Medical and sanitary report / Government of the Gold Coast.

GOVERNMENT OF THE GOLD COAST.

MEDICAL AND SANITARY REPORT

FOR THE YEAR

1911.

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CONTENTS.

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ANNUAL MEDICAL REPORT FOR THE YEAR ENDING 31st DECEMBER, 1911.

I have the honour to submit the Annual Report on the Medical Department of this Colony for the year 1911.

ADMINISTRATIVE.

Staff.

The Principal Medical Officer,
The Deputy Principal Medical Officer,
Two Provincial Medical Officers, and
Two Senior Medical Officers.

Promotions.

Dr. E. H. Tweedy, Provincial Medical Officer, was promoted as Deputy Principal Medical Officer, *vice* Dr. P. J. Garland, C.M.G.

Dr. H. B. S. Montgomery, Senior Medical Officer, was promoted as Provincial Medical Officer, Ashanti, *vice* Dr. G. J. Rutherford.

Appointments.

Dr. F. G. Hopkins, Deputy Principal Medical Officer of Southern Nigeria, was appointed Principal Medical Officer of the Gold Coast Colony, *vice* Dr. W. H. Langley, C.M.G.

Dr. C. E. S. Watson, Senior Medical Officer of Northern Nigeria, was appointed Provincial Medical Officer, Northern Territories of the Gold Coast, *vice* Dr. E. H. Tweedy.

Dr. J. A. Clough, Medical Officer of Southern Nigeria, was appointed Senior Medical Officer in the Gold Coast Colony, *vice* Dr. H. B. S. Montgomery.

Transfers.

Dr. G. J. Rutherford, Provincial Medical Officer, was transferred to the Medical Department of Ceylon.

Dr. H. W. Gush, Medical Officer of Northern Nigeria, was transferred to the Gold Coast, *vice* Dr. A. G. Eldred.

Dr. A. G. Eldred, Medical Officer of Health, was transferred to the Medical Department of Nyasaland.

Dr. A. Connal, Assistant at the Medical Research Institute, Lagos, was transferred to the Medical Department, Gold Coast, *vice* Dr. R. Cope.

Dr. F. J. A. Beringer, Medical Officer, was transferred to the Sanitary Branch as Medical Officer of Health.

Dr. D. W. Purkis, Medical Officer, was transferred to the Sanitary Branch as Medical Officer of Health.

Resignations.

Drs. E. Slack, J. H. Swan and T. F. Bayfield resigned their appointments.

Invalidings.

Dr. W. J. B. Carter, Medical Officer, was invalided to England.

Retirement.

Dr. P. J. Garland, C.M.G., Deputy Principal Medical Officer, retired from the service on pension.

Dr. F. M. Simmonds, Medical Officer, retired from the service.

European Nurses.

The strength of the European Nurses was the same.

The appointments of Miss V. Hornsby and Miss S. M. Crane were terminated.

Prinicpal Members of Subordinate Staff.

Principal Medical Officer's Office :—1st Grade Clerk, S. G. Ricketts ; 2nd Grade Clerk, J. A. Brown ; 3rd Grade Clerk, G. Quansah ; 5th Grade Clerks, C. A. Akwetey and H. J. Smith.

1st Class Dispensers :—John Cato and F. W. C. Wulff.

2nd Class Dispensers :—W. B. Hagan and R. P. Williams.

3rd Class Dispensers :—Sydney Smith, E. J. B. Plange, F. W. Thompson, W. A. Wellington, J. E. Brown and J. B. Lomotey.

Storekeeper :—H. D. Laryea.

FINANCIAL.

Expenditure.

Medical.—The authorized expenditure for 1911 was £56,118. The actual expenditure was £51,468. There was a saving under "Personal Emoluments" of £2,500, due to changes in Holders of Office, and a saving of £2,150 under "Other Charges."

Sanitary.—The authorized expenditure was £20,617 ; the actual expenditure was £18,531. The total saving of £2,086 was under "Other Charges."

The Hospitals and Sanitation votes for Ashanti are shown in the Estimates under Ashanti, but controlled by the Principal Medical Officer.

In addition to the expenditure detailed above the following sums were expended under special votes during the year :—

Sleeping Sickness (Colony and Ashanti) . .	£2,455
Yellow Fever Outbreak	£3,336

Revenue.

The total receipts were £1,463, a tabulation of which is given below :—

Month.	Hospital Fees.		Dispensary fees.	Sale of Drugs.	Sale of Medical Comforts.	Total.
	Officials.	Non-Officials.				
	£	£	£	£	£	£
January	26	29	17	11	2	85
February	45	64	14	10	1	134
March	48	49	16	12	2	127
April	27	28	15	15	2	87
May	37	81	12	14	0	144
June	50	41	17	10	1	119
July	40	67	26	10	2	145
August	39	65	25	12	2	143
September ...	48	88	21	13	0	170
October	29	30	27	15	2	103
November ...	46	27	23	9	1	106
December... ...	34	29	26	11	0	100
Total	469	598	239	142	15	1,463

HEALTH OF GOVERNMENT OFFICIALS.

I.—European Officials.

During the year there were 566 European Officials stationed on the Gold Coast, this being an increase of 91 over the year 1910. Notwithstanding this large increase the average daily number placed on the sick list was the same as in the previous year. During the year 1910 Malaria accounted for six Officials being invalided and three deaths, against three invalidings and no death in 1911. Only two cases of Hæmoglobinuric Fever were recorded throughout the Colony.

Table Showing the Sick, Invaliding, and Death Rates of European Officials.

	1909	1910	1911
Total number of officials resident	438	475	566
Total number on sick list...	461	438	470
Total number of days on sick list	2,819	3,074	3,214
Average daily number on sick list	6	8	8
Average number of days on sick list for each patient	7	7	6
Total number invalided	17	32	27
Percentage of invalidings to total residents	3·88	6·73	4·77
Total deaths	5	8	4
Percentage of deaths to total residents	1·14	1·68	·70

Causes of Invaliding.

Hæmoglobinuric Fevers	2
Malarial Fevers	3
Poisoned Wound of Hand... ...	1
Neurasthenia	3
Enteric Fever	1
Anæmia and Debility	4
Phthisis	1
Mental Breakdown...	2
Diarrhœa	1
Neuritis	2
Bilharziosis	1
Gastric Catarrh	2
Leukæmia	1
Epileptic Seizure	1
Enteritis (Helminth)	1
Supra-orbital Neuralgia	1
Total	27

Causes of Deaths.

Dysenteric Diarrhœa	1
Acute Yellow Atrophy of Liver ...	1
Accident (Railway)...	1
Yellow Fever	1
Total	4

II.—Native Officials.

The health of the Native Officials must be considered very satisfactory, when it is remembered that there was an increase of 202 in the staff employed.

I regret to say that the death rate was higher than in previous years. This is difficult of explanation, as there appears to have been no epidemic to account for the increased death rate. I attach a Table showing the sick, invaliding and death rates; also List of diseases causing invalidings and deaths.

Table showing the Sick, Invaliding, and Death Rates of Native Officials.

	1909	1910	1911
Total number of officials resident	940	922	1,124
Total number on sick list...	579	420	369
Total number of days on sick list	2,862	3,400	2,507
Average daily number on sick list	7	9	6
Average number of days on sick list for each patient	4	8	6
Total number invalided	3	7	10
Percentage of invalidings to total residents	·32	·75	·88
Total deaths	2	1	8
Percentage of deaths to total residents	·21	·10	·71

CAUSES OF INVALIDING.

Nervous Disease	1
Chronic Renal Disease	1
Revolver Wound	1
Acute Pericarditis	1
Rheumatism	1
Alcoholism	2
Mental breakdown	1
Acute Bronchitis	1
Leprosy	1
Total	10

CAUSES OF DEATHS.

Pneumonia	1
Appendicitis	1
Malaria	1
Cerebral Hæmorrhage	1
Cerebral Irritation	1
Typhoid Fever...	1
Hyperpyrexia	1
Heart Failure	1
Total	8

GENERAL EUROPEAN POPULATION.

The general European population consists of four classes :—

(i.) Government Officials.
(ii.) Employés of Trading Firms.
(iii.) ,, Mining Companies.
(iv.) Missionaries.

Again the number of European residents on the Gold Coast shows a very substantial increase over the year 1910, the Trading Firms and Mining Companies alone showing an increase of 445. Taking the above facts into consideration, I think it is satisfactory to note that the invaliding rate was practically the same as in 1910, and the death rate was five less than in the previous year. The actual number of deaths was 33, as against 38 in 1910.

TABLE SHOWING THE SICK, INVALIDING, AND DEATH RATES OF NON-OFFICIALS.

How employed.	Number.	Deaths.	Invalided.	Death rate per cent.	Invaliding rate per cent.
1909					
Merchants	574	9	25	1·21	4·35
Mining Companies ...	585	7	20	1·19	3·41
Missionaries	118	3	4	2·54	3·38
Totals	1,277	19	49	1·32	3·83
1910					
Merchants	422	16	7	3·79	1·65
Mining Companies ...	660	18	33	2·72	5·00
Missionaries	135	4	2	2·96	1 48
Totals	1,217	38	42	3·12	3·45

TABLE SHOWING THE SICK, INVALIDING, AND DEATH RATES OF NON-OFFICIALS—*continued.*

How employed.	Number.	Deaths.	Invalided.	Death rate per cent.	Invaliding rate per cent.
1911					
Merchants	605	14	20	2·31	3·30
Mining Companies	922	16	31	1·73	3·36
Missionaries	152	3	3	1·97	1·97
Totals	1,679	33	54	1·96	3·21

CAUSES OF INVALIDING.

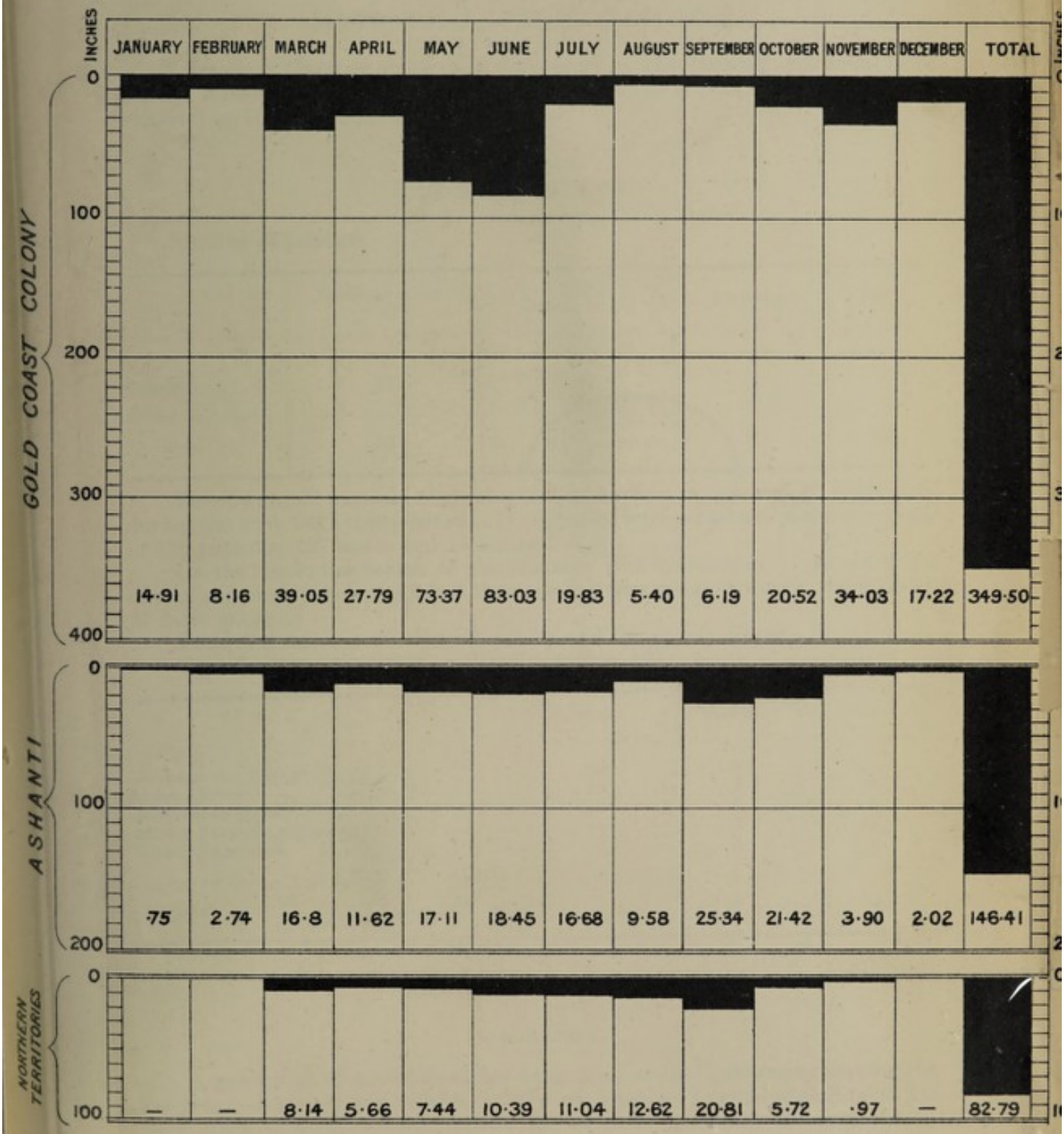
Hæmoglobinuric Fever	6
Malarial Fever	21
Heart Disease	2
Duodenal Ulcer	1
Melancholia	1
Boils	1
Nervous Prostration	1
Cystitis	2
Rheumatism	2
Dysentery	4
Epilepsy	1
Injury to Eyes	1
Debility	1
Neurasthenia	1
Ptomaine Poisoning	1
Anæmia	1
Gastritis	2
Hepatic Abscess	2
Venereal Disease	1
Neuralgia	1
Insomnia	1
Total	54

CAUSES OF DEATH.

Appendicitis	1
Malarial Fever	4
Hæmoglobinuric Fever	4
Pneumonia	2
Yellow Fever	5
Dysentry	2
Cerebral Hæmorrhage	3
Accidental Drowning	2
Enteritis	1
Cyanide Poisoning (Suicide)	1
Tetanus	1
Suicide while temporary insane	1
Heart Failure (Hyperpyrexia)	1
Chronic Nephritis	1
Inhalation of Poisonous Fumes	1
Acute Alcoholism	1
Sunstroke	2
Total	33

— 1911. —

— RAINFALL ON THE GOLD COAST, — ASHANTI & THE NORTHERN TERRITORIES.



GENERAL NATIVE POPULATION.

The Returns show that 2,711 less natives attended Hospital for treatment than in 1910. This reduction, I think, was due to the fact that no epidemic of a serious nature occurred in Ashanti or the Northern Territories throughout the year.

METEOROLOGICAL CONDITION.

I attach a Chart showing the difference in the Rainfall between the Colony, Ashanti and the Northern Territories. In the latter place the Rainfall was well up to the average 44·62 inches.

LUNATIC ASYLUM.

Number of patients :—

	Remaining at end of 1910.	Admitted during 1911.	Discharged.	Died.
Male	76	31	8	21
Female	13	6	2	2
Total ...	89	37	10	23

There were 89 patients remaining in the Asylum at the end of 1910, and during the year 1911 thirty-seven (37) new cases were admitted, making a total of 126 patients, 107 males and 19 females.

On the whole the health of the inmates was satisfactory. Twenty-three deaths occurred, this being 6 less than the previous year, although there were 37 more patients.

Food and water were of good quality and the supply ample.

Classification of patients on 31st December, 1911 :—

	Males.	Females.	Total.
Maniacal and Dangerous	25	2	27
Quiet, Chronic	37	11	48
Melancholia and Suicidal	2	0	2
Idiotic, Paralytic, Epileptic	10	2	12
Under Observation	3	0	3
Total	77	15	92

SCIENTIFIC.

LABORATORY.

A great deal of useful work has been done at the Laboratory throughout the year. A steady and reliable supply of Vaccine Lymph (Small-pox) has been manufactured and despatched to wherever necessary at short notice. With this lymph 12,021 primary vaccinations were performed during 1911 with 89·5 per cent. of successes.

The other work carried on during the same period may be classified as Clinical and General.

Clinical—Examination of Blood Films, etc., of both Europeans and Natives for diagnostic purposes.

General—Analysis of Water and Spirits (the latter carried out at the request of Comptroller of Customs).

2. Classification of Biting Flies.
3. Examination of Blood Films from Slaughter House.
4. Description of Trypanosomes found in cattle coming from the North.
5. Description of what is thought to be a new Spirochaeta found in sheep coming from the French Soudan.

DISEASES OF SPECIAL INTEREST.

Small-Pox.

The Colony.

Small-Pox.—This disease was very common during the year in the Eastern Province, and although every means was taken to stamp out the disease by vaccinations and isolation, it is still kept alive by the natives adopting the method of direct inoculation. No matter how often they are told of the serious consequences that may arise if they continue this practice, it is impossible to break them of a custom many years old. Slight outbreaks occurred in the Central and Western Provinces of the Colony, but were easily dealt with. 18,895 successful vaccinations were performed during the year.

Ashanti.

Small-pox.—An epidemic of this disease started in 1910 and continued for about 4 months in 1911 when it was stamped out, no case occurring during the last half of the year.

A Native Vaccinator has been appointed and, so far, has proved most useful.

Sleeping Sickness was prevalent in the North Western Province of Ashanti, 17 deaths from that disease being reported. I am glad to be able to report that no increase in the number of cases has occurred during the year, but all the same a strict watch must be kept on this district. In other parts of Ashanti 12 cases were under treatment with Atoxyl, and at the end of a course extending over a period of 5 or 6 months the parasites disappeared from the blood and the patients were able to resume their ordinary work.

A Special Medical Officer has been detailed for duty in the North Western Province, and another has been stationed at British Krachi on the Volta River.

Northern Territories.

Small-pox.—Only 10 cases of this disease were reported during the year. Vaccination was carried on systematically throughout the Protectorate.

Sleeping Sickness.—Only one case reported during the year.

Blackwater Fever.

Eight cases of Blackwater Fever were admitted into Hospital during the year, with 4 deaths. Three cases occurred at Accra, 2 at Seccondee, 2 at Axim and 1 at Tamale. The history of all these cases showed great exposure to infection or carelessness in the mode of living, quinine being taken irregularly or not at all, and in one case a mosquito net was seldom used.

Six other cases of this disease occurred in Ashanti, 3 cases amongst the Mining Community and 3 in Syrian petty traders; out of this number two cases ended fatally.

Yellow Fever.

Nine cases of Yellow Fever occurred during the year under review ; seven of these cases took place during May and June, one in February and in December.

It will be noticed, on referring to the Meteorological Returns, that the rainfall for May and June was exceptionally heavy in Accra, where these seven cases took place. It is only fair to assume that the increased rainfall facilitates the breeding of mosquitoes, and especially stegomyia, and, in consequence, a number of cases of this very fatal disease arise.

It is difficult to account for the isolated cases that occurred during the months of February and December, but they only show that the disease must be lurking about, only waiting for a favourable opportunity to make itself manifest, and these single cases must be met with rigorous action on the part of the Sanitary Branch of the Medical Department, otherwise very serious outbreaks of this disease may be started.

PRISONS.

The health of the convicts was satisfactory throughout the year. No epidemic occurred in any of the Prisons, although there was a considerable increase in the number of convicts. The daily average number of prisoners was 978, and out of this number 34 reported sick daily.

	1910.	1911.
Total convicts	3,001	5,474
Total sick	385	466
Total deaths	18	10

HOSPITALS AND DISPENSARIES.

The number of both Europeans and Natives who came under treatment in the Hospitals and Dispensaries of the Colony was slightly less than in the year 1910.

1911.—	
Europeans	878
Natives	24,197
1910.—	
Europeans	900
Natives	26,908

ACCRA.

European Mortality and Invaliding Rates, 1911.

Total Strength.	Deaths.	Invalidings.	Death rate per 1,000.	Invaliding rate per 1,000.
Officials ... 161	2	8	12·42	49·68
Non-officials ... 136	4	8	29·41	58·82
Totals ... 297	6	16	20·20	53·86

Summary of Hospital and Dispensary Return.

	In-patients.	Out-patients.
Europeans	92	247
Natives, including W.A.F.F. and Civil Police	425	4,015
Totals	517	4,262

Surgical Operations, 119.

European Mortality and Invaliding Rates, 1910.

Total Strength.	Deaths.	Invalidings.	Death rate per 1,000.	Invaliding rate per 1,000.
Officials ... 124	0	17	0	137·09
Non-officials ... 106	3	3	28·30	28·30
Totals ... 230	3	20	13·04	86·95

Summary of Hospital and Dispensary Return.

	In-patients.	Out-patients.
Europeans	107	432
Natives, including W.A.F.F. and Civil Police	525	6,049
Totals	632	6,481

Surgical Operations, 283.

SECCONDEE.

European Mortality and Invaliding Rates, 1911.

Total Strength.	Deaths.	Invalidings.	Death rate per 1,000.	Invaliding rate per 1,000.
Officials 173	2	5	11·56	28·90
Non-officials ... 144	4	6	27·77	41·66
Totals ... 317	6	11	18·92	34·70

Summary of Hospital and Dispensary Return.

	In-patients.	Out-patients.
Europeans	192	181
Natives, including W.A.F.F. and Civil Police	377	3,199
Totals	569	3,380

Surgical Operations, 57.

European Mortality and Invaliding Rates, 1910.

Total Strength.	Deaths.	Invalidings.	Death rate per 1,000.	Invaliding rate per 1,000.
Officials 70	4	2	57·14	28·57
Non-officials ... 143	12	5	83·91	34·96
Totals ... 213	16	7	75·55	23·47

Summary of Hospital and Dispensary Return.

	In-patients.	Out-patients.
Europeans	149	16
Natives, including W.A.F.F. and Civil Police	326	2,784
Totals	475	2,800

Surgical Operations, 25.

CAPE COAST.

European Mortality and Invaliding Rates, 1911.

Total Strength.	Deaths.	Invalidings.	Death rate per 1,000.	Invaliding rate per 1,000.
Officials 34	0	0	0	0
Non-officials ... 53	2	2	37·73	37·73
Totals ... 87	2	2	22·98	22·98

Summary of Hospital and Dispensary Return.

	In-Patients.	Out-Patients.
Europeans	18	9
Natives, including W.A.F.F. and Civil Police	180	3,987
Totals	198	3,996

Surgical Operations, 58.

European Mortality and Invaliding Rates, 1910.

Total Strength.	Deaths.	Invalidings.	Death rate per 1,000.	Invaliding rate per 1,000.
Officials 30	0	4	0	133·33
Non-officials ... 39	0	1	0	25·64
Totals ... 69	0	5	0	72·46

Summary of Hospital and Dispensary Return.

	In-Patients.	Out-Patients.
Europeans	25	15
Natives, including W.A.F.F. and Civil Police	233	4,982
Totals	258	4,997

Surgical Operations, 103.

AXIM.

European Mortality and Invaliding Rates, 1911.

Total Strength.	Deaths.	Invalidings.	Death rate per 1,000.	Invaliding rate per 1,000.
Officials 18	0	1	0	55·55
Non-officials ... 109	4	2	36·69	18·34
Totals ... 127	4	3	31·49	23·62

Summary of Hospital and Dispensary Return.

	In-patients.	Out-patients.
Europeans	12	10
Natives, including W.A.F.F. and Civil Police	91	3,656
Totals	103	3,666

Surgical Operations, 30.

European Mortality and Invaliding Rates, 1910.

Total Strength.	Deaths.	Invalidings.	Death rate per 1,000.	Invaliding rate per 1,000.
Officials 15	1	0	66·66	0
Non-officials ... 98	4	4	40·81	40·81
Totals ... 113	5	4	44·44	40·81

Summary of Hospital and Dispensary Return.

	In-patients.	Out-patients.
Europeans	18	27
Natives, including W.A.F.F. and Civil Police	74	2,431
Totals	92	2,458

Surgical Operations, 7.

SALTPOND.

European Mortality and Invaliding Rates, 1911.

Total Strength.	Deaths.	Invalidings.	Death rate per 1,000.	Invaliding rate per 1,000.
Officials 14	0	0	0	0
Non-officials ... 18	0	0	0	0
Totals ... 32	0	0	0	0

Summary of Hospital and Dispensary Return.

	In-patients.	Out-patients.
Europeans	—	8
Natives, including W.A.F.F. and Civil Police	No hospital	859
Totals	—	867

Surgical Operations, *nil.*

European Mortality and Invaliding Rates, 1910.

Total Strength.	Deaths.	Invalidings.	Death rate per 1,000.	Invaliding rate per 1,000.
Officials 19	0	2	0	105·26
Non-officials ... 22	0	0	0	0
Totals ... 41	0	2	0	48·78

Summary of Hospital and Dispensary Return.

	In-patients.	Out-patients.
Europeans	No hospital	7
Natives, including W.A.F.F. and Civil Police	—	1,088
Totals	—	1,095

Surgical Operations, *nil.*

WINNEBAH.

European Mortality and Invaliding Rates, 1911.

Total Strength.	Deaths.	Invalidings.	Death rate per 1,000.	Invaliding rate per 1,000.
Officials ... 15	—	—	—	—
Non-officials ... 36	1	2	27·77	55·54
Totals ... 51	1	2	19·60	39·20

Summary of Hospital and Dispensary Return.

	In-patients.	Out-patients.
Europeans	2	5
Natives, including W.A.F.F. and Civil Police	33	1,321
Totals	35	1,326

Surgical Operations, 12.

European Mortality and Invaliding Rates, 1910

Total Strength.	Deaths.	Invalidings.	Death rate per 1,000.	Invaliding rate per 1,000.
Officials ... 42	0	0	0	0
Non-officials ... 26	1	0	38·46	0
Totals ... 68	1	0	14·70	0

Summary of Hospital and Dispensary Return.

	In-patients.	Out-patients.
Europeans	1	34
Natives, including W.A.F.F. and Civil Police	11	2,332
Totals	12	2,366

Surgical Operations, 9.

TARQUAH.

European Mortality and Invaliding Rates, 1911.

Total Strength.	Deaths.	Invalidings.	Death rate per 1,000.	Invaliding rate per 1,000.
Officials ... 20	0	0	0	0
Non-officials ... 650	12	37	18·46	56·92
Totals .. 670	12	37	79·91	55·22

Summary of Hospital and Dispensary Return.

	In-Patients.	Out Patients.
Europeans	3	31
Natives, including W.A.F.F. and Civil Police	86	1,031
Totals	89	1,062

Surgical Operations, 7.

European Mortality and Invaliding Rates, 1910.

Total Strength.	Deaths.	Invalidings.	Death rate per 1,000.	Invaliding rate per 1,000.
Officials 20	1	0	50·00	0
Non-officials ... 700	20	0	28·57	0
Totals ... 720	21	0	28·57	0

Summary of Hospital and Dispensary Return.

	In-patients.	Out-patients.
Europeans	10	31
Natives, including W.A.F.F. and Civil Police	33	953
Totals	43	984

Surgical Operations, 4.

ELMINA.

European Mortality and Invaliding Rates, 1911.

Total strength.	Deaths.	Invalidings.	Death rate per 1,000.	Invaliding rate per 1,000.
Officials 1	0	0	0	0
Non-officials ... 5	0	0	0	0
Totals ... 6	0	0	0	0

Summary of Hospital and Dispensary Return.

	In-patients.	Out-patients.
Europeans	0	4
Natives, including W.A.F.F. and Civil Police	5	742
Totals	5	746

Surgical Operations, 9.

