E.	00	1	-	1	-4	1	53	1	1	1	
M. M.	K.		1	1	1	- 197	-	11000	1	-	1	4 10
5 to 6 Months.	H	-	-	1	-	6.1	_	-	-	1	-	C9
Me	M.	1	1	1	1	1	1	0.4	-	1	1	
4 to 5 Months.	24	6.3	-	1	1	, -	1	1		1	1	4
M.	H.	C1	-	-		1	1	-	-	1	1	0.1
3 to 4 Months.	PG	10	-	1		-	6.5	-	1	1	1	0
	N.		1	1	1	6.1	1		1	1		4
2 to 3 Months.	Er.	78		1	1	Cd.	1	0.1	1	1		00
Mo.	M.	10	1	-	1	1	1	60	-	1	-	0
1 to 2 Months.	F.	6.5	6.5	1	1	00	1	6.3	1	1	1	=
	M.	-	1	1	1	-	-	0.0	-	1	-	9
3 Weeks to 1 Month.	24	0,1	-	-	1	-	1	1	-	1	1	6.0
- PH	M.	L	-	1	1	-	1	-	-	1	-	C.S
2 to 3 Weeks.	E.	-	-	-	1		1	1	-	-	1	1
	M.	-	1	1	1	1	1	-	1	1	-	60
1 to 2 Weeks.	E.	0.4	-	1	1	6.1	1	-	1	1	-	-
	M.	60	0.1	1	1	6,3	-	-	1	1	1	10
1 Day to I Week.	E.	-	4	1	4	64	1	6.3	1	1		14
LI WI	M.	-	11	1	4	9	-	-	-	1	1	64
24 Hours 1 Day and to under. 1 Week.	100	1	0.1	1	0.3	0.1	1	1	-	1	1	56
24 E an un	M.	1	1	1	20	00	-	-	1	1	63	32 26 24 14 10
		1	1	:	:	:	-	:	:	:	1	:
			:	:	:	:	:	:	:	:	:	:
DISEASES.			:		d	ystem	v	/	Birth	auses	sno	TOTAL
		Fever	Debility	Starvation	Exhaustion	Nervous System	Alimentary	Pulmonary	Premature Birth	Natural Causes	Miscellaneous	
1		H	A	002	H	Z	A	P	H	Z	1	9

[248137]

VITAL STATISTICS—FREETOWN, 1908.

Table IV.

TABLE SHOWING THE MORTALITY DUE TO DIFFERENT DISEASES OVER FIVE YEARS.

YE			
Total.		82-044008 4-00 8841112118188 88114811811	539
Over 75 Years.	ь;		38
15.	M.	[-	16
65 to 75 Years.	E.	m m m m m m m m	20.33
65 t Ye	M.		16
55 to 65 Years.	E.		32
55 t Yes	M.	0 0 1 1 1 1 1 1	24
o 65 urs.	14		87
45 to 55 Years.	M.		43
45 rs.	E.		43
35 to 45 Years.	M.	101 101 10	49
35	ri.	[- - - - - - - - - - - - - - - - - -	46
25 to 35 Years.	M.		11
25	E.	03 - - - - 4 4	17
20 to 25 Years.	M.	w - m - m m m m	21
20 rs.	E.		13
15 to 20 Years.	M.	4-1	19
16 rs.	E.	00	11
10 to 15 Years.	M.		60
10	F.	01 4 001	11
5 to 10 Years.	M.	04 04 - 02	10
			:
		rth Pregnancy Parturition	:
		wwith h Preg	TI
DISEASES.		Small Pox. Small Pox. Fever, Intermittent Fever, Backwater Syphilis Debility Trypanosomiasi Other Discases Other Discases I Discase Nervous System Girculatory Lymphatic Lym	Toral
Dis		Small Pox Small Pox Fever, Intermittent Fever, Backwater Syphilis Bebility Tuberele Malignant New Gi Trypanosomiasis Other Discases Other Discases I Discases I Discases Other Discases Lymphatic Lymphatic Urinary Lymphatic Lymphatic Lymphatic I O'rinary Lymphatic I O'rinary I O'ri	. 19
1 3		ral Diseases— Small Pox Fever, Intermite Fever, Backwa Syphilis Debility Tuberele Malignant New Trypanosomias Other Diseases— Nervous Syster Girculatory Digestive Lymphatic Urinary Female Female Female Arions connected Ale Breast ale Breast als of Locomoti nective Tissue ns of Locomoti nective Tissue als series ans of Locomoti nective Tissue als in als of Locomoti nective Tissue	
		General Diseases— Small Pox Fever, Intermittent Fever, Blackwater Syphilis Debility Rheumatism Tubercle Malignant New Growth Trypanosomiasis Other Diseases Local Diseases Nervous System Girculatory " Respiratory " Respiratory " Pemale Lymphatic " Urinary " Female Lymphatic " Urinary " Female Skin Cornective Tissue Skin Poison Injuries Urilaries Conclassified Farale Affections connected with Pregnancy Female Breast Connective Tissue Skin Poison Injuries Urilaries Urilaries Urilaries Conclassified Farale Conclassified F	
1		General Local Local General Affect Affect Affect Commo Skin Poiso Injura Uncla	