European Mortality and Invaliding Rates, 1910.

Total strength.	Deaths.	Invalidings.	Death rate per 1,000.	Invaliding rate per 1,000.
Officials 17	0	0	0	0
Non-officials ... 14	0	0	0	0
Totals ... 31	0	0	0	0

Summary of Hospital and Dispensary Return.

	In-patients.	Out-patients.
Europeans	No European hospital	6
Natives, including W.A.F.F. and Civil Police	3	982
Totals	3	988

Surgical Operations, 9.

QUITTAH.

European Mortality and Invaliding Rates, 1911.

Total strength.	Deaths.	Invalidings.	Death rate per 1,000.	Invaliding rate per 1,000.
Officials 23	0	0	0	0
Non-officials ... 59	0	0	0	0
Totals ... 82	0	0	0	0

Summary of Hospital and Dispensary Return.

	In-patients.	Out-patients.
Europeans	0	20
Natives, including W.A.F.F. and Civil Police	48	1,882
Totals	48	1,902

Surgical Operations, 84.

European Mortality and Invaliding Rates, 1910.

Total strength.	Deaths.	Invalidings.	Death rate per 1,000.	Invaliding rate per 1,000.
Officials 7	0	0	0	0
Non-officials ... 12	0	1	0	83·33
Totals ... 19	0	1	0	52·63

Summary of Hospital and Dispensary Return.

	In-patients.	Out-patients.
Europeans	No European hospital	4
Natives, including W.A.F.F. and Civil Police	55	1,537
Totals	55	1,541

Surgical Operations, 71.

ADDAH.

European Mortality and Invaliding Rates, 1911.

Total strength.	Deaths.	Invalidings.	Death rate per 1,000.	Invaliding rate per 1,000.
Officials ... 8	0	0	0	0
Non-officials ... 23	0	0	0	0
Totals ... 31	0	0	0	0

Summary of Hospital and Dispensary Return.

	In-patients.	Out-patients.
Europeans	2	10
Natives, including W.A.F.F. and Civil Police	36	1,118
Totals	38	1,128

Surgical Operations, 9.

European Mortality and Invaliding Rates, 1910.

Total strength.	Deaths.	Invalidings.	Death rate per 1,000.	Invaliding rate per 1,000.
Officials ... 16	0	0	0	0
Non-officials ... 8	0	0	0	0
Totals ... 24	0	0	0	0

Summary of Hospital and Dispensary Return.

	In-patients.	Out-patients.
Europeans	4	10
Natives, including W.A.F.F. and Civil Police	21	1,086
Totals	25	1,096

Several Minor Surgical Operations.

AKUSE.

European Mortality and Invaliding Rates, 1911.

Total strength.	Deaths.	Invalidings.	Death rate per 1,000.	Invaliding rate per 1,000.
Officials ... 24	0	0	0	0
Non-officials ... 57	1	2	17·54	35·08
Totals ... 81	1	2	12·34	24·68

Summary of Hospital and Dispensary Return.

	In-patients.	Out-patients.
Europeans	—	32
Natives, including W.A.F.F. and Civil Police	94	1,012
Totals	94	1,044

Surgical Operations, 72.

European Mortality and Invaliding Rates, 1910.

Total strength.	Deaths.	Invalidings.	Death rate per 1,000.	Invaliding rate per 1,000.
Officials ... 13	0	0	0	0
Non-officials ... 29	1	2	34·48	68·96
Totals ... 42	1	2	23·80	47·61

Summary of Hospital and Dispensary Return.

	In-patients.	Out-patients.
Europeans	No European hospital.	4
Natives, including W.A.F.F. and Civil Police	26	775
Totals	26	779

Surgical Operations, 38.

E. H. TWEEDY,
Acting Principal Medical Officer.

Accra,
25th May, 1912.

APPENDIX I.

ACCRA.

Meteorological Return for the Year 1911.

Month.	Temperature.						Rainfall.		Wind.		Remarks.
	Solar Maximum.	Minimum on Grass.	Shade Maximum.	Shade Minimum.	Range.	Mean.	Amount in Inches.	Degree of Humidity.	General Direction.	Average Force.	
January ...	143·90	67·90	87·29	69·80	17·48	78·54	·80	88·87	S.W.	62·92	
February ...	144·75	70·50	85·53	71·17	14·35	78·35	...	79·42	...	62·73	
March ...	148·35	74·54	87·48	73·67	13·80	80·57	5·12	72·29	S.W.	64·07	
April	145·86	74·26	86·30	71·27	15·03	78·78	3·33	75·16	...	69·27	
May	146·58	75·83	85·16	73·67	11·48	79·41	6·20	71·41	...	68·86	
June	138·46	81·13	82·70	73·20	9·50	77·95	20·68	79·83	S.W.	54·67	
July	138·41	86·51	80·22	70·93	9·29	75·57	·14	79·32	,,	55·26	
August ...	134·48	85·67	78·80	69·67	9·12	74·23	...	76·29	,,	74·06	
September ...	143·60	71·40	81·80	69·63	12·16	75·71	·26	77·53	,,	72·74	
October ...	149·09	73·16	86·03	71·87	14·16	78·95	·14	77·64	,,	68·10	
November ...	147·93	72·43	85·60	73·53	12·06	79·56	3·26	83·30	,,	73·10	
December ...	141·45	72·61	86·87	71·96	14·90	79·41	·16	72·09	...	72·44	
Totals ...	1722·86	905·94	1013·78	860·37	153·33	937·03	40·09	933·15	S.W.	798·22	
Means ...	143·57	75·49	84·48	71·69	12·77	78·08	...	77·76	,,	66·51	

ABURI.

Meteorological Return for the Year 1911.

Month.	Temperature.						Rainfall.		Wind.		Remarks.
	Solar Maximum.	Minimum on Grass.	Shade Maximum.	Shade Minimum.	Range.	Mean.	Amount in Inches.	Degree of Humidity.	General Direction.	Average Force.	
January ...	144·00	66·09	84·58	66·06	18·51	75·32	2·02	89·00	N.E.	...	
February ...	148·60	65·82	80·53	66·25	14·28	73·39	·46	87·10	N.W.	...	
March ...	148·90	65·58	88·00	71·74	16·25	79·87	3·27	85·93	,,	...	
April	148·20	67·26	85·93	67·76	18·16	76·84	4·36	87·05	N.E.	...	
May	149·38	67·09	81·12	66·93	14·19	74·02	6·98	87·87	N.W.	...	
June	149·66	64·16	84·03	67·20	16·83	75·61	8·00	88·70	S.W.	...	
July	148·74	...	84·70	69·00	15·70	76·85	1·80	89·38	,,	...	
August ...	149·16	...	84·87	69·38	15·48	77·12	1·83	87·67	,,	...	
September ...	131·36	...	81·56	66·80	14·76	74·18	2·10	86·76	N.E.	...	
October ...	144·70	67·80	85·38	68·29	17·09	76·83	2·28	87·90	N.W.	...	
November ...	145·66	69·00	84·66	67·46	17·20	76·06	5·30	82·60	N.E.	...	
December ...	135·83	67·09	85·22	66·51	18·70	75·86	1·37	86·32	N.W.	...	
Totals ...	1744·19	599·89	1010·58	813·38	197·15	911·95	39·77	1046·28	,,	...	
Means ...	145·34	66·65	84·21	67·78	16·42	75·99	...	87·19	,,	...	

QUITTAH.

Meteorological Return for the Year 1911.

Month.	Temperature.						Rainfall.		Wind.		Remarks.
	Solar Maximum.	Minimum on Grass.	Shade Maximum.	Shade Minimum.	Range.	Mean.	Amount in Inches.	Degree of Humidity.	General Direction.	Average Force.	
January ...	134·93	70·16	84·64	73·67	10·96	79·15	·20	85·19	...	...	
February ...	140·28	75·03	89·03	77·75	11·28	83·39	·15	82·75	...	...	
March ...	141·87	73·74	88·22	76·77	11·45	82·49	4·37	77·03	...	...	
April	145·73	73·50	88·80	77·14	11·66	82·97	1·75	75·40	...	...	
May	141·54	74·22	86·12	74·93	11·19	80·52	6·18	80·03	...	...	
June	126·26	73·33	83·73	74·46	9·26	79·09	3·76	75·63	...	...	
July	136·03	71·51	81·77	73·09	8·67	77·43	·10	78·16	...	...	
August ...	136·06	71·03	80·09	70·90	9·19	77·49	...	79·35	...	...	
September ...	141·13	72·93	83·60	73·50	10·10	77·55	...	81·13	...	...	
October ...	143·83	73·80	85·83	74·96	10·87	80·39	·41	81·12	...	...	
November ...	143·80	74·96	87·53	76·90	10·63	82·21	·40	75·20	...	...	
December ...	136·67	73·32	86·67	75·96	10·70	81·31	·44	82·35	...	...	
Totals ...	1668·13	877·53	1026·03	900·03	125·96	963·99	17·76	953·34	...	...	
Means ...	139·01	73·12	85·50	75·00	10·49	80·33	...	79·44	...	...	

CAPE COAST.

Meteorological Return for the Year 1911.

Month.	Temperature.						Rainfall.		Wind.		Remarks.
	Solar Maximum.	Minimum on Grass.	Shade Maximum.	Shade Minimum.	Range.	Mean.	Amount in Inches.	Degree of Humidity.	General Direction.	Average Force.	
January ...	138·74	62·96	84·74	72·29	12·45	78·51	2·70	84·35	...	...	
February ...	140·14	66·53	86·92	72·92	14·00	79·92	·52	76·42	...	...	
March ...	142·58	64·67	85·83	72·54	13·29	79·18	2·77	79·32	...	...	
April	145·93	64·43	86·16	72·90	13·26	79·53	2·90	80·03	...	...	
May	99·74	60·80	84·83	71·77	13·06	78·30	4·95	80·06	...	...	
June	89·13	58·66	83·10	70·93	12·16	77·01	2·97	76·53	...	...	
July	84·58	56·93	82·80	69·67	13·12	76·23	·97	85·00	...	...	
August ...	82·67	53·32	79·51	66·41	13·09	72·96	·12	88·87	...	...	
September ...	87·16	53·73	79·36	66·76	12·60	73·06	·16	89·03	...	...	
October ...	87·61	55·12	76·67	71·12	5·54	73·89	1·25	82·09	...	...	
November ...	92·00	55·90	88·30	72·66	15·63	80·48	2·85	80·73	...	...	
December ...	89·61	54·45	85·54	75·83	9·70	80·68	·20	85·19	...	...	
Totals ...	1279·89	707·50	1003·76	855·80	147·90	929·75	22·36	987·62	...	...	
Means ...	106·65	58·95	83·64	71·31	12·32	77·47	...	82·30	...	...	

SECCONDEE.

METEOROLOGICAL RETURN FOR THE YEAR 1911.

MONTH.	TEMPERATURE.						RAINFALL.		WIND.		REMARKS.
	Solar Maximum.	Minimum on Grass.	Shade Maximum.	Shade Minimum.	Range.	Mean.	Amount in Inches.	Degree of Humidity.	General Direction.	Average Force.	
January ...	132·53	63·87	87·32	74·38	16·93	78·85	1·46	59·22	...	...	
February ...	140·38	67·60	91·53	74·39	17·14	82·96	·15	57·46	...	...	
March ...	144·48	68·00	87·74	71·61	16·77	79·67	4·96	56·58	...	...	
April	150·13	65·40	90·90	71·96	18·93	81·43	1·30	54·33	...	...	
May	144·54	62·12	87·32	71·32	16·00	79·32	10·71	58·25	...	...	
June	109·22	67·80	84·73	70·06	14·66	77·39	6·79	57·93	...	...	
July	165·35	69·25	81·45	68·77	12·67	75·11	3·96	63·16	...	...	
August ...	138·83	67·25	80·54	67·41	13·12	73·97	·32	59·70	...	...	
September ..	138·30	68·16	82·10	69·43	12·66	75·76	·71	60·93	...	...	
October ...	149·45	68·58	85·32	69·77	15·54	77·54	1·09	58·48	...	...	
November ...	148·10	67·96	88·76	70·66	18·10	79·71	1·80	55·76	...	...	
December ...	135·16	67·12	88·00	70·19	17·80	79·09	2·12	56·77	...	...	
Totals ...	1696·47	803·11	1035·71	845·95	190·32	940·80	35·37	698·57	...	...	
Means ...	141·37	66·92	86·30	70·49	15·86	78·40	...	58·21	...	...	

AXIM.

METEOROLOGICAL RETURN FOR THE YEAR 1911.

MONTH.	TEMPERATURE.						RAINFALL.		WIND.		REMARKS.
	Solar Maximum.	Minimum on Grass.	Shade Maximum.	Shade Minimum.	Range.	Mean.	Amount in Inches.	Degree of Humidity.	General Direction.	Average Force.	
January ...	130·70	73·58	83·83	66·09	17·74	74·96	1·67	92·48	...	...	
February ..	131·46	73·75	84·25	66·42	17·82	75·33	4·10	92·14	...	...	
March ...	131·67	71·74	84·38	65·67	18·70	75·02	5·76	93·32	...	...	
April	130·86	71·70	82·93	65·93	17·00	74·43	3·28	93·50	...	...	
May	130·77	69·06	82·90	65·67	17·22	74·28	15·27	92·41	...	...	
June	129·83	68·90	82·66	64·10	17·86	73·38	19·92	92·50	...	...	
July	129·22	69·29	81·51	65·16	16·35	73·33	9·10	92·87	...	...	
August ...	127·29	66·29	78·90	64·48	14·41	71·69	·96	93·19	...	...	
September ...	129·00	66·33	79·60	65·46	14·13	72·53	·46	93·23	...	...	
October ...	130·48	65·67	81·22	65·41	15·80	73·31	4·80	93·22	...	...	
November ...	131·70	63·56	82·30	65·96	16·33	74·13	13·75	92·90	...	...	
December ...	132·25	65·96	83·35	66·12	17·22	74·73	9·62	92·32	...	...	
Totals ...	1565·23	825·83	987·83	786·47	200·58	887·12	88·69	1114·08	...	...	
Means ...	130·43	68·81	82·31	65·53	16·71	73·92	...	92·84	...	...	

TARQUAH.

Meteorological Return for the Year 1911.

Month.	Temperature.						Rainfall.		Wind.		Remarks.
	Solar Maximum.	Minimum on Grass.	Shade Maximum.	Shade Minimum.	Range.	Mean.	Amount in Inches.	Degree of Humidity.	General Direction.	Average Force.	
January ...	134·87	69·70	90·29	69·22	21·09	79·75	1·81	85·06	...	...	
February ...	139·46	70·75	92·89	72·25	20·64	82·57	2·71	85·85	...	...	
March ...	143·96	70·23	93·06	72·38	20·67	82·72	10·54	88·12	...	...	
April	146·46	70·33	95·63	72·13	23·50	83·88	7·96	87·66	...	...	
May	143·06	70·48	92·12	72·06	20·06	82·09	14·81	88·74	...	...	
June	131·06	70·50	87·00	72·30	14·70	79·65	9·80	87·63	...	...	
July	129·32	70·16	80·12	72·09	13·03	76·10	3·76	84·58	...	...	
August ...	127·93	69·54	83·12	71·67	11·45	77·39	2·17	84·51	...	...	
September ...	132·90	70·93	85·16	72·30	12·86	78·73	2·50	82·06	...	...	
October ...	145·35	71·38	88·29	72·77	15·51	80·53	9·71	80·19	...	...	
November ...	144·40	70·40	91·33	71·86	19·46	81·59	6·54	80·33	...	...	
December ...	132·88	69·51	89·00	70·70	18·29	79·85	3·19	80·03	...	...	
Totals ...	1651·65	843·91	1068·01	861·73	211·26	964·85	75·50	1014·76	...	...	
Means ...	137·63	70·32	89·00	71·81	17·60	80·40	...	84·56	...	...	

COOMASSIE.

Meteorological Return for the Year 1911.

Month.	Temperature.						Rainfall.		Wind.		Remarks.
	Solar Maximum.	Minimum on Grass.	Shade Maximum.	Shade Minimum.	Range.	Mean.	Amount in Inches.	Degree of Humidity.	General Direction.	Average Force.	
January ...	116·25	80·43	90·00	...	...	...	·70	88·69	...	...	
February ...	123·00	60·60	...	90·50	...	...	1·82	87·92	...	...	
March ...	117·67	64·74	...	90·45	...	...	12·27	87·54	...	...	
April	120·13	68·23	...	90·80	...	...	7·22	87·33	...	...	
May	121·83	71·06	90·41	...	...	...	8·18	87·70	...	...	
June	122·43	63·03	83·03	70·36	12·66	76·69	10·70	87·16	...	...	
July	133·35	63·00	82·22	70·64	11·58	76·43	8·32	88·51	...	...	
August ...	115·64	63·48	82·19	71·06	11·12	76·62	3·93	88·51	...	...	
September ...	132·80	65·13	83·86	71·16	12·70	77·51	3·89	88·33	...	...	
October ...	133·74	64·58	85·29	70·74	14·54	78·01	8·01	70·91	...	...	
November ...	146·90	66·03	89·53	72·13	17·40	80·83	3·37	84·46	...	...	
December ...	147·74	64·83	88·61	71·12	17·48	79·86	1·57	88·19	...	...	
Totals ...	1531·48	795·14	775·14	768·96	97·48	545·95	69·98	1035·25	...	...	
Means ...	127·62	66·26	86·12	76·89	13·92	77·99	...	86·27	...	...	

KINTAMPO.

Meteorological Return for the Year 1911.

Month.	Temperature.						Rainfall.		Wind.		Remarks.
	Solar Maximum.	Minimum on Grass.	Shade Maximum.	Shade Minimum.	Range.	Mean.	Amount in Inches.	Degree of Humidity.	General Direction.	Average Force.	
January ...	139·77	63·51	89·83	66·77	23·06	78·30	·05	53·06	...	...	
February ...	153·00	66·21	94·00	70·14	23·85	82·07	·83	55·51	...	...	
March ...	...	...	...	...	...	...	...	...	...	...	
April	..	...	...	...	...	...	...	...	...	...	
May	...	...	...	...	...	...	...	...	...	...	
June	...	...	...	...	...	...	...	..	...	...	
July	124·03	...	82·09	68·64	13·45	75·36	3·72	73·25	...	...	
August ...	128·51	...	81·19	67·80	13·38	74·49	3·52	...	...	...	
September ...	135·80	...	81·16	69·43	11·73	75·29	17·50	...	...	...	
October ...	146·16	...	83·96	68·67	15·29	76·31	8·39	...	...	...	
November ...	...	...	...	...	...	...	...	...	...	...	
December ...	131·16	...	85·35	64·93	20·41	75·14	·30	...	...	...	
Totals ...	958·43	129·72	597·58	476·38	121·17	536·96	34·31	181·82	...	...	
Means ...	136·91	64·86	85·36	68·05	17·31	76·70	...	60·60	...	...	

SUNYANI.

Meteorological Return for the Year 1911.

Month.	Temperature.						Rainfall.		Wind.		Remarks.
	Solar Maximum.	Minimum on Grass.	Shade Maximum.	Shade Minimum.	Range.	Mean.	Amount in Inches.	Degree of Humidity.	General Direction.	Average Force.	
January ...	133·06	52·96	89·45	62·64	26·80	76·04	...	75·19	...	...	
February ...	136·96	61·17	94·10	69·78	24·32	81·94	·09	72·71	...	...	
March ...	141·22	61·77	93·48	70·70	22·77	82·19	4·53	81·41	...	...	
April	156·83	61·90	92·56	70·20	22·36	81·38	4·40	79·90	...	...	
May	137·29	61·06	88·77	70·61	18·16	79·69	8·93	84·54	...	...	
June	133·90	55·26	87·10	70·00	17·10	78·55	7·75	88·06	...	...	
July	130·87	54·74	84·38	69·54	14·83	76·96	4.64	89·64	...	...	
August ...	127·06	52·54	81·38	67·87	13·51	74·62	2·13	92·54	...	...	
September ...	135·06	54·50	85·46	69·30	16·16	77·38	3·95	91·40	...	...	
October ...	137·90	54·09	88·38	69·29	19·09	78·83	5·02	89·58	...	...	
November ...	138·90	55·33	89·63	69·70	19·93	79·66	·53	85·70	...	...	
December ...	128·90	47·00	89·64	63·54	26·09	76·58	·15	85·06	...	...	
Totals ...	1637·95	672·32	1064·33	823·17	241·12	943·82	42·12	1015·73	...	...	
Means ...	136·49	56·02	88·69	68·59	20·09	78·65	...	84·64	...	...	

TAMALE.

Meteorological Return for the Year 1911.

Month.	Temperature.						Rainfall.		Wind.		Remarks.
	Solar Maximum.	Minimum on Grass.	Shade Maximum.	Shade Minimum.	Range.	Mean.	Amount in Inches.	Degree of Humidity.	General Direction.	Average Force.	
January ...	139·25	...	96·35	55·74	40·61	76·04	...	32·06	...	...	
February ...	148·85	20·28	101·42	61·42	40·00	81·42	...	41·07	...	...	
March ...	150·93	...	97·96	62·48	35·48	80·22	7·98	51·54	...	...	
April	151·20	...	96·03	62·10	33·93	79·06	1·68	55·43	...	...	
May	147·03	...	93·22	60·38	32·83	76·80	4·94	58·54	...	...	
June	144·30	...	90·50	59·03	31·46	74·76	6·21	64·43	...	...	
July	144·67	...	88·77	58·67	30·09	73·72	6·11	65·16	...	...	
August ...	141·38	...	86·00	57·87	28·12	71·93	7·14	64·67	...	...	
September ...	146·76	...	89·00	58·86	30·13	78·93	8·09	66·63	...	...	
October ...	156·41	...	95·22	59·80	35·41	77·51	1·50	59·03	...	...	
November ...	158·43	...	99·50	59·63	39·86	79·56	·97	50·50	...	...	
December ...	147·80	...	98·00	55·45	42·54	76·72	...	34·19	...	...	
Totals ...	1777·01	20·28	1131·97	711·43	420·46	926·67	44·62	643·25	...	...	
Means ...	148·08	20·28	94·33	59·28	35·03	77·22	...	53·60	...	...	

GAMBAGA.

Meteorological Return for the Year 1911.

Month.	Temperature.						Rainfall.		Wind.		Remarks.
	Solar Maximum.	Minimum on Grass.	Shade Maximum.	Shade Minimum.	Range.	Mean.	Amount in Inches.	Degree of Humidity.	General Direction.	Average Force.	
January ...	131·89	61·56	99·83	65·90	30·93	82·86	...	35·93	...	...	
February ...	...	...	...	...	...	...	...	...	...	...	
March ...	155·25	74·00	105·66	77·58	26·41	91·62	·16	42.83	...	...	
April	82·10	71·06	98·63	73·76	24·86	86·19	3·98	55·56	...	...	
May	...	71·00	93·50	72·54	20·96	83·02	2·50	64·87	...	...	
June	...	68·80	87·36	70·36	17·00	78·86	4·18	77·88	...	...	
July	...	68·29	86·16	69·74	16·42	77·95	4·93	80·12	...	...	
August ...	...	69·16	84·83	70·11	14·72	77·47	5·48	79·72	...	...	
September ...	...	67·80	85·56	68·53	17·03	77·04	12·72	81·70	...	...	
October ...	...	68·58	91·87	70·32	21·54	81·09	4·22	74·61	...	...	
November ...	...	68·76	97·56	71·63	25·93	84·59	...	59·60	...	...	
December ...	...	64·61	96·83	67·96	28·87	82·39	...	40·00	...	...	
Totals ...	369·24	753·62	1027·79	778·43	244·67	903·08	38·17	692·82	...	...	
Means ...	123·08	68·51	93·43	70·76	22·24	82·09	...	62·98	...	...	

ADDAH.

Meteorological Return for the Year 1911.

Month.	Temperature.						Rainfall.		Wind.		Remarks.
	Solar Maximum.	Minimum on Grass.	Shade Maximum.	Shade Minimum.	Range.	Mean.	Amount in Inches.	Degree of Humidity.	General Direction.	Average Force.	
January ...	138·00	88·32	84·22	74·38	9·83	79·30	4·25	94·29	...	...	
February ...	143·00	90·82	85·64	77·96	7·67	81·80	·07	94·92	...	...	
March ...	144·77	90·58	85·54	77·29	8·25	81·41	2·26	94·90	...	...	
April	144·80	95·46	85·86	77·00	8·86	81·43	2·91	95·00	...	...	
May	107·96	89·83	84·19	75·32	8·87	79·75	8·27	78·66	...	...	
June	95·30	89·20	81·10	75·30	5·80	78·20	11·11	80·60	...	...	
July	114·61	77·93	77·96	72·70	5·25	75·33	...	88·83	...	...	
August ...	122·22	63·06	76·41	70·06	6·35	73·23	...	87·35	...	...	
September ...	151·73	56·40	79·50	73·26	6·23	76·38	...	86·76	...	...	
October ...	152·19	75·67	82·70	75·67	7·03	79·18	·84	80·58	...	...	
November ...	152·86	...	85·16	77·10	8·16	81·13	·13	79·90	...	...	
December ...	145·54	...	86·77	75·54	11·22	81·15	·12	80·58	...	...	
Totals ...	1612·98	817·27	995·05	901·58	93·52	948·29	29·96	1042·37	...	...	
Means ...	134·41	81·72	82·92	75·13	7·79	79·02	...	86·86	...	...	

APPENDIX II.

MEDICAL REPORT ON ASHANTI FOR THE YEAR ENDED 31ST DECEMBER, 1911.

EUROPEANS.

The health of the Europeans stationed in Ashanti during the year was good.

There was no death amongst the officials. Of non-officials one death occurred in Obuasi and eleven were invalided.

The number of Europeans resident in Ashanti during the year was 463, of these 139 were officials, 11 missionaries, 2 missionaries' wives, 3 were wives of officials, 308 merchants and mining community.

The daily average of Europeans in Coomassie was:—

Officials ...	41
Non-officials...	37

The total number of officials on the sick list during the year was 85.

TABLE OF INVALIDING.

Description.	Residence.	Disease.
1 Official ...	Obuasi ..	Anæmia
1 Non-official	Coomassie	Congestion of Liver
1 Non-official	Coomassie	Debility
1 Official ...	Coomassie	Epileptic Seizure
1 Official ...	Obuasi ...	Filariasis
1 Non-official	Coomassie	Hæmoglobinuric Fever
1 Non-official	Coomassie	Malaria
1 Non-official	Obuasi ...	Hæmoglobinuric Fever
1 Official ...	Coomassie	Malaria
6 Non-officials	Obuasi ...	Malaria
1 Official ...	Obuasi ...	Mental Debility
1 Official ...	Kintampo	Mental Debility
1 Non-official	Obuasi ...	Neurasthenia
1 Official ...	Obuasi ...	Phthisis
1 Non-official	Coomassie	Rheumatism
1 Non-official	Obuasi ...	Stone in Kidney
1 Non-official	Obuasi ...	Tachycardia
1 Non-official	Obuasi ...	Venereal Disease

The invaliding rate was 5·03 per cent. amongst officials and 5·19 per cent. amongst non-officials.

The Syrians, who number 23 in Coomassie, have indifferent health. They live with their wives and children scattered amongst the native population, and, as they seldom take quinine, malaria is common amongst them. Three of them had hæmoglobinuric fever, one female and two male cases; one of the latter ended fatally; they were all adults. A child died of malaria.

Officials suffered from the following diseases :—

Abscess	1
Anæmia	4
Bronchial Catarrh	4
Boils	1
Cellulitis of forearm	1
Congestion of Liver	1
Cystitis	1
Diarrhœa	1
Epileptic Seizure	1
Follicular Tonsilitis	2
Febricula	3
Gastro-Duodenal Catarrh	1
Gastritis	6
Heat Stroke	1
Heat Exhaustion	1
Influenza	1
Intermittent Malaria	4
Remittent Malaria	40
Injury to Foot	2
Jaundice	1
Mental Debility	1
Neuralgia	1
Ptomaine Poisoning	1
Rheumatism	1
Septic Finger	1
Sprained Ankle	1
Sciatica	1
Supra-orbital Neuralgia	1
Total	85

There were 57 Europeans treated in the Coomassie Hospital; 36 of these were officials and 21 were non-officials.

The average period spent in Hospital was 11 days.

During the year in Coomassie the number of non-officials who were treated in their quarters was 54.

NATIVES.

Officials :—Out of 170 native officials in Ashanti, 55 were placed on the sick list; their diseases were not serious, 18 cases were malaria, 7 bronchitis and the rest were minor troubles. There were no deaths and no invalidings.

Non-officials :—Attendance as in-patients in Coomassie Hospital.

Admissions for the year	657
Deaths for the year	27

New Cases attended to at out-patient department :—

Soldiers	2,818		
Civil Police	291		
Civilians	4,419	Total	7,528

Old Cases :—

Soldiers	18,348		
Civil Police	1,422		
Civilians	13,760	Total	33,530
		Grand Total	41,058

SMALL-POX.

The outbreak of small-pox continued from last year. For the first four months 37 cases were treated in the Isolation Hospital at Coomassie. There were 11 deaths amongst the cases.

During the latter portion of the year no cases have been reported.

A Native Public Vaccinator has been appointed who travels through Ashanti vaccinating; the people willingly presenting themselves for vaccination, about two-thirds of those vaccinated being successful. The vaccine lymph, as supplied from the Government Lymph Establishment, Accra, I found very successful when it was used as soon after receipt as possible. I vaccinated 100 school children in Coomassie and had 80 per cent of successful results.

TRYPANOSOMIASIS.

Four cases were treated in Coomassie during the year; among these cases one death occurred; the other three cases disappeared after a period of treatment.

Four more cases were under observation in a village near Coomassie, and after a long course of atoxyl treatment the parasites disappeared from their blood and the people remain in a healthy condition.

The four soldiers in whom trypanosomes were observed in Sunyani during the year 1910 were transferred to Coomassie in May, 1911. No parasites could be found in their blood and the men are fit and doing their work; they had been under treatment with atoxyl for six months. Two deaths were reported from villages near Kintampo.

The following Medical Officers were on Special Sleeping Sickness Duty at British Krachi during the year:—Drs. G. J. W. Keigwin, E. Slack, and A. M. Dowdall. Amongst the cases they treated they had 3 deaths and 5 recoveries after long courses of atoxyl. In North-western Ashanti there were 17 deaths.

METEOROLOGICAL CONDITIONS.

The rainfall in Coomassie was 70·25 inches as compared with 70·89 inches in the year 1910.

SLAUGHTER-HOUSE.

Statement showing number of cattle slaughtered in Coomassie Slaughter-house during the year 1911:—

Month.	Cows.	Sheep.	Goats.	Pigs.	Amount.		
					£	s.	d.
January	343	142	272	21	62	6	6
February	341	154	323	20	63	11	6
March	414	134	385	15	75	10	0
April	316	125	291	25	58	8	6
May	402	142	322	20	72	8	0
June	321	83	281	21	57	15	6
July	288	88	228	26	51	15	0
August	347	100	87	34	57	16	6
September	321	31	105	25	52	3	6
October	229	23	86	26	37	14	6
November	320	51	56	23	51	5	0
December	318	69	136	31	53	12	0
Totals	3,960	1,142	2,572	287	£694	6	6

GAOLS

The health of the prisoners for the year was good, no serious outbreak of disease occurring in any of the gaols. The work done was sanitary labour, making roads and carrying water.

SANITATION.

The sanitation of the four centres of administration, namely, Coomassie, Obuasi, Sunyani and Kintampo, has been kept in an efficient state. The incinerators in Coomassie and Obuasi work fairly well considering the amount of refuse they have to deal with. An incinerator has been built in Kintampo.

A permanent gang of 75 scavengers, under one Inspector and 3 headmen, were kept busy in looking after the sanitation of Coomassie, as the town is rapidly growing, being now of about 20,000 inhabitants. These numbers will have to be largely increased in the near future.

Mosquitoes were few in cantonments and in the European quarters; more numerous in the Native quarters.

Return showing number of prosecutions made in the Sanitary Department at Coomassie during the year 1911:—

Month.	No. of Prosecutions.	No. of Convictions.	Fines collected.			No. Imprisoned.
			£	s.	d.	
January	8	7	1	17	6	Nil.
February	40	40	20	8	0	"
March	38	37	7	8	0	"
April	42	42	10	7	6	"
May	54	54	19	18	0	"
June	44	44	13	19	0	"
July	94	94	37	10	0	"
August	60	60	23	5	0	"
September	42	40	23	4	0	"
October	16	16	6	0	0	"
November	60	60	35	2	6	"
December	65	62	15	12	0	"
Totals	563	556	£214	11	6	Nil.

GARDENS.

Good vegetable gardens were maintained by the Medical Officers at the various stations.

DEPARTMENTAL.

The efficiency of the Department has been well maintained.

The following Sisters have been in charge of the European Hospital during the year:—Miss Adair and Miss Hall.

The following members of the West African Medical Staff were on duty in Ashanti during the year:—Drs. H. B. S. Montgomery and C. E. S. Watson, Provincial Medical Officers; Dr. C. B. Hunter, Senior Medical Officer; Drs. W. W. Claridge, E. L. Hunt W. M. Wade, R. Whyte, G. J. W. Keigwin, G. F. Forde, G. de P. d'Amico, W. J. B Carter, S. Goodbrand, P. D. Oakley, A. J. Smith.

(Signed) H. B. S. MONTGOMERY,

Provincial Medical Officer.

APPENDIX III.

MEDICAL REPORT ON THE NORTHERN TERRITORIES FOR THE YEAR ENDED 31ST DECEMBER, 1911.

Out of a daily average European population of 22·85 thirty-one were placed on the Sick List. Two were invalided, but no deaths occurred; so that the improvement in the the health of the Europeans still continues.

The following table shows the comparative health of the stations in the Northern Territories and include all officials placed on the Sick List.

Station.	Average daily strength.	Number placed on Sick List.	Average Number of days on Sick List.	Invalided.	Died.
Tamale	6·15	13	4·07	1	—
Gambaga	1·61	3	2·66	—	—
Bawku	1·32	2	1·50	—	—
Zouaragu	5·35	5	7·40	—	—
Navarro	1·00	1	6·00	—	—
Lorha	1·43	—	—	—	—
Wa	2·13	1	6·00	—	—
Bole	1·55	2	2·50	—	—
Salaga	2·21	4	4·75	1	—
Totals	22·75	31	4·42	2	—

PREVALENT DISEASES.

Black-water Fever (this was a case remaining from the previous year)	1
Remittent Fever	18
Ptomaine Poisoning	1
Intermittent Fever	3
Rheumatism	1
Acute Tonsilitis	2
Dysentery	1
Fever	1
Diarrhœa	1
Accident (Bicycle)	1
,, (Ankle)	1
Total	31

Cause of invalidings:—

Blackwater Fever	1
Injury to Ankle	1
Total	2

NON-OFFICIALS.

No records.

NATIVE OFFICIALS.

The average number of the Government clerks throughout the Protectorate was 59·47, and out of this number fifteen were placed on the sick list; total number of days on Sick List 73, giving an average of ·2 per diem.

Invalided and died, nil.

NATIVE TROOPS.

The Company of the Gold Coast Regiment was stationed at Zouaragu most of the year. Out of a daily average of 209·25 there were no invalidings or deaths.

NORTHERN TERRITORIES CONSTABULARY.

Detachments were stationed at nine different places. During the year three deaths took place, in addition to one man killed in action, and four were invalided. Considering the duties and age of the men the figures are good. No epidemics occurred amongst the troops or the constabulary.

I. Company Gold Coast Regiment.

Month, 1911.	Strength.	Average daily number on Sick List.			Invalided.	Died.
		In-patients.	New.	Old.		
January	167	6·64	1·5	5·80	Nil.	Nil.
February	247	1·53	3·2	10·85	,,	,,
March	400	3·19	4·1	14·64	,,	,,
April	236·4	8·30	3·7	23·22	,,	,,
May	187	7·38	2·09	6·74	,,	,,
June	187	4·93	3·43	8·42	,,	,,
July	182·7	2·16	2·7	4·70	,,	,,
August	180	1·12	2·68	5·77	,,	,,
September	180	1·40	3·26	9·16	,,	,,
October	180	0·29	3·48	13·58	,,	,,
November	180	6·06	3·56	7·56	,,	,,
December	180	5·25	2·87	8·22	,,	,,

Northern Territories Constabulary.

Month, 1911.	Strength.	Average daily number on Sick List.			Invalided.	Died.
		In-patients.	New.	Old.		
January	244·91	·03	2·53	16·22	Nil.	Nil.
February	210·34	·21	1·46	10·21	,,	,,
March	226·22	·28	1·04	9·06	,,	One killed, poisoned arrow.
April	257·8	·20	1·66	7·03	,,	Nil.
May	292·41	1·13	2·28	16·36	4	1
June	288·16	1·96	2·58	11·26	Nil.	Nil.
July	271	1·42	2·13	20·15	,,	1
August	281	2·70	1·77	13·94	,,	Nil.
September	311·3	5·10	1·41	7·21	,,	1
October	307·5	7·74	3·30	5·77	,,	Nil.
November	289·10	1·56	2·69	4·04	,,	,,
December	303·3	2·90	5·10	3·06	,,	,,

INHABITANTS.

No serious epidemic has occurred during the year.

Small-Pox.—Two cases at Bole, eight cases at Lorha and one at Wa.

There seems to have been a difference as regards results of vaccinations; one Medical Officer reporting 1,498 successful vaccinations, the other finding the results very bad and giving it up. This probably has something to do with the age of the lymph used, and what the Medical Officer considers a successful vaccination. I myself gave up vaccinating on account of bad results, and after four weeks I find the lymph most uncertain.

It will take a considerable time for vaccination to make an improvement on Small-Pox epidemics, unless it could be made compulsory.

No Cerebro-Spinal Meningitis reported.

One case of Sleeping Sickness at Bole, but not infected there. Tetanus Neonatorum is suggested as a cause of deaths amongst children round Navarro; Pneumonia and Chronic Dysentery are also causes.

Prevalent Diseases.—Guinea Worm, Intestinal Parasites (Tape Worm), Scabies, Granular Ophthalmia, Ulcers are far too numerous, &c.

WATER SUPPLY.

Mostly shallow wells, but at Gambaga, spring. The quantity is a source of anxiety. The wells are still being improved; but labour and cement are not over plentiful. The pumps are not satisfactory and I have grave doubts of the present pumps ever being so. The Harmattan spoils the washers and they are constantly out of order owing to lost nuts, broken handles, &c.

DRAINAGE.

This is a very difficult matter and in places practically impossible.

The height of Tamale above sea level is only 600 feet; Gambaga, 1,300 feet. The various Voltas running through the Northern Territories make a great deal of it into a swamp during the rainy season, and in the dry season there is the other extreme—lack of water. Some of the water between Ejera and Tamale in the dry season is bad. The flooding of the country naturally produces swarms of mosquitoes at certain seasons of the year. Therefore, as Dr. Donnelly remarks, some form of mosquito room is desirable for the health and comfort of the Europeans. The level of the surface water is very high and open drains can easily do more harm than good.

DISPOSAL OF REFUSE.

Pan system for Europeans and Native Staff; pit latrines for others.

The pit system is not as satisfactory as in Ashanti, as it is impossible to dig pits any depth in places on account of the nature of the soil.

METEOROLOGICAL CONDITIONS

Vary a great deal during the year, the maximum going up to 110 and the minimum going as low as 50.

Rainfall for the year was 44·42 inches—well up to the average.

SLEEPING SICKNESS.

One case at Bole reported, but not infected there. I understand that the fly on the Volta is bad during the wet season; it certainly is in January on parts of the road after crossing the Pra, on which I saw several; on the first part of the journey from Prang to Kapellaum the carriers even find it necessary to carry branches to keep them off. They are mostly Longipalpis, but I caught one Palpalis. They are also bad between Makongo and Salaga for the first half, and bite even in the dark.

(Signed) C. E. S. WATSON,

Provincial Medical Officer.

APPENDIX IV.

TABLE VI.

HOSPITALS OF THE GOLD COAST COLONY, ASHANTI AND THE NORTHERN TERRITORIES.

RETURN OF DISEASES AND DEATHS (IN-PATIENTS) FOR THE YEAR 1911.

Diseases.	Remaining in Hospital at end of 1910.	Yearly Total.		Total Cases treated.	Remaining in Hospital at end of 1911.	Remarks.
		Admissions.	Deaths.			
Beri-Beri ...	1	18	4	19	2	
Chicken-Pox ...	1	15	—	16	—	
Diphtheria ...	—	2	1	2	—	
Dysentery	2	93	19	95	4	
Enteric	—	8	—	8	—	
Erysipelas	1	1	1	2	—	
Gonorrhœa	—	38	—	38	1	
Leprosy–Anæsthetic ...	1	6	—	7	1	
Malaria—						
(*a*) Tertian	—	49	—	49	—	
(*b*) Quotidian ...	1	29	—	30	—	
(*c*) Irregular... ...	—	2	—	2	—	
(*d*) Aestivo-Autumnal	3	148	1	151	3	
(*e*) Chronic Malaria	—	—	—	—	—	
(*f*) Type undiagnosed	1	91	2	92	—	
(*g*) Blackwater ...	1	7	2	8	—	
Pneumonia	—	97	29	97	1	
Rheumatic Fever ...	—	94	1	94	2	
Septicæmia	—	1	1	1	—	
Trypanosomiasis (Sleeping Sickness)	1	9	1	10	3	
Small-Pox	1	130	21	131	—	
Syphilis (*a*) Primary ...	2	20	2	22	2	
(*b*) Secondary	—	8	—	8	—	
Tetanus	—	4	2	4	—	
Tuberculosis	1	18	10	19	1	
Yaws	—	1	—	1	—	
Yellow Fever	—	6	5	6	—	
Intoxication :—						
Alcoholism	—	6	—	6	—	
General Diseases :—						
Debility	1	27	2	28	—	
Anæmia	—	6	—	6	—	
Diabetes	—	1	—	1	—	
Leucocythæmia ...	—	1	—	1	—	
Hodgkin's Disease ...	—	1	—	1	—	
Febricula	—	30	—	30	—	
Local Diseases :—						
Diseases of the Nervous System :						
Neuritis	3	6	—	9	—	
Meningitis	—	12	4	12	—	
Congestion of Brain	—	1	—	1	—	
Carried forward ...	21	986	108	1,007	20	

Diseases.	Remaining in Hospital at end of 1910.	Yearly Total.		Total Cases treated.	Remaining in Hospital at end of 1911.	Remarks.
		Admissions.	Deaths.			
Brought forward ...	21	986	108	1,007	20	
Diseases of the Nervous System–*cont.*						
Cerebral Hæmorrhage	—	1	1	1	—	
Apoplexy ...	—	1	1	1	—	
Paralysis ...	—	4	1	4	—	
Hemiplegia ...	1	1	—	2	—	
Epilepsy	—	6	1	6	—	
Neuralgia ...	—	9	—	9	—	
Hysteria ...	—	1	—	1	—	
Paraplegia ...	1	—	—	1	—	
Neurasthenia ...	—	10	—	10	1	
Vertigo ...	—	1	—	1	—	
Mental Diseases :—						
Idiocy	—	1	—	1	—	
Mania	—	7	1	7	—	
Melancholia ...	—	1	—	1	—	
Dementia	—	1	—	1	—	
Insanity	—	2	—	2	—	
Diseases of the Eye :—						
Conjunctivitis ...	—	33	—	33	—	
Keratitis	—	5	—	5	—	
Iritis	—	2	—	2	—	
Cataract	—	1	—	1	—	
Glaucoma	—	1	—	1	—	
Diseases of the Ear :—						
Inflammation ...	—	5	—	5	—	
Diseases of the Nose :—						
Epistaxis	—	3	—	3	—	
Diseases of the Circulatory System :—						
Pericarditis ...	—	12	2	12	1	
Endocarditis ...	—	14	3	14	—	
Valvular Mitral ...	—	2	1	2	2	
Aortic ...	—	1	1	1	—	
Phlebitis	—	1	—	1	—	
Diseases of the Respiratory System :—						
Bronchitis ...	1	88	4	89	—	
Asthma	—	3	—	3	—	
Pleurisy	—	45	1	45	2	
Diseases of the Digestive System :—						
Caries of Teeth ...	1	—	—	1	—	
Inflammation of Tonsils	—	2	—	2	—	
Gastritis	—	26	—	26	1	
Carried forward ...	25	1,276	125	1,301	27	

Diseases.	Remaining in Hospital at end of 1910.	Yearly Total.		Total Cases treated.	Remaining in Hospital at end of 1911.	Remarks.
		Admissions.	Deaths.			
Brought forward ...	25	1,276	125	1,301	27	
Diseases of the Digestive System—*continued.*						
Stricture of Stomach	—	2	—	2	—	
Enteritis	—	2	—	2	—	
Appendicitis ...	—	4	—	4	—	
Colitis	—	5	—	5	—	
Hernia	—	16	—	16	—	
Diarrhœa	1	47	16	48	2	
Constipation ...	—	70	—	70	—	
Colic	—	13	—	13	—	
Hæmorrhoids ...	—	6	—	6	2	
Hepatitis—Acute	—	32	—	32	—	
Abscess	—	1	1	1	—	
Cirrhosis	1	2	3	3	—	
Jaundice	—	1	—	1	—	
Peritonitis	—	1	1	1	—	
Ascites	—	1	—	1	—	
Gall Bladder ...	—	2	2	2	—	
Diseases of the Lymphatic System :—						
Splenitis	—	7	—	7	—	
Inflammation of Lymphatic Gland	—	38	—	38	—	
Lymphangitis ...	—	3	—	3	—	
Elephantiasis ...	—	1	—	1	—	
Thyroid Gland ...	—	1	—	1	—	
Diseases of the Urinary System :—						
Acute Nephritis ...	—	2	—	2	1	
Bright's Disease ...	—	25	5	25	—	
Cystitis	—	4	—	4	1	
Suppression ...	—	2	—	2	—	
Hæmaturia ...	1	2	—	3	—	
Diseases of the Generative System (Male Organs)—						
Urethritis	—	3	—	3	—	
Stricture	—	21	—	21	1	
Balanitis	—	3	—	3	—	
Soft Chancre ...	—	15	—	15	—	
Inflammation of Scrotum	—	8	1	8	—	
Hydrocele	—	4	1	4	1	
Orchitis	—	32	—	32	1	
Epididymitis ...	—	2	—	2	—	
Spermatic Cord ...	—	1	—	1	—	
(Female Organs) :						
Endometritis ...	—	1	—	1	—	
Displacement of Uterus	—	1	—	1	—	
Vaginitis	—	2	—	2	—	
Abortion	—	1	—	1	—	
Delayed Labour ...	—	1	—	1	1	
Retained Placenta...	—	1	1	1	—	
Mastitis	—	3	—	3	—	
Carried forward ...	28	1,665	156	1,693	37	

Diseases.	Remaining in Hospital at end of 1910.	Yearly Total.		Total Cases treated	Remaining in Hospital at end of 1911.	Remarks.
		Admissions.	Deaths.			
Brought forward ...	28	1,565	156	1,693	37	
Diseases of Organs of Locomotion :—						
Osteitis	—	26	1	26	1	
Arthritis	—	25	—	25	—	
Lumbago	—	4	—	4	—	
Bursitis	—	3	—	3	—	
Tendons & Fasciæ ...	—	2	—	2	—	
Diseases of Connective Tissue :—						
Cellulitis	1	17	—	18	—	
Abscess	4	68	—	72	—	
Elephantiasis ...	—	2	—	2	—	
Diseases of the Skin :—						
Eczema	—	16	—	16	—	
Boil...	1	35	—	36	—	
Carbuncle	—	1	—	1	—	
Psoriasis	—	6	—	6	—	
Tinea	—	1	—	1	—	
Scabies	—	81	—	81	—	
Pemphigus	1	—	—	1	—	
Prickly Heat ...	—	1	—	1	—	
Ulcers	11	123	—	134	9	
Burns	—	3	—	3	—	
Injuries—General	—	13	1	13	—	
Local... ...	7	228	10	235	11	
Surgical Operations ...	—	242	5	242	5	
Tumours	—	16	—	16	—	
Poisons	—	31	1	31	—	
Undiagnosed	—	8	—	8	1	
Parasites—Animal :—						
Bilharziosis ...	—	2	—	2	—	
Cestoda :—						
Tænia Solium ...	—	1	—	1	—	
Tænia Saginata ...	—	4	—	4	—	
Nematoda :—						
Ascaris	—	1	—	1	—	
Dracunculus ...	4	153	—	157	—	
Filariasis	—	5	—	5	—	
Ankylostomiasis ...	1	—	1	1	—	
Insecta :—						
Pulex Penetrans ...	—	3	—	3	—	
Pediculus Capitis ...	—	2	—	2	—	
Total ...	58	2,788	175	2,846	64	

TABLE VII.

HOSPITALS OF THE GOLD COAST COLONY, ASHANTI AND THE NORTHERN TERRITORIES.

RETURN OF DISEASES AND DEATHS (OUT-PATIENTS) FOR THE YEAR 1911.

Diseases.	Total Cases.	Total Deaths.
Beri-Beri	12	
Chicken-Pox	24	
Dysentery	274	
Erysipelas	5	
Gonorrhœa	524	
Influenza	2	
Leprosy Anæsthetic	37	
Malaria (*a*) Aestivo-autumnal	1,218	
(*b*) Type undiagnosed	766	
Measles	4	
Mumps	36	
Pneumonia	417	
Rheumatic Fever	2,008	
Septicæmia	8	
Trypanosomiasis (Sleeping Sickness)	73	
Small-Pox	45	8
Syphilis (*a*) Primary	135	
(*b*) Secondary	210	
Tetanus	1	
Tuberculosis	173	1
Whooping Cough...	12	
Yaws	534	
Yellow Fever	3	
INTOXICATIONS.		
Alcoholism	9	
GENERAL DISEASES.		
Anæmia	230	
Debility	413	
Diabetes	6	
Gout	18	
Leucocythæmia	1	
Febricula	75	
LOCAL DISEASES.		
Diseases of the Nervous System :—		
Sub-section 1.		
Neuritis	68	
Meningitis	124	
Carried forward	7,465	9

Diseases.	Total Cases.	Total Deaths.
Brought forward	7,465	9
LOCAL DISEASES—(*contd.*).		
Sub-section 2.		
Diseases of the Nervous System—(*contd.*) :—		
Paralysis	2	
Epilepsy	39	
Neuralgia	301	
Hysteria	4	
Neurasthenia	75	
Vertigo	31	
Sub-section 3.		
Mental Diseases :—		
Idiocy	1	
Insanity	7	
Diseases of the Eye :—		
Conjunctivitis	969	
Keratitis	54	
Iritis	60	
Glaucoma	7	
Cataract	57	
Diseases of the Ear :—		
Inflammation	626	
Diseases of the Nose :—		
Epistaxis	13	
Rhinitis	89	
Diseases of the Circulatory System :—		
Pericarditis	129	
Endocarditis	4	
Valvular Mitral	15	
Aortic	28	
Diseases of the Respiratory System :—		
Laryngitis	31	
Bronchitis	2,779	
Asthma	17	
Broncho-pneumonia...	260	
Pleurisy	273	
Diseases of the Digestive System :—		
Stomatitis	308	
Caries of Teeth	754	
Glossitis	28	
Sore Throat	273	
Inflammation of Tonsils	125	
Gastritis	1,079	
Salivary Gland	1	
Lip	20	
Dyspepsia	101	
Enteritis	101	
Appendicitis...	1	
Colitis	24	
Jaws and Antrim	12	
Hernia	120	
Diarrhœa	1,305	
Constipation...	3,081	
Colic	167	
Hæmorrhoids	126	
Hepatitis—Acute	135	
Jaundice	2	
Peritonitis	5	
Gall Bladder	24	
Carried forward	21,128	9

Diseases.	Total Cases.	Total Deaths.
Brought forward	21,128	9
Diseases of the Lymphatic System:—		
Splenitis	117	
Inflammation of Lymphatic Gland	285	
Lymphangitis	25	
Elephantiasis	13	
Thyroid Gland	5	
Diseases of the Urinary System :—		
Acute Nephritis	27	
Bright's Disease	40	
Cystitis	47	
Suppression	30	
Hæmaturia	16	
Diseases of the Generative System—Male Organs :—		
Urethritis	14	
Stricture	85	
Balanitis	2	
Prostatitis	5	
Soft Chancre	97	
Inflammation of Scrotum	45	
Hydrocele	28	
Orchitis	155	
Spermatic Cord	46	
Female Organs:—		
Ovaritis	7	
Endometritis	79	
Displacement of Uterus	8	
Vaginitis	66	
Amenorrhœa	39	
Dysmenorrhœa	61	
Inflammation of Vulva	3	
Leucorrhœa	20	
Abortion	1	
Delayed Labour	1	
Premature Birth	1	
Mastitis	54	
Uterus, Cancer of	1	
Diseases of Organs of Locomotion :—		
Osteitis	147	
Arthritis	276	
Lumbago	181	
Spondylitis	1	
Bursitis	105	
Tendons & Fasciæ	15	
Myalgia	53	
Diseases of Connective Tissue :—		
Cellulitis	601	
Abscess	928	
Diseases of the Skin :—		
Urticaria	40	
Eczema	481	
Boil	835	
Herpes	161	
Psoriasis	108	
Scrofula	8	
Tinea...	19	
Scabies	725	
Ulcers	3,558	
Burns	186	
Whitlow	237	
Carried forward	31,216	9

Diseases.	Total Cases.	Total Deaths.
Brought forward	31,216	9
Injuries, General :—	4	
Local	5,991	
Surgical Operations	67	
Tumours	209	
Poisons	36	
Undiagnosed	98	
Parasites :—		
Trematoda	101	
Bilharziosis	27	
Cestoda :—		
Tænia Solium	338	
Tænia Saginata	104	
Nematoda :—		
Ascaris	148	
Dracunculus	995	
Filariasis	10	
Ankylostomiasis	1	
Insecta :—		
Pulex Penetrans	149	
Pediculus Capitis	49	
TOTAL	39,543	9

SENIOR SANITARY OFFICER'S OFFICE,
VICTORIABORG, ACCRA,
10th May, 1912.

SIR,

I have the honour to forward herewith the Annual Report on Sanitation.

I advise also that the extracts which I forward of the excellent Annual Report sent in by the Medical Officer of Health of Cape Coast, Dr. Beringer, be printed as an appendix.

2. I regret the delay that has occurred in the rendering of this Report.

It was impossible to commence it before the beginning of April owing to the late arrival of many returns from Out-Stations, and, as you are aware, I have been far from well.