VITAL STATISTICS-FREETOWN, 1908.

Table V.

TABLE SHOWING THE MORTALITY DUE TO DIFFERENT DISEASES AT ALL AGES.

	TOTAL	EE	840
December.	F.	41 9	39
17/10/11/11	M.	4 4 4 6 6 6 6 6 6 6 6 6	34
November.	Ä.	[- -000 0004 -	65
Nove	K.	\(\alpha \	41
October.	F.	9 9 10 12 14 17 17 17 17 17 17 17	55.0
Octo	M.	m - m m m m m -	41
nber.	A.	4 4 01 01 20 01	30
September.	M.	10 0 0 0 0 0 0 0 0	60
nst.	E.	t - m	30
August.	M.	Les Su	40
6	E.	0 -00 4 0 -	40
July.	M.	c c c c c d d d d	43
10.	E.	0 04 - 4-0- -	7
June.	M.	L = F = 0 = 0 0 0 0 0 0 4	39
6	pi	0 0 0 0 0 0 0 0 0 0	60
May.	M.	m	01 01
al.	E.	4 0 - 0 0 00 - 01-	23
April.	M.	0 - 10 - 10 0 0 0 0 1 0 1	31
-th	E.	4 - -	58
March.	M.	10 - 01 - 01 00 00 00 01	67
ary.	F.	24 10 23 12 23 23 23	36
February.	M.	w -	65
ary.	E.	w	30
January.	M.	9 2 0 0 0	43
		rth	1
		Parts	1
	DISTASTS.	Pox Intermittent Blackwater S stism stism stism stism stism stism stism state state story ttory ttory stic y state y state y state y state story s	1
		General Diseases— Small Pox Fever, Intermittent Fever, Banittent Fever, Blackwater Syphilis Rheumatism Tubercle Malignant New Growth Trypanosomiasis Other Diseases Local Diseases Local Diseases Lymphatic " Urinary " Female Press Lymphatic " Urinary " Female Breast Organs of Locomotion	TOTAL

VITAL STATISTICS-FREETOWN, 1908.

Table VI.

Table showing the distribution of Deaths according to Months and Sexes, 1908.

Total.	428	412	840
December.	76	39	13
August. September. Octobor. November. December.	41	32.2	13
October.	41	533	94
September.	32	30	62
Angust.	07	30	02
July.	43	40	88
June.	39	14	80
May.	22	62	54
April.	31	23	54
March.	66	88	57
January. February. March.	33	26	59
January.	43	89	81
	:	1	1
1 1	:	. :	1
Мокти.	1	1	Тотак
	Male	Female	T