I have the honour to be,
Sir,
Your obedient servant,

THOMAS E. RICE.
Senior Sanitary Officer.

THE HONOURABLE
THE ACTING PRINCIPAL MEDICAL OFFICER,
VICTORIABORG, ACCRA.

SANITARY REPORT, 1911.

ADMINISTRATION.

The Sanitary Staff during the year was constituted as follows :—

EUROPEANS :—

The Senior Sanitary Officer.
The Junior Sanitary Officer.
Three Medical Officers of Health.
Three European Sanitary Inspectors.

NATIVE STAFF :—

One Sanitary Superintendent.
Two 1st Grade Sanitary Inspectors (West Indians).
Two 2nd Grade Sanitary Inspectors.
Two 3rd Grade Sanitary Inspectors.
Four 4th Grade Sanitary Inspectors.
Four 5th Grade Sanitary Inspectors.
Twelve 6th Grade Sanitary Inspectors.

CLERICAL STAFF :—

One 1st Grade Clerk.
Two 5th Grade Clerks.
One Clayton Mechanic.
One Chauffeur.

Owing to the unpopularity of the Service and the low rate of pay offered —less than that earned by a good cook—it was found impossible to bring the 6th Grade up to strength at any period of the year.

Moreover, the standard of education, probity and intelligence exhibited by some of the members of this grade was not of a high order or calculated to accelerate the progress of sanitation.

Some years ago, it would, I think, have been possible to obtain suitable candidates at the wage offered, but with the general prosperity of the Colony the standard of living has risen, and it is no longer possible to obtain on such terms any but derelicts.

On the 1st of January, 1912, the 6th Grade was abolished and provision made for nineteen 5th Grade Sanitary Inspectors at £40 to £60.

The Sanitary Estimates for the year totalled £20,617, an increase of £12,080 on those for the previous year.

The Estimates were apportioned as follows :—

Personal Emoluments	...	£6,346
Other Charges	... ...	£14,271

The chief items of expenditure under Other Charges were as follows :—

Scavengers and labourers	...	£7,000
Upkeep of Latrines ...	...	1,200
Dustbins, Tools, etc....	...	500
Clearing Government Lands		1,200
Plague Preventive Measures		200
Grants in aid to Town Councils		3,000

In addition to the above, under the vote for Public Works Extraordinary—controlled by the Director of Public Works—the sum of £23,400 was set aside for the Sanitary Improvements at Accra, Seccondee and other Stations.

PREVENTIVE MEASURES

Trypanosomiasis.

Reports have been forwarded from time to time by the various Medical Officers engaged in the investigation of Sleeping Sickness, and it will, therefore, be unnecessary here to occupy much space in the discussion of this subject.

Dr. Oakley reported that the last nine months of the year he had been unable to find a single case of Sleeping Sickness in the Anum District.

Dr. Wade, in an interesting report written after a tour through Ashanti, in the course of which he endeavoured to trace the history of the cases diagnosed by Dr. Kinghorn some twelve months previously, states that out of 92 of these cases 42 had ended fatally and 20 had disappeared.

If we assume that 10 of those who had disappeared were dead, the death rate works out at 56 per cent.

In the districts visited by Dr. Wade, Dr. Kinghorn had examined 9,171 natives, amongst whom he found 92 cases of Sleeping Sickness, that is about 1 per cent. of the population affected.

The above figures are interesting, in view of the fact recorded concerning Sleeping Sickness in Togoland, in the report submitted by Dr. G. E. H. LeFanu after his visit to that Colony, who states that in the Kpandu and Lawanjo Districts of Togoland the percentage of the population infected was 84·5.

On the last day of the year the official returns showed that 83 cases of Sleeping Sickness were known to exist, distributed as follows :—

Colony	6
Ashanti and Northern Territories	77

In connection with the subject of Trypanosomiasis in man, it will be seen from the return No. 1 attached that a large number of animals killed in the Public Slaughter Houses for human consumption are infected with Trypanosomes.

Yellow Fever.

Since it has been decided to publish apart from this report an account of the clinical and post-mortem records of cases of Yellow Fever that occurred during the year, it will be sufficient here to describe briefly the various outbreaks and the preventive measures taken in the infected area on the occurrence of the disease, and generally throughout the Colony during the year.

There were four occasions on which Yellow Fever manifested itself amongst the non-immunes, three times at Accra, and once at Avreboo, near Axim.

It will be more convenient to deal first with the outbreak at Accra.

On the 16th of February, Mr. R. was admitted into hospital. The patient died on the 19th of February. No autopsy was made.

Mr. R. had been in Accra from 17 to 19 days, and in West Africa about 10 months. He lived in the native town at Swanzy's James Town Store.

Measures taken to Prevent the Spread of Infection.

1. All contacts were isolated and kept under observation for a period of six days.

2. All the non-immunes in the neighbourhood were kept under observation and the temperature of each was taken twice daily.

3. Great care was taken to enquire into all deaths and cases of rise of temperature amongst the natives.

4. The infected house and all buildings in the vicinity were sealed and fumigated with sulphur gas, either by the Clayton machine or by burning the sulphur in open basins. A number of Alformant lamps were distributed amongst the non-immunes living in the native town.

Since no other case occurred, the measures may be stated to have been successful.

The second outbreak of Yellow Fever in Accra occurred on the 23rd of May, when the Sanitary Authorities were notified that two Europeans suffering from Yellow Fever had been admitted to the European Hospital.

1. W.W., aged 24, Merchant, a German, length of residence in the Colony 3 months. Diagnosed 23/5/11. Died 24/5/11.

2. W.D., aged 27, Merchant, German, length of residence in the Colony 3 months. Diagnosed 23/5/11. Died 28/5/11.

Both patients resided in the Basel Mission Factory in the Native Town. Subsequently four additional cases were diagnosed, viz:—

3. C.D.E., aged 40, a native. Diagnosed 25/5/11. Recovered. Residence Basel Mission Factory.

4. K.T., a Kroo-Boy. Length of residence in Accra 9 months. Residence Basel Mission Factory. Diagnosed 25/5/11. Recovered.

5. K.J., a Kroo-Boy. Length of residence in Accra 9 months. Residence Basel Mission Factory. Diagnosed 26/5/11. Recovered.

6. E.G.A., European, Government Official. Residence in Accra about 3 months, but had been longer in the Colony. Residence, Barrack Quarters, situated on the borders of the native town about 400 yards to the east of the Bassel Mission Factory when the previous cases had occurred.

Diagnosed 24/6/11. Died 26/6/11.

Preventive Measures Taken.

All the contacts were isolated and kept under observation.

An area within a certain radius of the infected factory was declared an infected area and all the non-immunes were removed from it.

89 houses were destroyed.

25 houses were altered, fumigated and had their out-buildings destroyed.

28 houses were fumigated only.

580 natives were dispossessed.

99 temporary wooden and iron structures were built for the dispossessed.

563 persons were accommodated in the new houses.

It appears that no less than 140 natives were living in the Basel Mission Compound when the disease first manifested itself.

The third outbreak of Yellow Fever in Accra occurred on the 21st December, 1911.

The case was that of Mr. H., European, an Accountant employed by the Railway Contractors and living on Railway Hill.

He was first seen by a Medical Officer at 2.30 p.m., on the 21st December, and died at 7 p.m. the same day. Length of residence in Accra 11 months.

Preventive Measures Taken.

All the Europeans were removed from Railway Hill and kept under observation.

All the buildings on Railway Hill were fumigated.

A house in the native town which the deceased was said to have been in the habit of frequenting and those in its neighbourhood were fumigated.

No further cases occurred.

Outbreak of Yellow Fever at Avreboo, near Axim.

Mr. S., a European, died on the 27th of June. He was not medically attended, but the clinical history was typical and the diagnosis was conferred at the autopsy made by the Government Medical Officer.

The following report by the Junior Sanitary Officer gives a full account of the preventive measures taken :—

Report on the Illness and Death of Mr. Sowman.

"I went to Avreboo, which is 9 miles east of Axim, on the 27th instant, at Mr Davidson's request, but arrived after Mr. S. had died.

"The bungalow they occupied is situated on a hump of land almost surrounded by marshes enclosed in an amphitheatre of hills. Grass and trees grow right up to the walls, and it is only 50 yards distant from the native village. Mosquitoes abound, and Mr. Davidson told me, quite off his own bat, that during the last two months he had seen for the first time a number of black and white mosquitoes.

"I examined the body. It was already very discoloured. But jaundice was very evident, the conjunctivæ being a bright yellow. Blood was oozing still from the nose and gums, and there were petechiæ all over the mucous membranes of the mouth."

Account obtained from Mr. J. Davidson.

"Mr. S. first came to the Coast in March, 1901. Since then he has visited India and Russia. This was his second tour at Avreboo. He landed on the 19th April, 1911, having gone on leave in February after a twelve months' tour.

"He was very temperate in habits, drinking on the average one glass of whisky and soda a day and no other alcohol. He spoke of having had a small attack of fever while on leave, but had none out here before this attack. He was in the habit of taking 5 grains of quinine daily.

"On the morning of the 22nd he fell on his back over a log, but did not appear hurt.

" He woke up during the night and told me that he had fever and was vomiting. I had no thermometer, so I do not know what his temperature was. He took phenacetin and quinine and appeared to become less feverish, but both fever and vomiting continued throughout the next day.

" On the 24th he felt much better, but was very restless and couldn't sleep. Pain was not complained of. The bowels were open, and he was passing urine freely. The urine was normal in colour. He was worse on Sunday, and the vomiting continued off and on. He got weaker and stopped passing urine on the morning of the 26th. During the day he became stone deaf. He began to vomit blood that evening, and, becoming unconscious, died at 7.30 on the 27th.

" The body was brought to Axim, where I performed an autopsy. The stomach contained a little dark blood. It was ecchymosed, and the mucous membrane extraordinarily rugous. The same conditions extended throughout the small intestines. The spleen was enlarged, flabby, and tore easily. The kidneys were enlarged. The capsule stripped off easily and there were pin point ecchymoses scattered over the surface. The cortex was broad and exhibited the same abnormal appearance. The liver was pale and somewhat fatty looking, but was normal in size. There were about 1½ ozs. of urine in the bladder. This yielded a heavy deposit of albumen on boiling.

" I am of opinion that Mr. S. died of Yellow Fever and have directed Mr. Davidson to abandon the bungalow.

(Sgd.) " FRANS JUPE, M.O.

" AXIM, 28*th June*, 1911."

Report of Yellow Fever on the Avreboo Rubber Estate.

" Avreboo Rubber Estate is about 10 miles north of Axim. It is situate in a very hilly but sparsely populated country.

" The section of the estate dealt with in this report covers an area of one square mile.

" The Government Medical Officer reported on June 28th, 1911, that a fatal case of Yellow Fever had occurred in this district.

" The village of Avreboo stands on a slight rise in a valley, and is situated near the centre of the cleared area. The village itself is surrounded by bush and trees. There are about 400 inhabitants.

" The building in which the late Mr. S. lived was 50 yards from the village and at its south-westerly corner. It was also surrounded by trees and bush. The branches of the rubber trees swept the bungalow roof.

" There was one other European, Mr. Davidson, who occupied rooms in this bungalow.

" There were no other Europeans in the district at the time of Mr. S's. attack of Yellow Fever.

" The village itself was occupied by natives of the district and employees of the Rubber Company, these latter consisting of Hausas, Wangaras and Fantis.

"The Company working the estate have no control over the village of Avreboo.

"There is a Kroo village, erected by the Company for their Kroo labour and containing about 200 souls, situate about a quarter of mile away in a south-westerly direction.

"This village stands in a portion of the cleared area and is under the Company's control.

"There is a plentiful supply of water and the natural drainage is good.

"The Late Mr. S.

"Previous History:—Mr. S. had been employed on the Gold Coast for some years before this time, doing various works, and had always enjoyed good health. He had only been out a few months this tour. His last visit to Axim was made a month before his fatal illness. He took six Wangaras with him. None of these men have shown any signs of illness, neither at that time nor at any time since.

"Some boys were sent to Axim a week before he took ill. They went to Axim and returned on the same day. No case of illness has been found among these boys.

"Kroo-boys were engaged at various times under contract and came direct from the Kroo Coast. One batch arrived on December 12th, 1910, and another batch arrived on January 28th, 1911.

"Some odd boys were picked up from Axim on April 17th, 1911.

"Twenty-four Wangaras arrived on June 22nd, 1911. In the evening of that day Mr S. first complained of feeling ill.

"This batch of Wangaras had come over from the Ivory Coast three months before and had been working in Axim up to the date of their arrival at Avreboo (at the end of the three months).

"During the whole of the period under review, and since, there has not been a case of illness reported or found amongst the employees.

"This estate finds carriers and hammock men for all the Government officials in Axim. Consequently many of their men are constantly away, sometimes for long periods.

"It was therefore not possible to see these men when inspecting the camp.

"During the week before his death Mr. S. had been working with some of the labourers. He was constructing a road to the camp. Part of the work consisted of digging into the hill side while a portion consisted of filling up sections of swamps which the road had to cross.

"The whole district is infested with stegomyia. During the inspection they were very tiresome, especially during the day. Only two *s. calopus* were found during the three days' visit.

"He always slept under a mosquito net.

"*Present Illness.*—Already posted.

"*Action taken.*—The Medical Officer of Axim visited the camp. He arrived after Mr. S. had died. He directed that the body should be at once taken into Axim for a post-mortem examination. (Results already sent.)

" He directed that the village should be fumigated and cleaned, the bungalow inhabited by the Europeans destroyed. This was done.

" The natives were inspected, but no case of illness was found, either then or later.

" The European Settlement was removed to the top of a hill about 600 yards to the west of the village, and the whole of this new site cleared of all trees and undergrowth. As soon as dry all the herbage and timber was burnt.

" There is now one square mile of thoroughly cleared land in the centre of which the new European Settlement is situated.

" There are now three Europeans there, and they are sleeping in tents and temporary shelters.

" New bungalows are in course of erection.

(Sgd.) " G. C. WALKER. M.D., D.P.H.,
" *Junior Sanitary Officer.*"

The deceased lived in a bungalow close to a native village which appears to have been infested with mosquitoes, and he had not left the neighbourhood for some weeks prior to his death.

There was no evidence of the disease having been introduced from outside

The case is interesting, from the point of view of the Endemic Theory.

A few remarks may not be out of place here on a point in connection with the Yellow Fever in West Africa that is often brought up by lay residents and must puzzle those unacquainted with the local conditions, viz. :—" Why are these outbreaks so limited; why don't we get something in the nature of an epidemic like, for instance, that of New Orleans in 1905."

One would like to reply, that the cases are diagnosed promptly. Preventive measures, such as evacuation of the infected area and isolation of contacts, are at once put into force, and the campaign against the stegomyia mosquito has done much to reduce the number of the definitive host. All these things are true, and there can be no doubt that the promptitude with which the various outbreaks of 1911 were suppressed was, in a large measure, due to them ; but that is not all.

We cannot pretend that prior to 1910 any of the above conditions obtained ; the notification fear was universal ; infected areas were not evacuated, nor were contacts isolated, and the stegomyia campaign had not begun, yet outbreaks occurred from time to time, but in no instance did one approach in character the historical epidemics of the West Indies and South America.

The explanation I submit is :—

(1) The comparatively small non-immune population.

(2) The fact that the non-immunes live in houses or bungalows often widely separated from one another, and hence in West Africa the disease is apt to attack the occupants of certain houses or bungalows and is a house or bungalow disease, as contrasted with the West Indies and South America, where, in times of epidemics, it affects whole streets or districts.

All the cases amongst the non-immune, six in number, diagnosed during the year ended fatally—a mortality rate of 100 per cent.

Such a death rate, compared with that obtaining in other parts of the world, forces one to the logical deduction that, as far as the non-immunes are concerned, only the fatal cases are diagnosed, possibly many mild cases go untreated.

GENERAL PREVENTIVE MEASURES TAKEN AGAINST YELLOW FEVER IN 1911.

Apart from the special prophylactic schemes adopted on the occasion of each outbreak, the following general precautions were instituted :—

1. Number of European Houses during the year wholly mosquito-protected...	6
2. Number of European Houses during the year partially mosquito-protected	7
3. Number of Public Wells	60
4. Number of Public Wells mosquito-proof	28
5. Number of Private Wells	789
6. Number of Private Wells mosquito-proof	705
7. Number of Public Tanks	133
8. Number of Public Tanks mosquito-proof	128
9. Number of Private Tanks	1,199
10. Number of Private Tanks mosquito-proof	1,138
11. Number of barrels	3,247
12. Number of barrels mosquito-proof ...	3,035
13. Number of Tanks and barrels oiled ...	10,075
14. Number of Inspectors employed ...	27
15. Number of Houses inspected	199,349
16. Number of Houses where larvæ were found	5,160
17. Number of notices served *re* larvæ ...	2,787
18. Number of persons fined for having larvæ on premises	1,948
19. Number of pools, wells, &c., stocked with Fish	144

In addition to the above measures, works for bringing pipe-borne water supplies to the town of Accra and Seccondee have been under construction. The progress made with these schemes will doubtless have been reported on by the officers concerned.

There is so little information on the subject in my office that I am not in a position to comment on the problem.

At Obuassie a pipe-borne water supply has been introduced and a number of stand-pipes erected. The supply appears to be sufficient to serve the needs of the small community.

As has happened before in the tropics the water supply was introduced without any reference to a drainage system and there is danger, unless constant vigilance is exercised, of the formation of anopheline pools in the earthen trenches draining from the stand-pipes.

I believe a drainage system is now under consideration.

The water supply was introduced without reference to this office.

Filariasis.

During the year 15 cases of Filariasis were treated at the Government Dispensaries.

No special investigations appear to have been made to determine the percentage of the population infected.

The writer, in collaboration with Dr. O'Kelly in 1909, during some investigations into an outbreak of Sleeping Sickness in an Ashanti village, found, out of 94 persons examined, that 42 or 44·68% were infected with Filaria Perstans.

It would appear, therefore, that, in all probabilty, at any rate in certain districts, a considerable percentage of the population is infected.

It is to be hoped that the general anti-mosquito measures are doing something towards diminishing the numbers of the carriers of this disease.

Malaria.

The official returns shew that 2,307 natives were treated at the Government Hospitals and Dispensaries for Malarial Fever, and that there were three deaths ascribed to this cause.

Eight Europeans are returned as having died, 1 of Remittent Fever, 3 of Intermittent Fever, and 4 of Blackwater Fever.

There are no statistics to show in what percentage of the cases diagnosed as Fever, Malarial Fever, Remittent Fever and Intermittent Fever, malarial parasites have been demonstrated by microscopical examination. Doubtless, in the majority of cases, the diagnosis has been made from the clinical symptoms. This method is not without an element of error, although, no doubt, in the majority of cases it has achieved correct results.

I am aware that parasites in cases of Malaria are not always demonstrable in films taken from the peripheral circulation, but these returns would be more convincing and reliable were it stated in each instance whether the diagnosis had been confirmed by microscopic examination.

Preventive Measures.

It is not easy, in the course of a general campaign against mosquito-borne disease, to state precisely the means adopted for combating Malaria. Many of the proceedings described under Yellow Fever preventive measures are also described against Malaria.

Mosquito Brigades.

Under this heading there has been some misconception, and it has been considered the correct thing to have a number of Inspectors and scavengers told off as a Mosquito Brigade.

The sum of £7,000 was voted in the Estimates for scavengers and labourers and an effort has been made to make every Sanitary Inspector and labourer a Mosquito Brigader. The labourers are split up into various gangs, with definite duties, such as emptying dust-bins, sweeping the streets and collecting rubbish, tins and bottles, etc., accompanying the Sanitary Inspectors on house-to-house visitation, filling up depressions, cleaning, digging and grading ditches, and accompanying an Inspector in charge of gutters, etc.

With the £7,000 voted, 334 men were employed, distributed as in the following table:—

RETURN OF SCAVENGERS AND LABOURERS EMPLOYED BY THE SANITARY DEPARTMENT DURING THE YEAR 1911.

Station.	Number employed.	Remarks.
Accra	4	At Accra, Cape Coast and Seccondee, scavengers and labourers were supplied by the Town Councils.
Winnebah	26	
Saltpond	32	
Cape Coast	—	
Elmina	13	4 men are employed at the Accra Cantonments and paid by the Government.
Seccondee	—	
Axim	34	
Tarquah	42	
Dunkwa	5	
Appam	11	
Annamaboe	4	
Dixcove	3	
Chama	6	
Akuse	21	
Kpong	4	
Odumase	5	
Somanya	13	
Aburi	7	
Pram Pram	5	
Dodowah	11	
Mangoase	5	
Nsawam	16	
Pakro	11	
Adawso	11	
Komfrodua	7	
Quittah	15	
Northern Territories	24	
Total	335	

The towns under the Town Councils—Accra, Seccondee and Cape Coast—although assisted by the Government, have their own revenues and make out their own Estimates—copies of which will be found in the Appendix.

In addition to the works described under Yellow Fever Preventive Measures, the following are some of the means adopted to combat Malaria.

1. Lineal yards of concrete drains repaired or reconstructed	2,587
2. Lineal yards of new concrete drains constructed	5,250
3. Lineal yards of earth ditches dug	21,260
4. Lineal yards of earth ditches cleaned ...	752,704
5. Square yards of vegetation cleared... ...	8,232,465
6. Pools or excavations filled up	543
7. Square yards of marsh land filled in and drained	90,822
8. Drains oiled	6,000
9. Pools oiled	7,899

The attached Return No. 3 gives the results of spleen examinations during the year.

Epidemic Diseases.

Plague.

No case of plague has been reported during the year.

A general campaign has been carried on against rats and a number of these, caught in Accra, were examined in the Government Laboratory with negative results.

Small-pox.

Outbreaks of this disease were reported from the Northern Territories, Ashanti and various parts of the Colony. Whenever possible, Medical Officers were detailed to visit the infected areas with instructions to isolate the sick and contacts and to vaccinate as many as possible of the inhabitants.

Vaccination.

28,460 vaccinations were performed, of which 18,895 were successful and 9,565 unsuccessful.

Dysentery.

369 were treated for this disease at the Government Hospitals and Dispensaries.

Efforts to combat the disease have been made by protecting wells and increasing the public latrine accomodation, the details of which are described elsewhere.

Enteric Fever.

8 cases were reported during the year.

Helminthic Diseases.

In the Government Hospitals and Dispensaries the following cases were treated :—

Ankylostomiasis	3
Bilharzia	29
Guinea Worm	1152

The attached Table No. 4, giving the result of systematic examinations of the stools of the inmates of native prisons and hospitals, shows that Helminthic diseases are more prevalent than was commonly supposed.

GENERAL MEASURES.

Under the headings of Malaria and Yellow Fever, statistics have been given of the work done in protecting public and private wells, tanks and barrels; the construction of concrete and earth drains; the cleaning of ditches and removal of vegetation; the reclaiming of marshes and filling up of excavations; the oiling of drains, pools, tanks, barrels, etc., and it will be seen that much has been done in the way of prophylaxis, against both mosquito and water-borne diseases.

OTHER MEASURES.

Sewage Disposal.

In most of the stations, latrine work is done by prisoners. In none of the towns of the Gold Coast is there a sewage system.

The European residents and a certain number of educated natives have private pan latrines in which dry earth is used. Public pan latrines serve the general public. Such a system, whilst a vast improvement on the old one of none-at-all, is not an ideal solution of the conservancy problem. Dry earth cannot be used on account of the expense involved. During the past year the pans in the public latrines were treated with crude kerosene, which certainly had the effect of making them less offensive, and it is to be hoped also in rendering inert the various helminthic ova deposited in the pans.

Number of public pan latrines	332
Number of new public latrines constructed during the year	37
Number of public pan latrines repaired and reconstructed during the year	78
Number of private latrines	634
Average daily number of pails of excreta trenched and buried	703
Average daily number of pails of excreta thrown into the sea	1862

Disposal of Refuse.

To those unacquainted with the local conditions, a few words of explanation will not be out of place here concerning the figures given below as to the disposal of refuse, which are largely taken from Sanitary Form 56.

The procedure adopted varies in accordance with the conditions obtaining at different stations. At some stations it has been found possible to induce the natives to carry this refuse direct to the destructors and in these stations dustbins have been largely dispensed with, and it has not been found necessary to institute a house-to-house system of collection.

Again in other towns, where this system does not obtain, by dint of persuasions and prosecutions for nuisance, the natives have been induced to carry their household refuse to the nearest dustbin, whence it is removed by scavengers to the incinerator or trenching ground.

Number of dustbins	198
Number of destructors	38
Number of carts employed in removing refuse ...	69
Number of men employed in removing refuse ...	230
Average number of head-loads of refuse burnt daily	641
Average number of head-loads of refuse buried and trenched daily	168
Average number of cartloads of refuse burnt daily	257
Average number of cartloads of refuse thrown into the sea daily	38
Average number of cartloads of refuse trenched and buried daily	96

Average number of head-loads of incombustible material removed from houses and compounds daily 138

Average number of cartloads of incombustible material removed from houses and compounds daily 52

Under the heading of Malaria and Yellow Fever, details of work done in connection with Water supplies, Drainage and Bush clearance have been given.

Prosecutions.

The attached Table No. 5 gives a return of the prosecutions instituted during the year.

Entomological Returns.

The following blood-sucking diptera have been described during the year by Medical Officers at various Stations :—

AXIM ... ... *Stegomyia fasciata.*
P. costalis.

SALTPOND ... *nil.*

WINNEBAH ... *Stegomyia fasciata.*

ACCRA ... ... *Stegomyia fasciata.*
Culex Filigans.
P. Costalis.

AKUSE ... ... *Stegomyia fasciata.*

SECCONDEE ... *do.*

ELMINA ... ... *do.*

QUITTAH ... ... *do.*

TARQUAH ... *do.*

BOLE (by DR. INGRAM).

Culicidæ (determined by Mr. F. W. Edwards)—

Myzorhynchus paludis, Theo., 7 ♂, 8 ♀, and *M. mauritianus*, Grp. 1 ♂, — bred vi. to xii., 1911.

Myzorhynchus mauritianus, Grp.—2 ♂, 2 ♀.

Myzomyia funesta, Giles—10 ♂, 11 ♀, bred vi. to xii., 1911.

Myzomyia costalis, Lw.—4 ♂, 6 ♀, bred vi. to xii., 1911.

Nyssorhynchus squamosus, Theo.—14 ♂, 25 ♀, bred ix. to xii.,1911.

Nyssorhynchus watsoni, Edw.—10 ♂, 15 ♀, bred ix. to xii., 1911.

Stegomyia sugens, Wied.—12 ♂, 15 ♀, bred vi. to xii., 1911.

Stegomyia fasciata, F.—2 ♂, 3 ♀, bred vi. to xii., 1911.

Ochlerotatus nigeriensis, Theo.—9 ♂, 18 ♀, bred xi., 1911.

Culex quasigelidus, Theo.—1 ♂, 4 ♀, bred ix. to xii., 1911.

Culex annulioris, Theo.—6 ♂, 11 ♀, bred vii. *and* xii., 1911.

Culex univittatus, Theo.—8 ♂, 25 ♀, bred vi. to xii., 1911.

Culex invidiosus, Theo.—(doubtfully distinct from *C. guiarti*, Bl.)—7 ♂, 12 ♀, bred vi. to xii., 1911.

Culex decens, Theo., var. ?—1 ♀, bred from larva in shallow rock-pool, 18. x., 1911.

Culex tigripes, Grp.—2 ♂, 6 ♀, bred vi. to xii., 1911.

Culicideæ—continued.

Culex argenteopunctatus, Ventr.—2 ♀, bred viii. and ix., 1911; previously recorded only from Madagascar.

Culex grahami, Theo., var.—4 ♀, bred viii. and ix., 1911.

Culex duttoni, Theo.—2 ♂, 6 ♀, bred vi. to xii., 1911.

Culex consimilis, Newst.—1 ♂, 2 ♀, bred vii. and x., 1911.

Culex ager, Giles, var. *aethiopicus*, Edw., v. nov.—15 ♂, 12 ♀, bred vi. to xii., 1911.

Banksinella sp. (damaged)—1 ♂, bred 8. vii., 1911.

Culiciomyia nebulosa, Theo.—4 ♀, in dwellings, viii. and ix., 1911.

Mansonioides uniformis, Theo.—4 ♂, 7 ♀, bred vi. to xii., 1911.

Aedomyia catasticta, Knab—9 ♂, 16 ♀, bred ix. to xii., 1911.

Mimomyia hispida, Theo.—3 ♂, 4 ♀, bred xi. and xii., 1911.

Mimomyia plumosa, Theo.—4 ♂, 1 ♀, bred xi., 1911.

Mimomyia splendens, Theo.—5 ♂, 12 ♀, bred x. to xii., 1911.

Mimomyia mimomyiaformis, Newst. (=*pincerna*, Grah.)—2 ♂, 4 ♀, bred vi. to viii., 1911.

Ingramia (nom. nov.) *malfeyti*, Newst.—11 ♂, 8 ♀, bred vi. to xii., 1911.

Uranotænia balfouri, Theo.—3 ♂, 4 ♀, bred vii. to xii., 1911.

Tabanidæ—

Hæmatopota tenuicrus, Aust.—3 ♀, attacking man, vi., vii. and viii., 1911.

Tabanus subangustus, Ric.—3 ♀, attracted by lamp in hut, vii. and viii., 1911.

Stratiomyidæ (Non blood-sucking Flies)—

Odontomyia sp. 1 ♂, 1 ♀, sent—one, undetermined, in the British Museum, from Sierra Leone.

CAPE COAST ... *Stegomyia fasciata.*

OBUASSIE... ... *do.*

Culex Fatigans.

Culex Pipiens.

SALAGA (by DR. LE FANU).

Culicidæ, Salaga, Gold Coast—

Culex decens, Theob.

Culiciomyia nebulosa, Theob.

Pyretophorus costalis, Loew.

Myzomyia funesta, Giles.

Glossina, Salaga and Kunkwa—

Glossina tachinoides, West

Glossina palapalis, R.D.

Glossina tachinoides.

Coleoptera—

Thithoes intermedius? *Longicorn.*

Scarabids.

Chrysomelids.

Scolytids.

	Fleas—	
		Ctenocephalus canis.
		Cimex lectularius.
	Sand flies—	
		Simulium n. sp.
COOMASSIE	...	*nil.*
TAMALE ...	...	*nil.*
ADDAH ...	...	*Pyretophorus costalis.*
		Stegomyia calopus.
		Mansonia uniformis.
		Myzorhynchus mauritianus.
SUNYANI ...	...	*Culex Fatigans.*
		Anopheles Maculipennis.
		Pyretophorus costalis.
		Stegomyia calopus.
WA ...	...	*Culex pipiens.*
		Culex fatigans.
		Pyretophorus costalis.
		M. Funesta.
		Masonia uniformis.
DUNKWA ...	...	*Stegomyia fasciata.*
APPAM ...	...	*Stegomyia.*
GAMBAGA...	...	*Culicine and Anopheline.*
BAWKU ...	...	*Stegomyia fasciata.*
		Myzomyia funesta.
KINTAMPO	...	*Myzomyia funesta.*
		Pretophorus costalis.
		Culex pipiens.
		Stegomyia fasciata.
		Culex fatigans.
NAVARRO ...	...	*nil.*
LORHA ...	...	*nil.*
ZOUARAGU	...	*nil.*

Prisons.

The prison returns sent in do not permit of a differentiation between debtors, untried and convicts, but the total number of inmates given is 978, and amongst them 10 deaths occurred from natural causes, showing a death rate of 10·22 per thousand, whilst the average daily sick list is returned as 18·34 per thousand.

Only a few of the prisons, viz., those constructed within recent years, were built for the purpose for which they are used, and a study of the figures, as to cubic space and ventilation area given on attached Table No. 6, shows that the conditions in many of them do not come up to the standard of modern sanitary requirements.

Many of the older prisons were formerly forts, and the cells below were doubtless used for the accommodation of slaves awaiting embarkation, and it is not surprising that the conditions obtaining are such as they are.

Knowing that these are the only available buildings for housing prisoners, and that their gradual replacement by building of a modern type, must be a matter of time, I have been forced to be content with a low standard, and have only protested to the Superintendent of Prisons when the cubic space per head has fallen below 200 cubic feet and the ventilation area below the square feet per head.

Table No. 6 gives the averages for the year for all prisons, but as this is somewhat misleading, copies of the monthly Prison Returns for December are also attached, in order that the conditions obtaining in individual cells may be realised.

Segregation.

It is gratifying to be able to report that something has at last been done towards securing segregation in future.

The following steps have been taken :—

(1) In September a circular letter was addressed to the Presidents of the Town Councils, which contained the following sentence :—" I am directed to inform you that the Senior Sanitary Officer has represented to the Government the imperative necessity there is for the segregation of Europeans, and has asked that no permits be allowed for the erection of quarters for Europeans in the native portion of the towns under your administration."

(2.) Segregation areas for Europeans have or are being acquired at the following stations :—

Coomassie.
Dunkwa.
Seccondee.
Tarquah.
Axim.
Cape Coast.
Saltpond.
Winnebah.
Nsawam.

In each instance the advice of the Advisory Committee has been borne in mind :—" That around all areas in West Africa set apart for the residence of Europeans there should be a circle, not less than a quarter of a mile across, within which neither natives nor Europeans should be allowed to settle.

Town Councils.

Since the appointment of special Medical Officers of Health the relations between the various Town Councils and the Senior Sanitary Officer have been more satisfactory. Difficulties have arisen, but in each instance have been adjusted on the matter being referred to His Excellency the Governor.

Shade Trees.

Objection was taken to the action of the Medical Officer at Axim in cutting down certain shade trees, and as an alternative the Conservator of Forests tried the expedient of filling up the holes in them, which were the cause of offence, with mud and clay ; this proceeding, however, turned out to be but a *placebo*, and eventually the offending trees were removed.

The trees were an unsuitable variety of ficus.

A circular was subsequently issued describing the most suitable form of shade trees as—

Figs—certain species making clean boles.
The West Indian Cedar.
Almond.
Melia Indica.
Poinciana Regia.
Casuarina Eucalyptus.

And it was directed that the plants should be first planted in one part of the station only until experience had shewn which of the trees were likely to be the most suitable shade trees for the district.

Measures taken to spread a knowledge of Hygiene and Sanitation.

Lectures have been given by Medical Officers to teachers and others.

The Director of Education reports that the pupils in the Upper Forms are beginning to display an intelligent knowledge of the subject.

A Special Committee sent in a series of recommendations dealing with the teaching of Hygiene in schools.

RECOMMENDATIONS FOR FUTURE WORK.

Educational Prophylaxis.

Sanitary Inspectors are given very considerable powers under the various Ordinances, and it is essential that they should be persons of probity and intelligence, and capable of exercising an educational influence upon those with whom their work brings them into contact.

In our present state of development there is an undoubted tendency on the part of the natives to regard a Sanitary Inspector as a malignant type of Police officer. This is perhaps inevitable, but in the training of these officials they are instructed constantly to teach those amongst whom they work the elementary principles of Tropical Hygiene, and never to serve a notice or take out a summons without carefully explaining to the accused the true nature of the offence.

It is hoped by such methods as these to eventually gain the confidence of the people, so that they will be willing to listen to and carry out the advice given by Sanitary Inspectors, and the need for working the deterrent expedients of prosecutions, fines and imprisonment will become less.

Educational Prophylaxis in the West Indies, South America and some other parts of the Tropics can be largely carried on by the using, from time to time, of printed pamphlets dealing with sanitary matters, but in West Africa, where the bulk of the population is illiterate, educational literature of this description can appeal only to a small portion of the community. Here, apart from the deterrent effect of prosecutions for offences against sanitation, the spreading of a knowledge of Hygiene amongst the people depends largely upon the individual efforts of our Sanitary Inspectors, and for this side of the work it has occurred to me that a number of educated native women might be trained and sent out into the principal towns.

Certain of the hospitals have already been made mosquito-proof. I hope that in the course of 1912 every European and Native hospital will be similarly dealt with.

The teaching of Hygiene in schools should be improved by the adoption of the following practical methods :—

Simple practical demonstration should be given, as for instance—

(1) Mosquito larvæ should be placed in a bottle in the class room, the top closed with gauze and the bottle inspected daily until the experiment has been completed by the emergence from the water of the imago.

(2) A model of a simple type of a sanitary house should be provided and regular demonstration given illustrating the provision of cubic space, light and ventilation area, compound space, etc.

(3) A model of a mosquito-proof barrel should be provided and demonstrated on.

On the walls should be exhibited, in place of the present picture of lions and elephants—

(1) Large pictures of the mosquito in its various stages from egg to imago.

(2) Pictures of typical anopheles pools and of an insanitary compound exhibiting tins, bottles and refuse lying about.

(3) A plan for making a barrel mosquito-proof.

In the event of an extension of the Accra-Akwapim Railway being sanctioned, a Surveyor and a Sanitary Engineer should be appointed to lay out, on sanitary lines, the new townships that will spring up around the Station Sites.

Segregation.

In another part of this report it has been shown that some initial steps have been taken towards securing segregation.

Much more will have to be done in the future.

We cannot, of course, compel Europeans who are already established in native towns to move outside, but surely instructions might be issued to all local building authorities to refuse to sanction the erection of quarters for the occupancy of Europeans in native towns, and in all new townships, such as those springing up along the railways, no Europeans should be allowed to reside outside the segregation areas. Offices and factories, of course, must be built within the business area.

My experience in West Africa has taught me that, apart from a certain type of Government official, more happily becoming extinct, the bitterest opponent of sanitation is the local mercantile agent. He may live in a native town, but his quarters are usually palatial, whilst those occupied by his assistants are often such as, could the shareholders at home realise their condition, they would blush to pocket their dividends.

It is possible that this reluctance on the part of the local agent to advise his firm to build suitable residential quarters outside the native towns may, in some part, be due to financial consideration. I presume the interest on the capital sum so expended would be an annual charge to expenses which would diminish the sum of the profits, to a percentage of which the local agent looks to augment his income.

Then, again, the trader's great argument against living outside the town is that it is necessary for the safety of his store that Europeans should live on the premises. No doubt the merchants of the City of London advanced the same arguments long ago, but I scarcely think that in the principal towns of

the Gold Coast such a reflection upon efficiency of the Police force is justifiable, and the argument is stultified by the fact that in the more primitive out-stations, where police supervision is naturally less efficient, the factories are often in charge of a native agent.

I am inclined to think, in the absence of legislation, we shall not make any great progress in this matter until the Directors at home have been brought to realise the conditions under which their employees live, and that, in the long run, capital expended in providing them with healthy quarters outside the native towns would be found to be well invested.

Water Supplies.

Although large works are in progress for bringing pipe-borne water supplies into the towns of Accra and Seccondee, and much has been done to protect the public and private water supplies throughout the Colony, I hope that next year, at least, some preliminary surveys will be made into the feasibility of introducing pipe-borne water supplies into the towns of Cape Coast, Saltpond and Winnebah, where most of the native water supply is little better than liquid sewage, being derived from shallow surface wells sunk in the native towns.

Every effort has been made to protect these wells from surface pollution and to provide them with pumps, but the latter precaution, whilst it enables the well to be made mosquito-proof, also increases the area from which the shallow well derives its unwholesome water and makes it more polluted.

Artesian borings should also be tried, not only in the towns just mentioned but throughout the Colony, and the necessary mechanism and staff provided for doing so.

Cold Storage.

In a Tsetse-ridden country, such as this, every effort should be made to provide the population with wholesome meat.

I have previously stated that a large percentage of the animals killed in the Public Slaughter Houses are infected with Trypanosomiasis.

I hope that, in the near future, the Government will endeavour, by establishing or subsidising Cold Storage Depôts, to do something towards placing the purchase of wholesome meat within the reach of all.

Sleeping Sickness.

It is to be hoped that before long this menace to the future prosperity of the Colony will be dealt with in the same systematic and scientific precision with which it is already being fought in Togoland.

The deductions to be drawn from the few facts quoted in another part of this report cannot be ignored.

It is high time that we established a Special Sleeping Sickness Service, passed laws as to compulsory segregation and notification, and established a segregation camp.

The Stocking of Water-Holes, etc., with Fish.

Some progress has been made with this work in the past year, and at the present time at Accra, in a mosquito-proof tank, the habits of fish caught locally are being studied as to their larval destructive powers.

As a result of their observations it is hoped to acquire valuable information as to the most suitable local fish for stocking ponds, wells, etc.

Prisons.

Elsewhere attention has been called to the insanitary condition of the majority of the Prisons of the Colony. An effort should be made to gradually replace these by buildings of a more modern type.

The following are some of the recommendations to be carried out in the different stations in 1912 :—

I.—AXIM.

(1) The New European Hospital and additional quarters should, of course, be erected on the proposed segregation area to the north-east of the town.

Sanitary Improvements.

(2) Amount voted £3,000. I understand that a drainage scheme for Axim is now being prepared by the District Engineer.

The Medical Officer, Dr. Jupe, stated that culverts were required at

Hospital Road Fall	4
Ankobra Road	3
Main Road—Lower Town... ...	2

I hope that, whenever possible, culverts will be provided with moveable metal roofs, to facilitate inspection and cleanliness.

(3.) Afala Lagoon, I understand, requires filling in and draining.

(4.) Dustbins. At least 12 of the type-plan should be built.

(5.) Latrines. Three new latrines of the type-plan are required at Upper Town, Hausa Town and Otopai.

The Court House latrine and that at Otopai need repair.

(6.) Three new wells of the Macgregor type, with suitable and unbreakable pumps.

(7.) A wash-house, to be used as a public laundry.

Dust-bins	£100
Latrines	150
Wells and pumps	100
Laundry	250
Drainage, swamp, &c.	2,400
	£3,000

II.—SECCONDEE.

Two-roomed bungalow.

Four-roomed bungalow.

Should be built on K. Hill.

Sanitary Improvements.

After the laying out of the new townships, the remodelling of the native town should be proceeded with, in order to facilitate the completion of the drainage and water schemes and Sweet Water Lagoon should be filled in and drained.

III.—CHAMA.

Sanitary Improvements.

A destructor of the small type-plan.

Three dustbins of the type-plan.

A Macgregor well, with proper pump.

Such drainage as the District Engineer may advise.

IV.—TARKWA.

Additional quarters for Europeans to be erected on Government Hill, west of the railway.

Sanitary Improvements.

(1.) The drainage scheme at present in hand should be completed.

(2.) The swamp between the hill on which the District Commissioner lives and the native town should be drained.

(3.) The laying out of the new village should be taken in hand, and, whilst this is being done, the question of setting aside a portion of it for the Syrians should be considered, in order that they may be, to some extent, segregated from the natives.

(4.) As opportunity occurs the portion of the native town known as Avenue A or 4 should be demolished, as it lies in a swamp.

(5.) Six dustbins of the type-plan should be built.

(6.) If necessary, the new latrines of the type-plan should be built.

(7) A public laundry should be built.

(8) A Contagious Diseases Hospital.

V.—PRESTEA.

Sanitary Improvements.

A destructor of the small type-plan.

1 dustbin of the type-plan.

1 latrine of the type-plan, to contain six pans.

VI.—DUNKWA.

Two-roomed bungalow.

New quarters (Europeans).

Should be built in the segregation area, to be selected by the Senior Sanitary Officer.

Court House.

Police station and barrack; these should not be built in or within 600 yards of the segregation area.

Sanitary Improvements.

(*a*) Four latrines, each to contain 12 pans of the type-plan.

(*b*) A slaughter house of the type-plan.

(*c*) Six dustbins of the type-plan.

(*d*) Two small destructors of the type-plan.

(*e*) A market shed.

(*f*) Drainage of the main street.

(*g*) Drainage of the swamp.

VII.—DIXCOVE.

Sanitary Improvements.

A well of the Macgregor type.
Drainage of the lagoon, by the warehouse.

VIII.—ELMINA.

Sanitary Improvements.

A slaughter house of the type-plan.
Two dustbins of the type-plan.

IX.—CAPE COAST.

Additional quarters (Europeans), one three-roomed single bungalow,
Additional quarters (Europeans), one two-roomed single bungalow,
should be erected on the segregation area.

Erection of two sea latrines, at sites chosen by a Board, after careful consideration of the local conditions as to the set of the tide, etc.

Sanitary Improvements.

(*a*) Convert two of the old market sheds into a public laundry, with a well and windmill pump attached.

(*b*) 40 dustbins of the type-plan.

(*c*) Four latrines of the new type-plan, each to contain 12 pans.

(*d*) Three Macgregor wells, with pumps of the barrel type.

(*e*) The swamp opposite the Government Cemetery should be drained.

(*f*) If not already built, a destructor of the type-plan and, if necessary, another.

(*g*) A well, flushing tank and windmill pump should be erected at a site suitable for flushing the main drain.

(*h*) The balance should be expended in continuing the drainage system.

An additional vote of £1,000 has been granted to the Cape Coast Town Council for clearing congested areas, and I shall be grateful if instructions be given the District Engineer, Cape Coast, to give the Town Council every assistance in this matter.

(*i*) Some preliminary investigation should be made as to the possibility of introducing a pipe-borne water supply into Cape Coast.

X.—SOADRU.

Sanitary Improvements.

(*a*) A slaughter house of the type-plan.

(*b*) A destructor of large type-plan.

(*c*) 8 dustbins of type-plan.

(*d*) Drainage of main street.

(*e*) One 6-pan latrine of type-plan.

XI.—NSABA.

Sanitary Improvements.

(*a*) Small destructor of type-plan.

(*b*) A slaughter house of type-plan.

(*c*) 6 dustpins of type-plan.

(I have asked for Special Warrants for two other cocoa towns—Kwanyako and Nyakrom—also rest houses. I will make recommendations if Special Warrants are granted.)

XII.—SALTPOND.

Native Hospital.

Should be built on a site recommended in the north-eastern portion of the Health area.

Additional quarters (European), one two-roomed single bungalow.

Should be built on the segregation area, now being acquired.

Sanitary Improvements.

(*a*) The scheme for acquiring houses (except those necessary to clear the site for the new Native Hospital) in the so-called segregation area (Health area) has now been abandoned.

(*b*) A slaughter house of the type-plan should be erected near the sea.

(*c*) 6 dustbins of the type-plan should be built.

(*d*) A large destructor of the type-plan should be built.

(*e*) A new market shed.

(*f*) Two latrines of 12 pans each of the type-plan.

(*g*) The existing latrines should be altered to prevent fouling of the surrounding soil.

(*h*) The drainage of the town should be continued, and some attempt should be made to canalize and fill in at least the upper portion of the lagoon.

(*i*) Some preliminininary investigation should be made as to the possibility of introducing a pipe-borne water-supply to Saltpond.

XIII.—ANNAMABOE.

Sanitary Improvements.

(*a*) The storage tank and catchment area should be repaired.

(*b*) Extension of sea latrines to beyond low water mark.

A rest house is needed here.

XIV.—APPAM.

Sanitary Improvements.

(*a*) A large destructor.

(*b*) A slaughter house.

(*c*) 6 dustbins of the type-plan.

Erection of one sea-latrine at a site to be selected by a Board, to be appointed locally, after careful consideration and observation of the set of the currents, etc.

XV.—WINNEBAH.

Sanitary Improvements.

(*a*) Reconstructing of present latrines, to prevent fouling of surrounding cell.

(*b*) Two new latrines of 12 pans each of the type-plan.

(*c*) 10 dustbins of the type-plan.

(*d*) One destructor of the large type-plan.

(*e*) One slaughter house of the type-plan.

(*f*) Two Macgregor wells.

(*g*) The drainage system should be continued.

(*h*) Some preliminary investigation as to the possibility of introducing a pipe-borne water supply should be made.

(*i*) The markets should be drained.

XVI.—ACCRA.

Sanitary Improvements.

The most urgent sanitary improvements are :—

(1) The drainage of the area behind the European Club.

(2) The drainage of the area behind the Laboratory and the new bungalows behind No. 14.

(3) The extension of the main drain.

(4) The erection of a flushing tank, etc., for the main drain.

(5) The building of a large destructor near the Kru Boys' houses at Ripponsville, and the completion of the Kru houses by building a latrine and kitchen.

(6) The drainage of the area between Ripponsville and the station.

(7) The filling in of the quarries.

XVII.—NSAWAM.

Sanitary Improvements.

(1) 8 dustbins of type-plan.

(2) A slaughter house of type-plan.

(3.) Three 12-pan latrines of type-plan.

(4.) Building new market.

(5.) Extension of drainage, especially south along the main street.

(6.) Demolition of congested areas.

XVIII.—WESHIANG.

Sanitary Improvements.

(1.) A small destructor.

(2.) A slaughter house.

(3.) 6 dustbins.

XIX.—DODOWAH.

Sanitary Improvements.

(1.) New market place.

(2.) 6 dustbins.

(3.) 3 Magregor wells.

(4.) Extension of drainage.

XX.—OBLOGO.

Sanitary Improvements.

(1.) A small destructor.
(2.) 6 dustbins.

XXI.—ABURI.

Sanitary Improvements.

(1.) A slaughter house.
(2.) A small destructor.
(3.) 3 dustbins.
(4.) Improving water supply and drainage.

XXII.—MANGOASE.

Sanitary Improvements.

(1.) A small destructor.
(2.) Roofing for pit latrines.

XXIII.—KIBBI.

Sanitary Improvements.

(1.) A slaughter house.
(2.) 6 dustbins.
(3.) 2 small destructors.
(4.) Roofing pit latrines.
(5.) Drainage.

XXIV.—KOMFRODUA.

Sanitary Improvements.

(1.) A slaughter house.
(2.) 2 small destructors.
(3.) 6 dustbins.
(4.) Roofing pit latrines.
(5.) Drainage.

XXV.—PAKRO.

Sanitary Improvements.

As this site is to be moved to New Mangoase, application should be made for a transfer of the vote to the latter place and the money expended there.

XXVI.—ADAWSO.

Sanitary Improvements.

(1.) 2 small destructors.
(2.) A slaughter house.
(3.) 6 dustbins.
(4.) 3 Macgregor wells.
(5.) Roofing latrines.
(6.) Reconstructing and draining market.
(7.) General drainage.

XXVII.—SOMANYA.

Sanitary Improvements.

(1.) 2 small destructors.
(2.) 6 dustbins.
(3.) Drainage.
(4.) Roofing pit latrines.

XXVIII.—AKUSE.

Sanitary Improvements.

(1.) 3 Macgregor wells.
(2.) A pound.
(3.) Re-constructing latrines to prevent fouling of surrounding soil.
(4.) Drainage.
(5.) 6 dustbins.

XXIX.—ADDAH.

Sanitary Improvements.

(1.) A slaughter house.
(2.) A large destructor.
(3.) A pound.
(4.) 2 Macgregor wells.
(5.) 6 dustbins.
(6.) Draining and filling in swamp.

XXX.—QUITTAH.

Sanitary Improvements.

(1.) Two 12 pan latrines.
(2.) 6 dustbins.
(3.) Repairing dustbins.
(4.) Repairing latrines.
(5.) 2 Macgregor wells.
(6.) Repairing old wells.
(7.) A slaughter house.
(8.) Drainage.

XXXI.—SUNYANI.

Sanitary Improvements.

(1.) A small destructor.
(2.) 2 dustbins.
(3.) A slaughter house.
(4.) Roofing pit latrines.

XXXII.—COOMASSIE and OBUASSIE.

I will advise about these stations after my visit.

XXXIII.—KINTAMPO

Sanitary Improvements.

(1.) A slaughter house.
(2.) A small destructor.
(3.) 6 dustbins.
(4.) Roofing pit latrines.

SUMMARY OF ROUTINE OF SANITARY WORK DONE DURING THE YEAR 1911 IN THE UNDERMENTIONED TOWNS.

Accra	Coomassie
Addah	Obuassie
Akuse	Saltpond
Axim	Seccondee
Cape Coast	Winnebah

This Form has only been rendered for certain towns in the Colony and for the towns of Coomassie and Obuassie in Ashanti.

The conditions prevailing at other stations are too primitive to permit of the rendering of such elaborate returns, and any attempt to enforce them would only result in the compilation of misleading and inaccurate statistics.

A LABOUR PROBLEM.

The following in an extract from a report sent in after a tour of the Cocoa District behind Accra.

> "Lastly, it may not be out of place here to call attention to one of the factors that is tending to undermine the health of a portion of the native population—I allude to the cocoa carriers.
>
> "In the course of my journey I frequently noticed the distressed appearance of the cocoa carriers along the road. All day long a procession of them passed to the South (old men and women, adults and children of all ages), each staggering under a too heavy burden, the adults often carrying loads of 200 lbs. or more, their condition of profuse perspiration and laboured breathing recalling the appearance of an athlete in distress, after some supreme physical effort.
>
> "I am aware that this traffic must continue, but I submit that some legislative enactment should be passed, with the object of regulating this traffic, in the interest of the physical well-being of the native community."

It may, perhaps, not be advisable to interfere with adults, but something should be done to protect the children from injury, by making it illegal for a child under a certain age to carry a load over a given weight.

THOS. C. RICE,

Senior Sanitary Officer.

Accra,

9th May, 1912.

TABLE I.

Annual Return of the Result of Periodical Examination of Blood Smears taken from the Slaughter-Houses of the Colony and Protectorate for the Year 1911.

	Station.	Cattle.			Sheep.			Goats.			Pigs.			Percentage in which Trypanosomes were found.				Percentage in which other Parasites were found.				Nature of other Parasites.
		Number examined.	Number in which Trypanosomes were found.	Number in which other Parasites were found.	Number examined.	Number in which Trypanosomes were found.	Number in which other Parasites were found.	Number examined.	Number in which Trypanosomes were found.	Number in which other Parasites were found.	Number examined.	Number in which Trypanosomes were found.	Number in which other Parasites were found.	Cattle.	Sheep.	Goats.	Pigs.	Cattle.	Sheep.	Goats.	Pigs.	
Colony.	Accra	100	20	—	59	3	2	40	—	1	28	—	—	20·00	5·08	—	—	—	3·38	2·5	—	2 sheep, spirochætosis. 1 goat, ,,
	Winnebah	—	—	—	19	—	—	33	—	—	—	—	—	—	—	—	—	—	—	—	—	
	Saltpond	4	—	—	118	—	—	1186	—	—	—	—	—	—	—	—	—	—	—	—	—	
	Cape Coast	—	—	—	9	1	—	24	—	—	1	—	—	—	11·11	—	—	—	—	—	—	
	Elmina	—	—	—	49	—	—	83	—	—	10	—	—	—	—	—	—	—	—	—	—	
	Seccondee	28	28	—	9	4	—	17	4	—	13	2	—	100·00	44·44	23·52	15·38	—	—	—	—	
	Axim	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
	Tarquah	45	24	—	20	—	—	30	—	—	17	—	1	53·33	—	—	—	—	—	—	5·88	Parasite unnamed.
	Dunkwa	10	9	—	1	—	—	2	1	—	—	—	—	90·00	—	50·00	—	—	—	—	—	
	Addah	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
	Akuse	4	—	—	22	—	—	47	—	7	34	—	—	—	—	—	—	—	—	14·89	—	
	Quittah	16	—	1	31	—	—	70	—	—	45	1	2	—	—	—	2·22	6·25	—	—	4·44	1 cow, drepanidium. 1 pig, piroplasmosis. 1 pig, parasite unrecognised.
Northern Territories-Ashanti.	Coomassie	111	67	—	50	19	—	77	15	—	34	6	—	60·36	38·00	19·35	17·64	—	—	—	—	
	Obuassie	34	1	—	6	—	—	23	—	—	9	—	—	2·94	—	—	—	—	—	—	—	
	Kintampo	10	—	—	3	—	—	3	—	—	—	—	—	—	—	—	—	—	—	—	—	
	Sunyani	38	2	—	3	1	—	—	—	—	—	—	—	5·26	33·33	—	—	—	—	—	—	
	Tamale	30	5	—	8	—	—	12	—	—	—	—	—	16·66	—	—	—	—	—	—	—	
	Wa	45	5	—	8	1	—	4	2	—	—	—	—	11·11	12·5	50·00	—	—	—	—	—	
	Gambaga	42	1	5	27	—	—	35	—	—	—	—	—	2·38	—	—	—	11·11	—	—	—	3 cows had massive pneumonia and 2 had flukes in liver.
	Salaga	64	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
	Bole	71	19	—	9	—	—	12	1	—	—	—	—	26·76	—	8·33	—	—	—	—	—	
	Navarro	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
	Zouaragu	11	—	—	—	—	—	2	—	—	—	—	—	—	—	—	—	—	—	—	—	
	Bawku	17	1	—	43	—	—	19	—	—	—	—	—	5·88	—	—	—	—	—	—	—	
	Lorha	2	—	—	—	—	—	30	1	—	—	—	—	—	—	3·33	—	—	—	—	—	
	Total	682	182	6	494	29	2	1749	24	8	191	9	3	—	—	—	—	—	—	—	—	

TABLE II.

Larval Index for the year 1911.

	Station.	Premises Inspected (Monthly Average.)	Larvæ found.	Protected Barrels.	Unprotected Barrels.	Protected Tanks.	Unprotected Tanks.	Protected Wells.	Unprotected Wells.	Larval Index.
										%
Colony.	Accra	384	46	86	29	11	6	4	5	11·97
	Winnebah	881	16	88	8	94	5	29	3	1·81
	Appam	448	7	62	—	29	—	7	—	1·56
	Saltpond	647	22	634	31	166	6	88	30	3·4
	Cape Coast	2,303	213	628	39	150	12	182	15	9·24
	Elmina	505	12	352	—	36	3	13	1	2·37
	Seccondee	3,531	52	599	12	249	6	137	10	1·44
	Axim	566	4	47	—	67	—	21	1	·70
	Tarquah	316	11	89	3	51	—	21	5	3·48
	Dunkwa	176	2	7	11	8	—	—	10	1·13
	Addah	440	27	3	5	17	1	2	12	6·11
	Akuse	220	26	87	38	17	2	—	—	11·81
	Quittah	185	9	66	2	17	—	55	3	4·86
	Nsawam	1,318	8	11	2	4	—	—	—	·61
	Pakro	264	7	13	6	2	2	—	—	2·65
	Dodowah	478	—	60	—	13	1	80	2	—
	Komfrodua	29	—	1	4	1	—	2	—	—
Ashanti.	Coomassie	1,639	21	124	—	19	—	12	56	1·28
	Obuassie	2,536	12	2	—	1	—	—	2	·47
	Kintampo	166	1	—	—	—	—	—	—	·66
	Sunyani	41	3	—	—	—	—	—	4	7·31
Northern Territories.	Tamale	52	10	—	—	2	—	1	2	19·23
	Wa	305	2	—	—	—	—	—	43	·65
	Gambaga	68	—	—	—	—	—	—	1	—
	Salaga	27	17	—	—	—	—	—	300	62·96
	Bole	127	—	—	—	—	—	—	—	—
	Navarro	44	1	—	—	—	—	—	2	2 27
	Zouaragu	747	—	—	—	—	—	1	—	—
	Bawku	51	6	—	—	—	—	—	2	11·76
	Lorha	—	—	—	—	—	—	—	—	—
	Total	18,494	535	2,959	190	954	44	655	509	2·89

TABLE III.

Annual Return of Spleen Rate for the Colony, Ashanti and The Northern Territories for the Year 1911.

	Station.	Age 0 to 5 years.		Age 5 to 8 years.		Age 8 to 15 years.		Total Number examined.	Total Number with enlarged spleen.	Number of blood examinations made of foregoing.	Number of Cases in which Malarial Parasites were found.	Percentage with enlarged spleen.	Percentage in which Malarial Parasites were found on blood examination.
		Number examined.	Number with enlarged spleen.	Number examined.	Number with enlarged spleen.	Number examined.	Number with enlarged spleen.						
Colony.	Accra	—	—	70	28	62	13	132	41	66	15	31·06	22·72
	Winnebah	104	38	112	24	10	—	226	62	21	3	27·43	14·28
	Saltpond	20	9	13	6	18	6	51	21	33	10	41·17	30·30
	Cape Coast	114	81	107	82	30	18	251	181	8	7	72·11	87·50
	Elmina	73	66	45	36	29	11	147	113	35	8	76·87	22·85
	Seccondee	56	38	105	64	79	22	240	124	35	13	51·66	37·14
	Axim	264	142	229	121	160	31	653	294	8	2	45·02	25·00
	Tarquah	33	28	89	49	145	58	267	135	52	18	50·56	34·61
	Dunkwa	22	12	34	21	35	13	91	46	32	12	50·54	37·18
	Addah	47	36	241	84	132	10	420	130	65	45	30·95	69·23
	Akuse	53	41	202	102	181	41	436	184	5	—	42·20	—
	Quittah	107	74	1,177	222	579	35	1,863	331	501	363	17·76	72·45
Ashanti.	Coomassie	163	115	173	95	85	32	421	242	19	—	57·48	—
	Obuassie	59	17	214	46	103	15	376	78	15	1	20·74	6·66
	Kintampo	35	31	28	20	23	10	86	61	43	20	70.93	46·51
	Sunyani	72	45	98	39	22	5	192	89	100	11	46·35	11·00
Northern Territories.	Tamale	25	17	77	50	43	18	145	85	12	12	58·62	100·00
	Wa	77	38	142	37	67	10	286	85	2	1	29·72	50 00
	Gambaga	59	16	46	11	22	2	127	29	—	—	22·83	—
	Salaga	20	18	40	37	30	27	90	82	55	30	91·11	54·54
	Bole	58	18	151	78	90	13	299	109	1	—	36·45	—
	Navarro	—	—	—	—	—	—	—	—	—	—	—	—
	Zouaragu	17	15	21	19	2	2	40	36	18	4	90·00	22·22
	Bawku	78	71	53	39	20	2	151	112	50	4	74·16	8·00
	Lorha	44	18	98	25	—	—	142	43	70	16	30·28	22·85
	Total ...	1,600	984	3,565	1,335	1,967	394	7,132	2,713	1,246	595	38·03	47·75

TABLE IV.

RETURN SHEWING THE NUMBER OF THE INMATES OF THE PRISONS AND NATIVE HOSPITALS WHOSE STOOLS HAVE BEEN EXAMINED MICROSCOPICALLY AND TABULATING THE RESULTS DURING THE YEAR 1911.

Station.		No. of cases examined.	Taenia Solium.	Rhabdonema Intestinale.	Trichocephalus Dispar.	Ankylostomo Duodenale.	Uncinaria Americana.	Ascaris Lumbricoides.	Oxyuris Vermicularis.	Other Intestinal Parasites.	Remarks.
ACCRA—	Prison	—	—	—	—	—	—	—	—	—	
	Hospital	—	—	—	—	—	—	—	—	—	
WINNEBAH—	Prison	2	—	—	—	—	—	—	—	—	
	Hospital	2	—	—	—	1	—	—	—	—	
SALTPOND—	Prison	—	—	—	—	—	—	—	—	—	
	Hospital	—	—	—	—	—	—	—	—	—	
CAPE COAST—	Prison	12	—	—	5	—	—	9	—	—	
	Hospital	49	—	—	20	9	—	39	1	4	
ELMINA—	Prison	39	—	1	5	4	—	12	—	—	
	Hospital	6	—	—	—	1	—	1	—	—	
SECCONDEE—	Prison	48	10	—	7	—	—	11	2	1	
	Hospital	67	1	2	9	1	—	23	4	—	
AXIM—	Prison	—	—	—	—	—	—	—	—	—	
	Hospital	16	—	—	1	—	—	3	1	11	
TARQUAH—	Prison	6	3	—	—	—	—	2	—	—	
	Hospital	3	—	—	—	—	—	1	—	—	
DUNKWA—	Prison	10	—	—	1	—	—	1	2	—	
	Hospital	—	—	—	—	—	—	—	—	—	
ADDAH—	Prison	11	—	—	—	—	—	1	—	—	
	Hospital	35	4	—	—	—	—	14	—	1	
AKUSE—	Prison	72	6	—	3	—	—	8	9	3	
	Hospital	8	—	—	1	—	—	3	2	1	
QUITTAH—	Prison	65	—	—	8	29	—	21	2	4	
	Hospital	17	1	—	2	11	—	12	—	—	
COOMASSIE—	Prison	82	—	3	3	—	—	38	1	6	
	Hospital	28	1	1	3	—	—	6	1	1	
OBUASSIE—	Prison	35	2	—	1	—	—	3	—	—	
	Hospital	31	—	—	1	—	—	1	1	—	
KINTAMPO—	Prison	—	—	—	—	—	—	—	—	—	
	Hospital	—	—	—	—	—	—	—	—	—	
SUNYANI—	Prison	76	4	—	3	—	—	17	4	—	
	Hospital	20	2	—	—	—	—	3	2	—	
TAMALE—	Prison	54	—	—	5	—	—	7	4	—	
	Hospital	25	—	—	1	—	—	3	—	—	
WA—	Prison	12	5	—	—	—	—	2	—	—	
	Hospital	5	1	—	1	—	—	1	—	—	
GAMBAGA—	Prison	8	2	—	—	1	—	—	—	8	
	Hospital	—	—	—	—	—	—	—	—	—	
SALAGA—	Prison	7	1	—	—	—	—	—	—	—	
	Hospital	—	—	—	—	—	—	—	1	—	
BOLE—	Prison	10	—	—	—	7	—	6	2	1	
	Hospital	—	—	—	—	—	—	—	—	—	
TOTAL		861	43	7	80	64	—	248	39	41	

TABLE V.

Annual Return of Prosecutions made in the Sanitary Department for the Year 1911.

Station.	Larval Index.	No. of Prosecutions.	No. of Convictions.	No. Fined.	Total Amount of Fines.			No. Imprisoned
					£	s.	d.	
Colony.	%							
Accra	11·97	786	742	742	426	9	6	
Winnebah ...	1·81	373	330	329	339	11	6	1
Appam	1·56	184	170	170	153	6	6	
Saltpond	3·4	185	162	162	107	13	0	
Cape Coast ...	9·24	706	668	666	180	16	6	2
Elmina	2·37	257	241	241	51	1	9	
Seccondee ...	1·44	584	535	535	310	1	0	
Axim	·70	87	81	81	39	10	6	
Tarquah	3·48	283	266	265	100	6	6	1
Addah	6·11	197	189	187	59	9	0	2
Akuse	11·81	227	185	185	45	18	3	
Quittah	4·86	174	161	160	56	10	6	1
Dodowah... ...	—	459	447	447	406	5	6	
Nsawam & Pakro	·94	453	429	429	324	15	6	
Adawso	—	148	101	101	98	6	6	
Komfrodua ...	—	72	71	71	41	5	0	
Aburi	—	43	36	36	45	11	6	
Somanya	—	37	32	32	7	1	6	
Ashanti.								
Coomassie ...	1·28	563	556	556	214	11	6	
Obuassie	·47	275	268	268	102	12	6	
Kintampo ...	·66	20	17	17	5	6	0	
Sunyani	7·31	4	4	4	0	17	6	
Northern Territories								
Tamale	19·23	35	35	35	3	3	0	
Wa	·65	134	134	134	24	19	0	
Gambaga ...	—	45	45	45	15	12	6	
Salaga	62·96	12	10	10	3	12	6	
Bole	—	—	—	—	—	—	—	
Navarro	2·27	17	17	17	2	2	6	
Zouaragu... ...	—	20	20	20	0	10	0	
Bawku	11·76	3	3	3	0	1	6	
Lorha	—	10	10	10	2	10	0	
Total	—	6,593	5,965	5,958	£3,159	17	6	7

TABLE VI.

Prison Return for the Year 1911.

Station.	Daily Average Number in Prison.	Total Cubic Area of Cells in cu. ft.	Total Ventilation Area of Cells in sq. ft.	Average Cubic space per head in cu. ft.	Average Ventilation Area per head in sq. ft.	Daily Average Number on Sick List.	Number discharged on Certificate of Medical Officer.	Number of Deaths.	Causes of Deaths.
Accra	179	62,343	787·81476	348·28	4·40	10	—	1	Dysentery.
Cape Coast	75	35,623	92·25	474·97	1·23	3	2	—	
Elmina	37	71,837	283·25	1941·54	7 65	—	—	1	Not stated.
Seccondee C.P.	192	105,672	4152·1	550·33	21·62	4	15	3	1 Dysentery, 1 Epilepsy, 1 G.P.I.
Axim	20	7,813	69·2	390·65	3·46	—	—	—	
Quittah	30	12,642	278·24966	421·40	9·27	1	—	—	
Tarquah	40	5,280	77	132	1·92	1	—	—	
Akuse	50	19,790	283	395·80	5·66	1	—	—	
Addah	18	10,375	79	576·38	4·38	1	1	—	
Saltpond	20	11,858	262	592·90	13·1	—	—	—	
Winnebah	24	12,705	54·1	529·37	2·25	1	—	—	
Seccondee F.O.	93	21,238	185	228·36	1·98	5	—	2	Not stated.
Dunkwa	12	3,300	26·5	275	2·20	2	—	—	
Coomassie	117	39,011	710	333·42	6·06	4	6	1	Not stated.
Obuassie	47	18,920	128	402·55	2·72	1	—	2	Abscess.
Kintampo	5	2,250	280·24	450	56·48	—	—	—	
Sunyani	18	3,480	40	193·33	2·22	—	—	—	
British Kratchi	1	3,514	5·75	3514	5·75	—	—	—	

TABLE VI.—*continued.*

Name of Prison—ACCRA.

STATEMENT SHOWING NUMBER OF PRISONERS IN LOCK-UP EACH NIGHT DURING THE MONTH OF DECEMBER, 1911.

Description No. of Cell.	Area of Cell, Cubic feet.	Ventilation Area of Cell, Square feet.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Daily Average Number.	Average cubic space per head.	Average Ventilation Area per head in sq. feet.
22 Separate Cells	608 Cubic ft = 13,376	14 each = 308	72	72	71	70	72	71	71	84	83	84	82	84	83	77	84	83	83	84	84	81	80	78	76	79	80	80	77	76	76	79	79	78·3	264·01	6·07
6 „ „	1,216 each = 7,296	168																																		
	Total = 20,672	476																																		
No. 1 Cell	1,390 Cubic feet	10·5	10	10	10	10	10	10	10	8	8	8	8	8	8	8	8	7	7	7	8	8	8	8	8	8	8	8	8	8	7	7	7	8·2	169·51	1·28
„ 2 „	1,370 „	10·5	10	10	10	10	10	10	10	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8·4	163·09	1·25
„ 3 „	1,500 „	10·5	10	10	9	9	9	8	8	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	7	8	8	8	8	7	8	8	7	8·6	174·41	1·22
„ 4 „	1,470 „	10·5	10	10	10	10	11	10	10	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8·4	175	1·25
„ 5 „	1,930 „	10·15	10	10	10	10	10	10	9	10	10	10	10	10	10	10	10	10	10	10	10	9	7	6	8	9	9	10	10	10	10	10	10	9·5	203·15	1·57
„ 6 „	1,980 „	10·15	10	9	9	9	9	10	9	10	10	10	10	10	10	9	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	9·8	202·04	1·53
„ 7 „	1,800 „	10·12	10	10	10	10	10	10	10	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	7	7	8	9	9	8·4	214·28	1·42
„ 8 „	2,080 „	10·24	11	10	10	10	10	10	10	12	12	12	10	10	12	11	12	12	12	12	12	12	12	11	11	12	12	12	12	12	12	12	12	11·3	184·07	2·12
„ 9 „	925 „	7·75	7	7	7	7	7	7	7	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6·2	149·19	1·25
„ 10 „	950 „	7·75	6	6	6	6	6	6	4	6	6	6	6	5	5	5	5	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	5·6	169·64	1·38
„ 11 „	840 „	7·75	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	168	1·55
„ 12 „	740 „	18·583	6	6	6	6	6	6	6	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	4	4	5	5	5	5	5·1	145·09	3·60
„ 13 „	1,912 „	12·10416	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	318·66	2·01
„ 14 „	3,825 „	20·4305	8	6	8	8	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	8	8	9	8·7	439·65	2·34
„ 15 „	1,912 „	13·4305	9	9	9	9	10	8	9	9	9	9	8	9	9	7	8	8	7	7	7	6	8	8	8	8	8	8	8	6	4	4	4	7·7	248·31	1·74
„ 16 „	2,730 „	28	9	9	9	13	12	12	24	12	14	13	16	16	11	16	17	19	19	19	19	19	22	21	20	17	17	17	17	16	17	18	18	16	176·25	1·75
Female Ward No. 1	2,337 „	9·3472	3	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	1,168·5	4·07
„ „ No. 2	1,923 „	4 1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	2	2	2	2	2	2	3	3	3	1·3	1,479·23	3·15
Gaol Hospital	6,080 „	43·3194	1	1	1	1	1	1	1	1	1	1	1	1	1	3	7	3	1	1	1	1	2	3	5	5	5	3	3	2	2	2	2	2·1	2,895·28	26·33
No. 1 Condemned Cell	1,003 „	5·5	—	—	—	—	—	1	1	1	1	1	1	1	1	1	1	1	1	—	1	1	1	1	1	1	—	1	1	1	1	1	1	1	1,003	5·5
„ 2 „ „	980 „	8·25	1	1	1	1	—	—	—	—	—	—	—	—	—	1	1	1	1	—	—	—	1	1	1	—	—	—	1	1	1	—	—	1	980	8·25
„ 3 „ „	980 „	8·25	—	1	1	1	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	1	1	1	—	—	—	1	1	1	—	—	1	980	8·25
„ 4 „ „	1,014 „	9·25	—	1	1	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	1	1	—	—	—	—	—	—	—	—	1	1,014	9·25
Grand Total ...			215	212	212	214	216	213	222	220	221	221	218	221	219	221	227	225	224	223	225	222	226	224	222	222	222	221	219	214	213	217	217			

TABLE VI.—*continued.*

Name of Prison—AXIM.

STATEMENT SHOWING NUMBER OF PRISONERS IN LOCK-UP EACH NIGHT DURING THE MONTH OF DECEMBER, 1911.

Description No. of Cell.	Area of Cell, Cubic Feet.	Ventilation Area of Cell, Square Feet.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Daily Average Number.	Average Cubic Space per head.	Average Ventilation Area per head.
1	942 / 1,873	23·7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	8	8	8	8	8	8	8	7	7	7	7	7	7·2	260·13	3·48
2	1,545 / 1,338	30·4	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	6	6	6	6	6·8	227·20	4·47
3	1,657	5·5	2	3	3	2	2	2	2	2	2	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	2·7	613·70	2·37
4	2,164	7·1	8	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	309·14	1·01
5	1,174	2·5	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2	2	2	2	1	1	1	1	1·4	840·71	1·92
			26	25	25	24	24	24	24	24	24	24	25	25	25	25	25	26	26	26	26	27	27	27	27	27	27	27	26	24	24	24	24			

Name of Prison—SECCONDEE CENTRAL.

STATEMENT SHOWING NUMBER OF PRISONERS IN LOCK-UP EACH NIGHT DURING THE MONTH OF DECEMBER, 1911.

Description No. of Cell.	Area of Cell, Cubic Feet.	Ventilation Area of Cell, Square Feet.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Daily Average Number.	Average Cubic Space per head.	Average Ventilation Area per head.
Ground floor, 60 cells	701 each	12·5 each	94	93	93	93	93	93	93	93	93	93	93	93	93	93	93	92	92	92	92	90	90	90	90	90	90	90	90	90	90	93	93	92	457·17	8·15
First floor, 60 cells	651 „	12·5 „	93	93	93	92	92	92	90	90	90	90	92	93	93	93	93	93	93	92	92	92	93	92	90	90	90	91	91	92	92	92	93	92·4	422·72	8·11
Untried, 7 cells	676 „	16·5 „	5	5	5	5	5	5	5	5	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	5·7	830·17	20·26
Remand, 4 cells	527 „	12·5 „	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Punishment, 4 cells	521 „	6 „	—	—	—	—	—	—	2	2	2	2	2	1	1	1	1	1	1	2	2	2	2	3	4	4	4	3	3	3	3	1	—	2·1	992·38	1·14
European Ward, 2 cells	2,520 „	16 „	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Gaol Hospital, 1 cell	10,588 „	24·30 „	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	5	5	5	5	5	4	4	4	4	4	4	4	3	5	4	4	4·1	7,135·36	161·21
			196	195	195	194	194	194	194	194	195	195	197	197	197	197	197	197	197	197	197	195	195	195	194	194	194	194	194	194	196	196	196	—	—	—

Table VI.—*continued.*

Name of Prison—DUNKWA.

Statement showing number of Prisoners in Lock-up each night during the Month of December, 1911.

Description No. of Cell.	Area of Cell, Cubic Feet.	Ventilation Area of Cell, Square Feet.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Daily Average Number.	Average Cubic Space per head.	Average Ventilation Area per head.
1	1,500	20	6	7	7	7	7	7	7	7	7	7	7	7	7	—	—	—	—	—	2	2	1	4	5	6	8	8	8	2	3	3	3	5·5	272·72	3·63
2	1,800	6½	7	7	8	8	8	8	7	7	7	7	7	8	8	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	8·3	216·86	·78
Communicating door left open always			13	14	15	15	15	15	14	14	14	14	14	15	15	9	9	9	9	9	11	11	10	13	14	15	17	17	17	11	12	12	12			

Name of Prison—ELMINA.

Statement showing number of Prisoners in Lock-up each night during the Month of December, 1911.

Description No. of Cell.	Area of Cell, Cubic Feet.	Ventilation Area of Cell, Square Feet.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Daily Average Number.	Average Cubic Space per head.	Average Ventilation Area per head.
No. 1 Ward	2,962	35·75	10	10	10	10	10	10	10	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9·3	318·49	3·84
,, 2 ,, ...	3,147	24·5	10	10	10	10	10	10	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	8	8	8	8	8	8	9	349·66	2·72
,, 3 ,, ...	7,159	33	11	10	10	10	10	9	9	9	9	9	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8·5	842·23	3·88
,, 4 ,, ...	7,682	33	10	10	10	9	10	10	9	10	10	10	10	19	10	10	10	10	10	9	9	9	9	9	9	9	9	9	9	8	8	8	8	9·3	826·02	3·54
,, 5 ,, ...	3,053	12	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
,, 6 ,, ...	2,053	18	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
,, 7 ,, ...	2,142	15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
,, 8 Hospital Ward	16,565	30	3	2	2	2	2	2	3	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	8,285·5	15
,, 1 Solitary Cell	498	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
,, 2 ,, ,, ...	428	3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
,, 3 ,, ,, ...	543	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
,, 4 ,, ,, ...	585	3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Male Debtors Ward	20,560	33	5	5	5	5	6	6	7	7	7	8	8	8	8	8	8	8	8	7	7	7	7	7	7	7	7	7	7	8	10	10	10	7·2	2,855·55	4·58
Female ,, ...	2,160	23	1	1	1	1	1	1	2	2	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1·1	1,963·63	20·90
,, Convict	2,300	16	10	10	10	10	10	10	9	8	8	8	8	8	8	8	7	8	8	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7·9	291·13	2·02
Total			60	58	58	57	59	5	58	56	56	57	56	55	55	55	54	55	55	52	52	52	52	52	52	52	52	51	51	51	53	53	53	—		

TABLE VI.—*continued.*

Name of Prison—CAPE COAST.

STATEMENT SHOWING MUMBER OF PRISONERS IN LOCK-UP EACH NIGHT DURING THE MONTH OF DECEMBER, 1911.

Description No. of Cell.	Area of Cell, Cubic Feet.	Ventilation Area of Cell, Square Feet.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Daily Average Number.	Average Cubic Space per head.	Average Ventilation Area per head
No. 1 Ward	3,730	5·25	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
,, 2 ,, ...	3,476	7	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8·4	413·80	·83
,, 3 ,, ...	3,581	7	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8·4	426·30	·83
,, 4 ,, ...	3,501	7	9	9	9	9	9	9	9	9	9	9	9	9	9	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8·4	416·78	·83
,, 5 ,, ...	3,132	9	9	9	9	9	9	9	9	8	9	9	9	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8·4	372·85	1·07
,, 6 ,, ...	3,132	9	9	9	9	9	9	9	9	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8·2	381·95	1·09
,, 7 ,, ...	3,132	10	9	9	9	9	9	9	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8·1	386·66	1·23
,, 8 ,, ...	3,132	9	9	9	9	9	9	9	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8·1	386·66	1·11
,, 9 ,, ...	3,171	9	8	9	9	9	9	9	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8·1	391·48	1·11
,, 10 ,, ...	2,836	10	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	9	9	9	8	8	8	350	1·25
,, 11 ,, ...	2,800	10	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8			
			87	88	88	88	88	88	85	83	84	84	84	83	83	82	82	80	80	80	80	80	80	80	80	80	80	80	81	81	81	80	80			

Name of Prison—COOMASSIE.

STATEMENT SHOWING NUMBER OF PRISONERS IN LOCK-UP EACH NIGHT DURING THE MONTH OF DECEMBER, 1911.

Description No. of Cell.	Area of Cell, Cubic Feet.	Ventilation Area of Cell, Square Feet.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Daily Average Number.	Average Cubic Space per head.	Average Ventilation Area per head
No. 1 cell	7,548	118	31	31	31	31	30	30	31	31	31	31	31	30	30	30	30	30	30	30	30	30	30	30	31	31	31	30	30	30	30	30	30	30·2	249·10	3·89
,, 2 ,, ...	7,548	118	31	32	32	32	30	31	32	31	31	31	30	30	30	30	30	30	30	30	30	30	30	31	31	31	30	31	31	31	29	29	29	30·5	214·68	3·86
,, 3 ,, ...	7,548	128	30	31	31	31	31	31	32	31	31	31	31	30	31	32	31	30	30	31	31	31	30	31	29	29	29	31	30	29	28	28	28	30·3	249·10	4·22
,, 4 ,, Debtors	3,600	50	13	11	11	11	12	12	12	12	12	12	12	12	13	13	15	15	15	15	16	16	16	14	14	14	13	13	13	14	12	11	11	13	276·92	3·84
,, 5 ,, Female Convicts... ...	1,930	29	Occupied by Matron							—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
,, 6 ,, Female Untried & Debtors	1,930	29	6	6	6	6	6	6	6	5	5	5	5	4	3	3	3	3	3	3	2	2	2	2	1	1	1	1	—	—	—	—	—	3·6	536·11	8·05
Condemned Cell No. 1	488	23	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	1	1	1	488	23
,, ,, 2	488	23	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	1	—	—	—	—	—	—	1	488	23
,, ,, 3	488	23	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	1	—	—	—	—	—	—	—	—	—	—	—	1	1	1	1	488	23
,, ,, 4	1,008	46	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hospital Ward	6,435	123	8	7	7	7	8	8	7	7	7	7	7	7	7	6	7	6	6	6	6	6	6	5	4	4	4	4	4	4	4	3	3	5·8	1,109·46	21·20
			119	118	118	118	117	118	120	117	117	117	116	113	114	114	116	115	115	115	115	115	114	113	110	110	109	110	108	108	105	103	103			

Name of Prison—QUITTAH

STATEMENT SHOWING NUMBER OF PRISONERS IN LOCK-UP EACH NIGHT DURING THE MONTH OF DECEMBER, 1911.

Description No. of Cell.	Area of Cell, Cubic Feet.	Ventilation Area of Cell, Square Feet.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Daily Average Number.	Average Cubic Space per head.	Average Ventilation Area per head.
1	1,822	11·8125	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2	2,841	15·0625	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	284·1	1·50
3	2,204	9·39583	9	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	9	8	8	9	9	9	9	9	9	9	9	9	9	8·3	264·33	1·13
4	1,889	9·39583	8	8	8	7	7	7	6	6	6	6	8	7	7	7	7	6	6	7	7	8	8	9	6	6	6	6	8	8	8	8	8	7	269·85	1·34
5	1,150	4·583	—	—	—	1	1	1	1	1	1	1	2	2	2	2	2	2	2	1	1	1	1	1	1	1	1	1	1	—	—	—	—	1·2	958 33	3·81
6	2,736	228	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
			27	26	26	26	26	26	25	25	25	25	28	27	27	27	27	26	26	26	27	27	27	29	26	26	26	26	28	27	27	27	27			

Name of Prison—WINNEBAH.

STATEMENT SHOWING NUMBER OF PRISONERS IN LOCK-UP EACH NIGHT DURING THE MONTH OF DECEMBER, 1911.

Description No. of Cell.	Area of Cell, Cubic Feet.	Ventilation Area of Cell, Square Feet.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Daily Average Number.	Average Cubic Space per head.	Average Ventilation Area per head.
1	5,445	22·5	7	8	8	8	9	9	9	9	9	9	12	11	11	11	11	11	11	11	11	11	12	12	13	13	12	11	11	13	12	12	12	10·6	513·67	2·12
2	5,040	27·6	9	10	9	9	9	9	9	9	9	9	13	15	15	15	15	14	14	14	14	14	17	17	17	17	17	16	16	16	16	16	16	13·4	376·11	2·05
3	2,220	4	2	—	—	—	—	—	—	—	—	—	3	7	7	9	9	9	9	9	9	9	6	7	9	8	8	8	8	8	8	7	7	7·5	296	·53
			18	18	17	17	18	18	18	18	18	18	30	33	33	35	35	34	34	34	34	34	35	36	39	38	37	35	35	37	36	35	35			

TABLE VI.—*continued.*

Name of Prison—OBUASSI.

STATEMENT SHOWING NUMBER OF PRISONERS IN LOCK-UP EACH NIGHT DURING THE MONTH OF DECEMBER, 1911.

Descripton No. of Cell.	Area of Cell, Cubic Feet.	Ventilation Area of Cell, Square Feet.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Daily Average Number.	Average Cubic Space per head.	Average Ventilation Area per head.
1	6,037	48	23	23	23	23	23	23	20	20	20	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	17	17	17	17	17	19·5	30·95	2·46
2	4,092	24	20	20	20	20	19	19	14	13	13	13	13	13	13	13	13	13	13	14	14	13	13	13	13	13	13	13	13	13	13	13	13	14·3	286·15	1·67
3	3,850	24	19	19	17	17	17	17	18	18	18	19	19	19	19	17	17	17	17	16	16	18	17	17	16	16	16	16	16	16	16	16	16	17·1	225·14	1·40
4	2,587	16	5	3	5	7	7	6	8	8	8	9	9	9	9	9	10	10	10	10	10	9	8	8	8	8	8	9	9	9	9	9	9	8·2	315·48	1·95
5	2,354	16	—	—	—	—	—	—	5	6	7	5	5	4	4	7	9	9	9	5	7	5	6	6	5	5	5	5	6	7	6	7	7	6	392·33	2·66
			67	65	65	67	66	65	65	65	66	65	65	64	64	65	68	68	68	64	66	64	63	63	61	61	61	62	61	62	61	62	62			

Name of Prison—BRITISH KRATCHI.

STATEMENT SHOWING NUMBER OF PRISONERS IN LOCK-UP EACH NIGHT DURING THE MONTH OF DECEMBER, 1911.

Descripton No. of Cell.	Area of Cell, Cubic Feet.	Ventilation Area of Cell, Square Feet.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Daily Average Number.	Average Cubic Space per head.	Average Ventilation Area per head.
1	630·17	19·6	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	630·17	1·96
2	602	,,	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	602	1·96
3	554·75	,,	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—			
4	558	163—6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—			
5	561·5	1—113	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—			
6	607·75	1—108·8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—			
			2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1			

Table VI.—*continued.*

Name of Prison—AKUSE.

Statement showing number of Prisoners in Lock-up each night during the Month of December, 1911.

Description No. of Cell.	Area of Cell, Cubic Feet.	Ventilation Area of Cell, Square Feet.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Daily Average Number.	Average Cubic Space per head.	Average Ventilation Area per head.
1	4,466	58	11	14	14	14	8	10	8	8	7	7	8	9	9	11	11	11	11	12	13	13	13	14	14	13	13	15	15	15	15	15	15	11·8	378·47	4·91
2	4,466	58	14	14	14	15	12	12	12	12	11	11	11	12	12	12	12	12	13	12	14	14	15	15	14	15	15	15	15	15	15	16	16	13·4	333·28	4·32
3	6,766	77	20	19	19	18	17	17	17	16	16	16	16	16	16	16	16	19	19	19	21	20	22	22	22	22	22	22	22	22	22	22	22	19·1	354·24	4·03
4	2,046	45	6	6	6	6	4	4	4	4	4	4	4	4	4	5	5	6	5	5	5	5	6	7	7	7	7	6	5	5	5	10	10	5·5	372	8·18
5	2,046	45	7	6	6	6	7	8	8	8	8	8	8	8	8	9	9	9	9	9	1	1	1	1	1	1	1	1	1	1	1	1	1	6·5	314·76	6·92
Females 6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
			58	59	59	59	48	51	49	48	46	46	47	49	49	53	53	57	57	57	61	57	61	61	61	61	61	63	62	62	62	74	74			

Name of Prison—KINTAMPO.

Statement showing number of Prisoners in Lock-up each night during the Month of December, 1911.

Description No. of Cell.	Area of Cell, Cubic Feet.	Ventilation Area of Cell, Square feet.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Daily Average Number.	Average Cubic Space per head.	Average Ventilation Area per head.
1	590	70·06	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	3	3	3	3	3	3	3	3	3	3	1·6	368·75	43·78
2	520	,,	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	4	5	5	5	5	5	5	5	5	5	3·6	144·44	19·46
3	550	,,	1	1	1	1	1	3	3	3	3	3	3	3	1	1	—	—	—	—	—	—	—	—	—	—	—	—	—	1	1	1	1	1·7	347·05	41·21
4	590	,,	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
			5	5	5	5	5	7	7	7	7	7	7	7	5	5	4	4	4	4	4	4	4	7	8	8	8	8	8	9	9	9	9			

TABLE VI.—*continued*

Name of Prison—SALT POND.

STATEMENT SHOWING NUMBER OF PRISONERS IN LOCK-UP EACH NIGHT DURING THE MONTH OF DECEMBER, 1911.

Description No. of Cell.	Area of Cell, Cubic Feet.	Ventilation Area of Cell, Square Feet.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Daily Average Number.	Average Cubic Space per head.	Average Ventilation Area per head.
1	5,390	121	6	6	6	6	6	6	6	6	8	8	9	10	10	10	10	10	10	10	9	9	9	9	9	9	9	10	10	10	9	12	12	8·6	626·74	12·90
2	5,390	121	6	6	6	6	6	6	6	6	7	7	9	9	9	10	9	9	9	9	9	9	9	9	9	9	9	9	10	10	9	12	12	8·3	684·19	13·37
3	1,070	20	4	5	5	5	8	8	8	8	5	5	1	1	1	1	1	1	1	1	2	2	3	3	2	2	2	2	2	2	2	1	1	3	383·33	6·66
			16	17	17	17	20	20	20	20	20	20	19	20	20	21	20	20	20	20	20	20	21	21	20	20	20	21	22	22	20	25	25			

Name of Prison—SECCONDEE FORT ORANGE.

STATEMENT SHOWING NUMBER OF PRISONERS IN LOCK-UP EACH NIGHT DURING THE MONTH OF DECEMBER, 1911.

Description No. of Cell.	Area of Cell, Cubic Feet.	Ventilation Area of Cell, Square Feet.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Daily Average Number.	Average Cubic Space, per head.	Average Ventilation Area per head.
1 Downstairs	2,898	11	13	13	13	14	14	14	14	14	14	14	13	13	13	12	12	12	12	12	15	15	15	15	14	14	14	14	14	13	15	15	15	13·3	217·89	·82
2 „	1,350	10	7	7	7	7	6	6	6	6	5	5	4	4	6	1	3	3	3	3	3	3	3	3	4	4	4	4	3	3	3	3	3	4·2	321·42	2·38
3 „	2,060	9	12	12	12	11	9	9	9	9	9	9	6	6	3	7	7	5	5	5	6	6	6	6	6	6	7	7	7	7	5	5	5	7·2	286·11	1·25
4 „	2,210	15	13	13	14	14	14	14	14	14	14	14	12	12	13	12	11	12	12	11	12	13	13	14	13	12	12	11	11	11	12	12	13	12·6	175·31	1·19
5 „	880	Anger Holed door	3	3	3	3	3	3	4	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	4	—	—	-	3	293·33	—
6 „	1,100	8	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	3	3	3	3	3	3	3	3	3	3	3	4	4	3·6	305·55	2·22
7 „	1,311	5	4	4	4	4	4	4	4	4	4	4	4	6	6	6	6	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	4·7	278·93	1·06
1 Upstairs	4,725	63	22	21	21	21	21	21	20	20	20	20	19	22	22	21	21	21	21	21	23	23	24	23	23	23	22	22	22	21	22	22	22	21·08	216·74	2·88
2 „	4,410	63	22	21	21	21	21	20	20	20	21	21	17	22	22	21	21	20	20	20	23	23	23	24	23	23	21	21	22	—	22	22	22	21·6	203·70	2·91
Punishment	294	1	—	—	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	—	—	—	1	1	1	—	—	—	1	1	—	1	294	1
			100	98	100	100	97	96	96	92	92	92	80	90	90	86	86	83	83	82	82	91	92	93	92	91	90	87	86	89	88	89	89			

Table VI.—*continued.*

Name of Prison—ADDAH.

Statement showing number of Prisoners in Lock-up each night during the Month of December, 1911.

Description No. of Cell.	Area of Cell, Cubic Feet.	Ventilation Area of Cell, Square Feet.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Daily Average Number.	Average Cubic Space per head.	Average Ventilation, Area per head.
1	1,403	10	5	4	4	5	5	5	5	5	5	5	4	4	4	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	4	4	4·5	311·77	2·22
2	1,434	10	4	3	3	5	5	5	5	5	5	5	4	4	4	5	5	4	4	4	4	4	4	4	4	4	4	4	4	4	5	3	3	4·1	349·75	2·43
3	1,102	10	4	4	4	1	1	1	1	1	1	1	4	4	4	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	1	—	—	2·6	423·84	3·84
4	1,425	10	—	—	—	—	4	4	4	4	4	4	4	4	4	3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3·9	365·38	2·56
5	1,464	10	—	—	4	4	4	4	4	4	4	4	4	4	4	3	—	—	—	—	—	—	—	—	1	1	1	1	—	—	—	—	—	3·1	472·25	3·22
6	1,035	10	—	—	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	103·5	10
7	659	3·3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
8	876	8·3	1	1	4	4	4	4	4	4	4	4	4	4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3·5	250·28	2·3
9	979	8·3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
			14	12	20	20	24	24	24	24	24	24	25	25	21	20	14	13	13	13	13	13	13	13	14	14	14	14	13	13	12	8	8			

RETURN OF MALARIAL FEVER, BLACK-WATER FEVER, YELLOW FEVER, FILARIASIS AND DENGUE, DURING THE YEAR FROM THE 1st JANUARY TO 31st DECEMBER (1911).

1. Name of Colony	Gold Coast.
2. Total area	80,235 square miles.
3. Estimated population—	
(*a*) Total	1,503,386.
(*b*) Europeans	1,343.
(*c*) Asiatics	46.
(*d*) Other races	1,501,997.
(*e*)	
4. Births during the year...	Births are not registered in the Colony.
Total births	Coomassie 48.
5. Deaths during the year	
(*a*) Total deaths	Colony 1932. Coomassie 90.
(*b*) Deaths ascribed to Fever	223.
(*c*) Deaths ascribed to Black-water Fever...	4.
(*d*) Deaths ascribed to Yellow Fever ...	6.
6. Government Hospitals—	
(*a*) Number of such Hospitals	22.
(*b*) Totals during year (admissions) ...	2,788.
(deaths)	175.
(*c*) Malarial Fever (admissions) ...	324.
(deaths)	3.
(*d*) Black-water Fever (admissions) ...	7.
(deaths)	2.
(*e*) Yellow Fever (admissions) ...	6 + 3 Cases treated outside (Natives).
(deaths)	6 (Europeans).
(*f*) Filarial Dieases (admissions) ...	5
(deaths)	Nil
(*g*) Dengue (admissions)...	Nil
(deaths)	Nil
7. Government Dispensaries—	
(*a*) Number of such Dispensaries	29
(*b*) Total attendances during year	39,543
(*c*) Attendances for Malaria	1,983
(*d*) Attendances for Filarial Diseases ...	10
(*e*) Attendances for Dengue	Nil
8. Medical Service—	
(*a*) Number of Government Medical Officers	55
(*b*) Number of Special Health Officers ...	5
(*c*) Number of regd. practitioners	4
9. Schools—	
(*a*) No. of Govt. and State-aided schools ...	162
(*b*) No. of scholars regd. in these schools ...	18,680
(*c*) Percentage of daily attendances ...	72%

10. Estates employing indentured labour—

(*a*) Number of such	No returns.
(*b*) Number of indentured labourers employed	
(*c*) No. of Hospitals and Dispensaries ...	
(*d*) Total deaths among such labourers ...	
(*e*) Deaths ascribed to Malaria	
(*f*) Total admissions and attendances at Hospitals and Dispensaries	

11. Estimated revenue of Colony—

Total during year	£1,020,000 0 0

12. Estimated expenditure of Colony—

(*a*) Total during year	£989,390 0 0
(*b*) Annual Medical and Sanitary expenditure	£69,999 4 6
(*c*) Upkeep of Govt. Hospitals and Dispensaries	—
(*d*) Total salaries and allowances of M.Os.	£40,956 12 3
(*e*) Total annual sanitary expenditure ...	£18,530 12 10

13. Towns under Municipalities or Town Councils—

(*a*) Number of such	3
(*b*) Total population...	39,638
(*c*) Total revenues—	
Accra	£6,446 2 9
Cape Coast	£3,093 13 9
Seccondee	£4,545 13 11
Total	£14,085 9 8
(*d*) Total sanitary expenditure—	
Cape Coast	£2,226 5 2
Accra	£4,974 18 10
Seccondee	£3,072 8 9
Total	£10,273 12 9

14. Table of Deaths by Districts.

District.	Area.	Population.	Total Deaths.												
			January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Eastern Province ...		442,232	69	80	61	92	78	74	76	81	89	98	97	90	986
Central Province ...		247,121	70	59	62	52	55	51	60	55	38	42	46	55	644
Western Province...		164,413	19	23	15	20	14	27	33	22	35	29	35	30	302
Total		853,766	158	162	138	164	147	152	169	158	162	169	178	175	1,932

15. Table of Deaths in the Principal Towns.

Town.	District where situated.	Population.	Total Deaths.												
			January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Accra ...			61	59	53	56	64	59	55	68	76	80	78	73	782
Winnebah			31	36	30	18	19	11	11	17	5	10	7	10	208
Saltpond..			5	4	3	7	1	5	9	9	3	8	8	13	80
Cape Coast			29	13	25	23	26	19	29	19	19	18	24	24	268
Elmina ...			5	6	4	4	3	13	11	10	11	6	7	8	88
Seccondee			7	16	4	8	7	14	12	4	14	14	10	8	118
Axim ...			6	2	—	5	3	1	3	5	7	3	5	4	44
Tarquah...			6	4	6	7	4	10	13	12	10	9	16	10	107
Dunkwa...			—	1	5	—	—	2	5	1	4	3	4	8	33
Addah ...			1	5	—	8	3	4	6	3	3	2	2	3	40
Akuse ...			5	7	1	15	3	3	7	2	7	7	7	5	69
Kpong ...			1	5	3	9	8	5	7	4	2	5	6	6	61
Quittah ...			1	4	2	4	1	—	1	4	1	4	1	3	26
Dodowah			—	—	2	—	—	3	—	—	—	—	3	—	8
		Total...	158	162	138	164	147	152	169	158	162	169	178	175	1,932

16. Rainfall during the Year 1911.

Where Observed.	District.	Rainfall.												
		January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Accra ...		·80	—	5·12	3·33	6·20	20·68	·14	—	·26	·14	3·26	·16	40·09
Aburi ...		2·02	·46	3·27	4·36	6 98	8·00	1·80	1·83	2·10	2·28	5·30	1·37	39·77
Quittah ...		·02	·15	4·37	1·75	6·18	3·76	·10	—	—	·41	·40	·44	17·76
Cape Coast		2·70	·52	2·77	2·90	4·95	2·97	·97	·12	·16	1·25	2·85	·20	22·36
Seccondee ...		1·46	·15	4·96	1·30	10·71	6·79	3·96	·32	·71	1·09	1·80	2·12	35·37
Axim ...		1·67	4·10	5·76	3·28	15·27	19·92	9·10	·96	·46	4·80	13·75	9·62	88·69
Tarquah ...		1·81	2·71	10·54	7·96	14·81	9·30	3·76	2·17	2·50	9·71	6·54	3·19	75·50
Addah ...		4·25	·07	2·26	2·91	8·27	11·11	—	—	—	·84	·13	·12	29·96
	Total ...	14·91	8·16	39·05	27·79	73·37	83·03	19·83	5·40	6·19	20·52	34·03	17·22	349·50
Coomassie ...		·70	1·82	12·27	7·22	8·18	10·70	8·32	3·93	3·89	8·01	3·37	1·57	69·98
Kintampo ...		·05	·83	—	—	—	—	3·72	3·52	17·50	8·39	—	·30	34·31
Sunyani ...		—	·09	4·53	4·40	8·93	7·75	4·64	2·13	3·95	5·02	·53	·15	42·12
	Total ..	·75	2·74	16·80	11·62	17·11	18·45	16·68	9·58	25·34	21·42	3·90	2·02	146·41
Tamale ...		—	—	7·98	1·68	4·94	6·21	6·11	7·14	8·09	1·50	·97	—	44·62
Gambaga ...		—	—	·16	3·98	2·50	4·18	4·93	5·48	12·72	4·22	—	—	38·17
	Total ...	—	—	8·14	5·66	7·44	10·39	11·04	12·62	20·81	5·72	·97	—	82·79

17. Additional information to be given, if possible, on the following points :—

(*a*) Is there any legislation in force against the breeding of mosquitoes in premises	Yes. Ordinance No. 6 of 1911.
Number notice served	3,161.
Number of convictions	2,028.
(*b*) Number of children examined for enlarged spleen	7,132. See table 3 in report.
Where was this done	At Government Hospitals and dispensaries.
Percentage affected	38·03 See table 3 in report.
Does Kala-azar exist	No case yet reported.
(*c*) Number of persons examined for filarial disease	Nil.
(*d*) Any large works for surface drainage of towns or reclamation of marshes	Yes, at Accra and Seccondee. Sanitary Improvements £29,670 19s. 10d.
(*e*) Number of men employed in towns and villages for petty anti-mosquito works	Part time of 334 men employed in scavenging was utilised in anti-mosquito work.
Approximate cost	£7,000 voted for scavenging.
(*f*) Amount of Government quinine sold or distributed gratis during the year	Unknown, distributed free to European Government Officials.
(*g*) Is quinine distributed regularly in the schools	No.
(*h*) Measures taken against these diseases on estates employing indentured labour	An Ordinance is under consideration.
(*i*) Any steps taken regarding the housing of the poor	At Seccondee a new Hausa Zongo in process of construction.
(*j*) Any exceptional increase or decrease of these diseases recently noticed	At Accra some progress has been made in helping the better class of Native to build.
(*k*) Any other remarks on the subject ...	

GOLD COAST.

No.

SUMMARY OF ROUTINE SANITARY WORK DONE DURING THE YEAR IN THE TOWN.

1. Name of Town: SALTPOND.

——	Approximate area.	Number of proclaimed open spaces.
1910		
1911	2 square miles	13
1912		

2. Population.

——	Number of Natives.		Number of Europeans.		Total.
	Males.	Females.	Males.	Females.	
1910					
1911	1,693	1,857	11	2	3,553
1912					

3. Housing.

——	Number occupied by Europeans.	Number occupied by Natives.
Number of Houses :—		
1910		
1911	8	256
1912		

Number of Huts :—
1910 ... ...
1911 224
1912 ... ...

4. Mosquito Protection of Houses.

——	1910.	1911.	1912.
Number of European houses wholly mosquito-protected		*nil*	
Number of European houses with mosquito room		1	
Number rendered during the year wholly mosquito-protected ...		*nil*	
Number rendered during the year partially mosquito-protected ...		*nil*	

5. Erection of New Buildings during the Year.

——	1910.	1911.	1912.
Number of public buildings erected with sanction as to site, construction, and relation to other buildings		*nil*	
Number of houses erected with sanction as to site, construction, and relation to other buildings		36	
Number of huts erected with sanction as to site, construction, and relation to other buildings		*nil*	
Number of houses built without sanction		*nil*	
Number of huts built without sanction		*nil*	

ACTION TAKEN:

	Number of Prosecutions.		Number demolished.	
	Huts.	Houses.	Huts.	Houses.
1910	*nil*	*nil*	*nil*	*nil*
1911				
1912				

6. MARKETS.

	Total number.	Number paved and drained.	Number unpaved.
1910	1	1 paved only	*nil*
1911			
1912			

7. SLAUGHTER-HOUSES.

	Total number.	Number paved and drained.	Number unpaved.
1910	*nil*	*nil*	*nil*
1911			
1912			

8. LATRINES.

	For Males.		For Females.	
	Number.	Number of seats.	Number.	Number of seats.
Number of Public Latrines :—				
1910	12	57	12	58
1911				
1912				
Number of new Public Latrines erected during the year :—				
1910				
1911			2	12
1912				
Number of Public Latrines repaired during the year :—				
1910	*nil*		*nil*	
1911				
1912				
Number of Public Latrines demolished during the year :—				
1910	*nil*		*nil*	
1911				
1912				

	1910.	1911.	1912.
Number of Private Latrines		13	
Average number of pails of nightsoil removed daily		98·8	
Average number of soiled pails removed and clean pails substituted ...		*nil*	
Number of nightsoil men employed to clean latrines and remove excreta ...		11	
Number of cesspools		*nil*	
Number of cesspools cleansed		*nil*	
Number of new cesspools constructed during the year		*nil*	
Number of old cesspools abolished		*nil*	
Number of cesspools oiled regularly by department		*nil*	

9. Removal of Refuse.

	1910.	1911.	1912.
Number of dustbins		14	
Number of carts (if employed) at work daily to remove refuse from streets		5	
Amount of refuse removed daily from streets			
Number of carts (if employed) at work daily to remove refuse from yards and premises		*nil*	
Amount of refuse removed daily from yards and premises		18	
Number of men employed for moving refuse...		20	

10. Mode of Disposal of Excreta, Refuse and Offal.

	Daily average number of pails of excreta.			Daily average number of cartloads of refuse.			Daily average number of cartloads of slaughter-house and market offal.		
	1910.	1911.	1912.	1910.	1911.	1912.	1910.	1911.	1912.
Buried or trenched									
Burnt									
Thrown into sea		98·8			23·7			4·2	
*Otherwise dealt with									

* State mode of disposal.

11.—Average Daily Number of Cartloads of Tin Cans, Bottles, Broken Crockery and other Incombustible Material Removed from Houses, Huts and Compounds.

1910.	1911.	1912.
	nil	

12.—Water Supply.

Nature of Water Supply.	1910.	1911.	1912.
Pipe-borne water :—			
Source (river, lake or spring) :—			
Number of linear yards			
Number of stand pipes along roads		*nil*	
Number of stand pipes in compounds and houses ...			
Wells :—			
Public :—			
Number		5	
Number with pumps protected against surface water and mosquito-protected		5	
Private :—			
Number		12	
Number protected against surface water and mosquito-protected		5	
Tanks :—			
Public :—			
Number underground		1	
Number mosquito-protected and served by pumps		1	
Number above ground		*nil*	
Number mosquito-protected		*nil*	
Number of 400 gallons capacity or less		*nil*	
Number above 400 gallons		*nil*	

	1910.	1911.	1912.
Tanks :—			
Private :—			
Number underground		12	
Number mosquito-protected		12	
Number above ground		37	
Number mosquito-protected		37	
Number of 400 gallons capacity or less		—	
Number above 400 gallons		—	
Nature of tanks :—			
Wood		10	
Iron		27	
Concrete		12	
Barrels :—			
Number		80	
Number mosquito-protected		80	

13. Drainage.

Nature of Drainage.	Public.	Private.
Masonry drains :—		
Linear yards of masonry drains :—		
1910		
1911		
1912		
Linear yards reconstructed during the year :—		
1910		
1911		
1912		
Linear yards repaired during the year :—		
1910		
1911		
1912		
Linear yards of new drains constructed during the year :—		
1910		
1911	723·6	
1912		
Earth drains or ditches :—		
Number of linear yards of ditches cleaned :—		
1910		
1911		
1912		
Number of linear yards of ditches dug and graded :—		
1910		
1911	891	
1912		
Average frequency of clearing ditches of grass :—		
1910		
1911		
1912		

14. Clearance of Undergrowth, Long Grass and Jungle.

	1910.	1911.	1912.
Number of square yards of weeds, grass and vegetation cut and removed.		12,704	
Average frequency of clearance of rank vegetation on same area		monthly.	

15. Excavations and low-lying Land.

——	1910.	1911.	1912.
Number of pools and excavations			
Number of excavations filled up			
Amount of low-lying and marsh land raised and drained			
Number of pools, marshes, streams, &c., fish-stocked			
Number of cubic yards of material used for filling up pools and excavations			
Number of persons fined for making new excavations			
Average number of men daily employed in filling up pools, &c. ..			

16. Oiling.

——	1910.	1911.	1912.
Number of drains oiled			
Number of pools and excavations oiled			
Number of tanks and barrels oiled		522	
Average number of men daily employed for oiling drains, pools, and watertanks or barrels			

17. Inspections and Prosecutions.

——	1910.	1911.	1912.
Number of inspectors employed		1	
Number of houses inspected		7,680	
Number of houses where larvæ were found		79	
Number of notices served to remove conditions causing the breeding of larvæ		101	
Number of persons fined for having mosquito larvæ on premises ...		83	
Number of notices served to remove insanitary conditions on premises		116	
Number of persons fined for not removing insanitary conditions after notice		8	
Number of soda and aërated water factories inspected		*nil*	

GOLD COAST.

No.

SUMMARY OF ROUTINE SANITARY WORK DONE DURING THE YEAR IN THE TOWN.

1. Name of Town: TARQUAH.

	Approximate Area.	Number of proclaimed open spaces.
1910		
1911	1½ square miles	*nil*
1912		

2. Population.

	Number of Natives.		Number of Europeans.		Total.
	Males.	Females.	Males.	Females.	
1910					
1911	1402	969	47	5	2433
1912					

3. Housing.

	Number occupied by Europeans.	Number occupied by Natives.
Number of Houses:—		
1910		
1911	22	677
1912		

Number of Huts:—	
1910	
1911	*nil*
1912	

4. Mosquito Protection of Houses.

	1910.	1911.	1912.
Number of European houses wholly mosquito-protected		*nil*	
Number of European houses with mosquito room		*nil*	
Number rendered during the year wholly mosquito-protected ...		*nil*	
Number rendered during the year partially mosquito-protected ...		*nil*	

5. Erection of New Buildings during the Year.

	1910.	1911.	1912.
Number of public buildings erected with sanction as to site, construction and relation to other buildings		*nil*	
Number of houses erected with sanction as to site, construction, and relation to other buildings		13	
Number of huts erected with sanction as to site, construction, and relation to other buildings		*nil*	
Number of houses built without sanction		20	
Number of huts built without sanction		*nil*	

ACTION TAKEN :—

	Number of Prosecutions.		Number demolished.	
	Huts.	Houses.	Huts.	Houses.
1910				
1911	*nil*	20		44
1912				

6. MARKETS.

	Total number.	Number paved and drained.	Number unpaved.
1910			
1911	1	1	*nil*
1912			

7. SLAUGHTER-HOUSES.

	Total number.	Number paved and drained.	Number unpaved.
1910			
1911	1	1	*nil*
1912			

8. LATRINES.

	For Males.		For Females.	
	Number.	Number of seats.	Number.	Number of seats.
Number of Public Latrines :				
1910				
1911	11	77	6	48
1912				
Number of new Public Latrines erected during the year :—				
1910				
1911	2	14		
1912				
Number of Public Latrines repaired during the year :—				
1910				
1911	17			
1912				
Number of Public Latrines demolished during the year :—				
1910				
1911	*nil*			
1912				

	1910.	1911.	1912.
Number of Private Latrines		29	
Average number of pails of nightsoil removed daily		122	
Average number of soiled pails removed and clean pails substituted ...		—	
Number of nightsoil men employed to clean Latrines and remove excreta ...		18	
Number of cesspools			
Number of cesspools cleansed			
Number of new cesspools constructed during the year		*nil*	
Number of old cesspools abolished			
Number of cesspools oiled regularly by Department			

9. Removal of Refuse

	1910.	1911.	1912.
Number of dustbins		*nil*	
Number of carts (if employed) at work daily to remove refuse from streets		6 wheelbarrows	
Amount of refuse removed daily from streets		12 cartloads	
Number of carts (if employed) at work daily to remove refuse from yards and premises		6	
Amount of refuse removed daily from yards and premises		6 cartloads	
Number of men employed for moving refuse		8	

10. Mode of Disposal of Excreta, Refuse, and Offal.

	Daily average number of pails of excreta.			Daily average number of cartloads of refuse.			Daily average number of cartloads of Slaughter House and Market offal.		
	1910.	1911.	1912.	1910.	1911.	1912.	1910.	1911.	1912.
Buried or trenched		122							
Burnt					12			2 cartloads	
Thrown into sea									
*Otherwise dealt with									

* State mode of disposal.

11. Average Daily Number of Cartloads of Tin Cans, Bottles, Broken Crockery, and other Incombustible Material Removed from Houses, Huts and Compounds.

1910.	1911.	1912.
	60 headloads	

12. Water Supply.

Nature of Water Supply.	1910.	1911.	1912.
Pipe-borne water :—			
Source (river, lake or spring) :—			
Number of linear yards		*nil*	
Number of stand pipes along roads		*nil*	
Number of stand pipes in compounds and houses		*nil*	
Wells :—			
Public :—			
Number		4	
Number with pumps protected against surface water and mosquito-protected		4	
Private :—			
Number		20	
Number protected against surface water and mosquito-protected		20	
Tanks :—			
Public :—			
Number underground		*nil*	
Number mosquito-protected and served by pumps			
Number above ground			
Number mosquito-protected			
Number of 400 gallons capacity or less			
Number above 400 gallons			

——	1910.	1911.	1912.
Tanks :—			
Private :—			
Number underground		3	
Number mosquito-protected		3	
Number above ground		56	
Number mosquito protected		56	
Number of 400 gallons capacity or less		36	
Number above 400 gallons...		23	
Nature of tanks :—			
Wood		9	
Iron		47	
Concrete		3	
Barrels :—			
Number		100	
Number mosquito-protected		100	

13. Drainage.

Nature of Drainage.	Public.	Private.
Masonry drains :—		
Linear yards of masonry drains :—		
1910		
1911	153,709	
1912		
Linear yards reconstructed during the year :—		
1910		
1911	*nil*	
1912		
Linear yards repaired during the year :—		
1910		
1911	6	
1912		
Linear yards of new drains constructed during the year :—		
1910		
1911	107	
1912		
Earth drains or ditches :—		
Number of linear yards of ditches cleaned :—		
1910		
1911	2,196⅔	
1912		
Number of linear yards of ditches dug and graded :—		
1910		
1911	2,196⅔	
1912		
Average frequency of clearing ditches of grass :—		
1910		
1911	Every fortnight.	
1912		

14. Clearance of Undergrowth, Long Grass and Jungle.

——	1910.	1911.	1912.
Number of square yards of weeds, grass, and vegetation cut and removed		899,256	
Average frequency of clearance of rank vegetation on same area ...		Twice a Quarter	

15. Excavations and Low-Lying Land.

——	1910.	1911.	1912.
Number of pools and excavations		106	
Number of excavations filled up		104	
Amount of low-lying and marsh land raised and drained		2,150 sq. yds.	
Number of pools, marshes, streams, &c., fish stocked		1	
Number of cubic yards of material used for filling up pools and excavations		2,150	
Number of persons fined for making new excavations		*nil*	
Average number of men daily employed in filling up pools, &c. ...		54	

16. Oiling.

——	1910.	1911.	1912.
Number of drains oiled		24	
Number of pools and excavations oiled		106	
Number of tanks and barrels oiled		160	
Average number of men daily employed for oiling drains, pools, and watertanks or barrels		1	

17. Inspections and Prosecutions.

——	1910.	1911.	1912.
Number of inspectors employed		1	
Number of houses inspected		699	
Number of houses where larvæ were found		235	
Number of notices served to remove conditions causing the breeding of larvæ		Not necessary on Gold Coast	
Number of persons fined for having mosquito larvæ on premises ...		75	
Number of notices served to remove insanitary conditions on premises		362	
Number of persons fined for not removing insanitary conditions after notice		131	
Number of soda and aerated water factories inspected		*nil*	

GOLD COAST.

No.

SUMMARY OF ROUTINE SANITARY WORK DONE DURING THE YEAR IN THE TOWN.

1. Name of Town : ACCRA.

—	Approximate area.	Number of proclaimed open spaces.
1910	1,740 acres	33 recommended, but not proclaimed
1911		
1912		

2. Population.

	Number of Natives.		Number of Europeans.		Total.
	Males.	Females.	Males.	Females.	
1910					
1911	9,205	9937	210	32	19,384
1912					

3. Housing.

—	Number occupied by Europeans.	Number occupied by Natives.
Number of Houses :—		
1910		
1911	100	2,611
1912		
Number of Huts :—		
1910		
1911	Included under Houses.	
1912		

4. Mosquito Protection of Houses.

—	1910.	1911.	1912.
Number of European houses wholly mosquito protected		6	
Number of European houses with mosquito room		4	
Number rendered during the year wholly mosquito protected ...		4	
Number rendered during the year partially mosquito protected ...		*nil*	

5. Erection of New Buildings during the Year.

—	1910.	1911.	1912.
Number of public buildings erected with sanction as to site, construction, and relation to other buildings		*nil*	
Number of houses erected with sanction as to site, construction, and relation to other buildings		272	
Number of huts erected with sanction as to site, construction, and relation to other buildings			
Number of houses built without sanction		*nil*	
Number of huts built without sanction...		*nil*	

ACTION TAKEN :—

	Number of Prosecutions.		Number demolished.	
	Huts.	Houses.	Huts.	Houses.
1910	*nil*	*nil*	*nil*	*nil*
1911				
1912				

6. MARKETS.

	Total number.	Number paved and drained.	Number unpaved.
1910	2	2	
1911			
1912			

7. SLAUGHTER-HOUSES.

	Total number.	Number paved and drained.	Number unpaved.
1910	1	1	
1911			
1912			

8. LATRINES.

	For Males.		For Females.	
	Number.	Number of seats.	Number.	Number of seats.
Number of Public Latrines :—				
1910				
1911	42	306	25	238
1912				
Number of new Public Latrines erected during the year :—				
1910				
1911	6	87	6	87
1912				
Number of Public Latrines repaired during the year :—				
1910				
1911	9		9	
1912				
Number of Public Latrines demolished during the year :—				
1910				
1911	4	79	4	39
1911	2 Sea Latrines			

	1910.	1911.	1912.
Number of Private Latrines...		150	
Average number of pails of nightsoil removed daily		306	
Average number of soiled pails removed and clean pails substituted ...		Can't say	
Number of nightsoil men employed to clean latrines and remove excreta ...		35	
Number of cesspools		*nil*	
Number of cesspools cleansed		*nil*	
Number of new cesspools constructed during the year		*nil*	
Number of old cesspools abolished		*nil*	
Number of cesspools oiled regularly by Department		*nil*	

9. Removal of Refuse.

	1910.	1911.	1912.
Number of Dustbins		40	
Number of carts (if employed) at work daily to remove refuse from streets...		10	
Amount of refuse removed daily from streets...		55 cartloads	
Number of carts (if employed) at work daily to remove refuse from yards and premises		*nil*	
Amount of refuse removed daily from yards and premises		*nil*	
Number of men employed for moving refuse		29	

10. Mode of Disposal of Excreta, Refuse, and Offal.

	Daily average number of pails of excreta.			Daily average number of cartloads of refuse.			Daily average number of cartloads of Slaughter House and Market Offal.		
	1910.	1911.	1912.	1910.	1911.	1912.	1910.	1911.	1912.
Buried or trenched		*nil*			13 cartloads 55 headloads			*nil*	
Burnt		*nil*			56				
Thrown into sea		361			*nil*				
*Otherwise dealt with		*nil*			*nil*				

* State mode of disposal.

11. Average daily number of cartloads of Tin Cans, Bottles, Broken Crockery, and other incombustible material removed from Houses, Huts and Compounds.

1910.	1911.	1912.
	55 headloads	

12. Water Supply.

Nature of Water Supply.	1910.	1911.	1912.
Pipe-borne water :—			
Source (river, lake or spring) :—			
Number of linear yards		*nil*	
Number of stand pipes along roads			
Number of stand pipes in compounds and houses... ...			
Wells :—			
Public :—			
Number		*nil*	
Number with pumps protected against surface water and mosquito-protected			
Private :—			
Number		185	
Number protected against surface water and mosquito-protected		152	
Tanks :—			
Public :—			
Number underground		25	
Number mosquito-protected and served by pumps ...		23	
Number above ground		53	
Number mosquito-protected		53	
Number of 400 gallons capacity or less		*nil*	
Number above 400 gallons		78	

	1910.	1911.	1912.
Tanks :—			
Private :—			
Number underground		155	
Number mosquito-protected		129	
Number above ground		145	
Number mosquito-protected		126	
Number of 400 gallons capacity or less		19	
Number above 400 gallons		281	
Nature of tanks :—			
Wood		24	
Iron		121	
Concrete		155	
Barrels :—			
Number		940	
Number mosquito-protected		747	

13. Drainage.

Nature of drainage.	Public.	Private.
Masonry drains :—		
Linear yards of masonry drains :—		
1910		
1911	9,109	
1912		
Linear yards reconstructed during the year :—		
1910		
1911	1,288	
1912		
Linear yards repaired during the year :—		
1910		
1911	93	
1912		
Linear yards of new drains constructed during the year :—		
1910		
1911	1,109	
1912		
Earth drains or ditches :—		
Number of linear yards of ditches cleaned :—		
1910		
1911	10,459	
1912		
Number of linear yards of ditches dug and graded :—		
1910		
1911	9,727	
1912		
Average frequency of clearing ditches of grass :—		
1910		
1911	Every 2 months.	
1912		

14. Clearance of undergrowth, long grass, and jungle.

	1910.	1911.	1912.
Number of square yards of weeds, grass, and vegetation cut and removed		945,960	
Average frequency of clearance of rank vegetation on same area		Every 3 months.	

15. Excavations and low-lying Land.

—	1910.	1911.	1912.
Number of pools and excavations		—	
Number of excavations filled up		161	
Amount of low-lying and marsh land raised and drained		24,520 sq. yds.	
Number of pools, marshes, streams, &c., fish-stocked		144 (including Wells)	
Number of cubic yards of material used for filling up pools and excavations		13,295	
Number of persons fined for making new excavations		*nil*	
Average number of men daily employed in filling up pools, &c. ...		11	

16. Oiling.

—	1910.	1911.	1912.
Number of drains oiled		3,498	
Number of pools and excavations oiled		5,610	
Number of tanks and barrels oiled		6,313	
Average number of men daily employed for oiling drains, pools, and watertanks or barrels		9	

17. Inspections and Prosecutions.

—	1910.	1911.	1912.
Number of inspectors employed		11	
Number of houses inspected		53,452	
Number of houses where larvæ were found		1,636	
Number of notices served to remove conditions causing the breeding of larvæ		not necessary on Gold Coast	
Number of persons fined for having mosquito larvæ on premises ...		482	
Number of notices served to remove insanitary conditions on premises		934	
Number of persons fined for not removing insanitary conditions after notice		116	
Number of soda and aërated water factories inspected		*nil*	

(Sgd.) H. O. H. MAY,

Medical Officer of Health.

GOLD COAST.

No.

SUMMARY OF ROUTINE SANITARY WORK DONE DURING THE YEAR IN THE TOWN.

1. Name of Town: ADDAH.

—	Approximate area.	Number of proclaimed open spaces.
1910		
1911	4 acres	*nil*
1912		

2. Population.

—	Number of Natives.		Number of Europeans.		Total.
	Males.	Females.	Males.	Females.	
1910					
1911	811	176	9	1	997
1912					

3. Housing.

—	Number occupied by Europeans.	Number occupied by Natives.
Number of Houses:—		
1910		
1911	8	250
1912		

Number of Huts:—
1910 ... ...
1911 ... ... *nil*
1912 ... ...

4. Mosquito Protection of Houses.

—	1910.	1911.	1912.
Number of European houses wholly mosquito protected		4	
Number of European houses with mosquito room		*nil*	
Number rendered during the year wholly mosquito protected ...		2	
Number rendered during the year partially mosquito protected ...		*nil*	

5. Erection of New Buildings during the Year.

—	1910.	1911.	1912.
Number of public buildings erected with sanction as to site, construction, and relation to other buildings		1	
Number of houses erected with sanction as to site, construction, and relation to other buildings		2	
Number of huts erected with sanction as to site, construction, and relation to other buildings		*nil*	
Number of houses built without sanction		,,	
Number of huts built without sanction		,,	

ACTION TAKEN :—

—	Number of Prosecutions.		Number demolished.	
	Huts.	Houses.	Huts.	Houses.
1910	*nil*	*nil*	*nil*	1
1911				
1912				

6. MARKETS.

—	Total number.	Number paved and drained.	Number unpaved.
1910	1	*nil*	1
1911			
1912			

7. SLAUGHTER-HOUSES.

—	Total number.	Number paved and drained.	Number unpaved.
1910	*nil*	*nil*	*nil*
1911			
1912			

8. LATRINES.

—	For Males.		For Females.	
	Number.	Number of seats.	Number.	Number of seats.
Number of Public Latrines :—				
1910				
1911	6	24	5	20
1912				
Number of new Public Latrines erected during the year :—				
1910				
1911	1	4	*nil*	
1912				
Number of Public Latrines repaired during the year :—				
1910				
1911	4	16	5	20
1912				
Number of Public Latrines demolished during the year :—				
1910				
1911				
1912				

—	1910.	1911.	1912.
Number of Private Latrines		9	
Average number of pails of nightsoil removed daily		114	
Average number of soiled pails removed and clean pails substituted		—	
Number of nightsoil men employed to clean latrines and remove excreta ...		5	
Number of cesspools		*nil*	
Number of cesspools cleansed		,,	
Number of new cesspools constructed during the year		,,	
Number of old cesspools abolished		,,	
Number of cesspools oiled regularly by Department		,,	

9. Removal of Refuse.

	1910.	1911.	1912.
Number of dustbins		9	
Number of carts (if employed) at work daily to remove refuse from streets		2	
Amount of refuse removed daily from streets		18	
Number of carts (if employed) at work daily to remove refuse from yards and premises...		cartloads. *nil*	
Amount of refuse removed daily from yards and premises		,,	
Number of men employed for moving refuse		6	

10. Mode of Disposal of Excreta, Refuse, and Offal.

	Daily average number of pails of excreta.			Daily average number of cartloads of refuse.			Daily average number of cartloads of Slaughter House and Market Offal.		
	1910.	1911.	1912.	1910.	1911.	1912.	1910.	1911.	1912.
Buried or trenched					12			*nil*	
Burnt...					6			,,	
Thrown into sea		104						,,	
*Otherwise dealt with								,,	

* State mode of disposal.

11. Average Daily Number of Cartloads of Tin Cans, Bottles, Broken Crockery and Other Incombustible Material Removed from Houses, Huts and Compounds.

1910.	1911.	1912.
	15	

12. Water Supply.

Nature of Water Supply.	1910.	1911.	1912.
Pipe-borne water :—			
Source (river, lake or spring) :—			
Number of linear yards		*nil*	
Number of stand pipes along roads...			
Number of stand pipes in compounds and houses			
Wells :—			
Public :—			
Number		3	
Number with pumps protected against surface water and mosquito-protected		*nil*	
Private :—			
Number		6	
Number protected against surface water and mosquito-protected		3	
Tanks :—			
Public :—			
Number under ground		2	
Number mosquito-protected and served by pumps ...		*nil*	
Number above ground		8	
Number mosquito-protected...		8	
Number of 400 gallons capacity or less		*nil*	
Number above 400 gallons		10	

——	1910.	1911.	1912.
Tanks :—			
Private :—			
Number under ground		3	
Number mosquito-protected		3	
Number above ground		5	
Number mosquito-protected		5	
Number of 400 gallons capacity or less		*nil*	
Number above 400 gallons		8	
Nature of tanks :—			
Wood		2	
Iron		14	
Concrete		2	
Barrels :—			
Number		3	
Number mosquito-protected		3	

13. Drainage.

Nature of drainage.	Public.	Private.
Masonry drains :—		
Linear yards of masonry drains :—		
1910		
1911	5	
1912		
Linear yards reconstructed during the year :—		
1910		
1911	5	
1912		
Linear yards repaired during the year :—		
1910		
1911	*nil*	
1912		
Linear yards of new drains constructed during the year :—		
1910		
1911	*nil*	
1912		
Earth drains or ditches :—		
Number of linear yards of ditches cleaned :—		
1910		
1911	600	
1912		
Number of linear yards of ditches dug and graded :—		
1910		
1911	250	
1912		
Average frequency of clearing ditches of grass :—		
1910		
1911	Quarterly	
1912		

14. Clearance of Undergrowth, Long Grass and Jungle.

——	1910.	1911.	1912.
Number of square yards of weeds, grass, and vegetation cut and removed		20,000	
Average frequency of clearance of rank vegetation on same area ...		Quarterly	

15. Excavations and Low-lying Land.

——	1910.	1911.	1912.
Number of pools and excavations		14	
Number of excavations filled up		2	
Amount of low-lying and marsh land raised and drained		250 sq. yds.	
Number of pools, marshes, streams, &c., fish stocked		*nil*	
Number of cubic yards of material used for filling up pools and excavations		no estimate	
Number of persons fined for making new excavations		*nil*	
Average number of men daily employed in filling up pools, &c. ...		6	

16. Oiling.

——	1910.	1911.	1912.
Number of drains oiled		*nil*	
Number of pools and excavations oiled		,,	
Number of tanks and barrels oiled		,,	
Average number of men daily employed for oiling drains, pools, and watertanks or barrels		,,	

17. Inspections and Prosecutions.

——	1910.	1911.	1912.
Number of inspectors employed		1	
Number of houses inspected		6,000	
Number of houses where larvæ were found		106	
Number of notices served to remove conditions causing the breeding of larvæ		10	
Number of persons fined for having mosquito larvæ on premises ...		102	
Number of notices served to remove insanitary conditions on premises		67	
Number of persons fined for not removing insanitary conditions after notice		18	
Number of soda and aërated water factories inspected		*nil*	

GOLD COAST.

No.

SUMMARY OF ROUTINE SANITARY WORK DONE DURING THE YEAR IN THE TOWN.

1. Name of Town: SECCONDEE.

——	Approximate area.	Number of proclaimed open spaces.
1910	530 acres	3
1911		
1912		

2. Population.

	Number of Natives.		Number of Europeans.		Total.
	Males.	Females.	Males.	Females.	
1910					
1911	5,774	3,211	120	17	9,122
1912					

3. Housing.

——	Number occupied by Europeans.	Number occupied by Natives.
Number of Houses:—		
1910		
1911	71	1,165
1912		

Number of Huts:—
1910 ... ...
1911 ... ... *nil*
1912 ... ...

4. Mosquito Protection of Houses.

——	1910.	1911.	1912.
Number of European houses wholly mosquito-protected		*nil*	
Number of European houses with mosquito room		4	
Number rendered during the year wholly mosquito-protected ...		*nil*	
Number rendered during the year partially mosquito-protected ...		1	

5. Erection of New Buildings during the Year.

——	1910.	1911.	1912.
Number of public buildings erected with sanction as to site, construction, and relation to other buildings		1	
Number of houses erected with sanction as to site, construction, and relation to other buildings		63	
Number of huts erected with sanction as to site, construction, and relation to other buildings		*nil*	
Number of houses built without sanction		2	
Number of huts built without sanction		1	

ACTION TAKEN :—

——	Number of Prosecutions.		Number demolished.	
	Huts.	Houses.	Huts.	Houses.
1910				
1911	1	2	99	24
1912				

6. MARKETS.

——	Total number.	Number paved and drained.	Number unpaved.
1910			
1911	1	1	*nil*
1912			

7. SLAUGHTER-HOUSES.

——	Total number.	Number paved and drained.	Number unpaved.
1910			
1911	1	1	*nil*
1912			

8. LATRINES.

——	For Males.		For Females.	
	Number.	Number of seats.	Number.	Number of seats.
Number of Public Latrines :—				
1910				
1911	17	112	9	63
1912				
Number of new Public Latrines erected during the year :—				
1910				
1911	2	12	*nil*	
1912				
Number of Public Latrines repaired during the year :—				
1910				
1911	*nil*		*nil*	
1912				
Number of Public Latrines demolished during the year :—				
1910				
1911	*nil*		*nil*	
1912				

——	1910.	1911.	1912.
Number of Private Latrines		66	
Average number of pails of nightsoil removed daily		80	
Average number of soiled pails removed and clean pails substituted ...		*nil*	
Number of nightsoil men employed to clean Latrines and remove excreta		20	
Number of cesspools		*nil*	
Number of cesspools cleansed...		"	
Number of new cesspools constructed during the year		"	
Number of old cesspools abolished		"	
Number of cesspools oiled regularly by Department...		"	

9. Removal of Refuse.

——	1910.	1911.	1912.
Number of dustbins		20	
Number of carts (if employed) at work daily to remove refuse from streets		2	
Amount of refuse removed daily from streets		6 cartloads	
Number of carts (if employed) at work daily to remove refuse from yards and premises		4	
Amount of refuse removed daily from yards and premises		20 cartloads	
Number of men employed for moving refuse		50	

10. Mode of Disposal of Excreta, Refuse and Offal.

——	Daily average number of pails of excreta.			Daily average number of cartloads of refuse.			Daily average number of cartloads of Slaughter House and Market Offal.		
	1910.	1911.	1912.	1910.	1911.	1912.	1910.	1911.	1912.
Buried or trenched					59 headloads				
Burnt					26 cartloads				
Thrown into sea		175						4	
*Otherwise dealt with									

* State mode of disposal.

11. Average Daily Number of Cartloads of Tin-cans, Bottles, Broken Crockery, and other Incombustible Material removed from Houses, Huts and Compounds.

1910.	1911.	1912.
	59 headloads	

12. Water Supply.

Nature of Water Supply.	1910.	1911.	1912.
Pipe-borne water :—			
Source (river, lake or spring) :—			
Number of linear yards		*nil*	
Number of stand pipes along roads...			
Number of stand pipes in compounds and houses... ...			
Wells :—			
Public :—			
Number		10	
Number with pumps protected against surface water and mosquito-protected		5	
Private :—			
Number		183	
Number protected against surface water and mosquito-protected		175	
Tanks :—			
Public :—			
Number under ground		*nil*	
Number mosquito-protected and served by pumps ...		,,	
Number above ground		,,	
Number mosquito-protected		,,	
Number of 400 gallons capacity or less		,,	
Number above 400 gallons		,,	

——	1910.	1911.	1912.
Tanks :—			
Private :—			
Number under ground		39	
Number mosquito-protected		39	
Number above ground		257	
Number mosquito-protected...		257	
Number of 400 gallons capacity or less		98	
Number above 400 gallons		147	
Nature of tanks :—			
Wood		9	
Iron		245	
Concrete		3	
Barrels :—			
Number		601	
Number mosquito-protected...		593	

13. Drainage.

Nature of drainage.	Public.	Private.
Masonry drains :—		
Linear yards of masonry drains :—		
1910		
1911	8,920	
1912		
Linear yards reconstructed during the year :—		
1910		
1911	*nil*	
1912		
Linear yards repaired during the year :—		
1910		
1911	599	
1912		
Linear yards of new drains constructed during the year :—		
1910		
1911	2,106	
1912		
Earth drains or ditches :—		
Number of linear yards of ditches cleaned :—		
1910		
1911	1,905	
1912		
Number of linear yards of ditches dug and graded :—		
1910		
1911	564	
1912		
Average frequency of clearing ditches of grass :—		
1910		
1911	Every two months	
1912		

14. Clearance of Undergrowth, Long Grass, and Jungle.

——	1910.	1911.	1912.
Number of square yards of weeds, grass, and vegetation cut and removed		572,791	
Average frequency of clearance of rank vegetation on same area		Quarterly	

15. Excavations and Low-lying Land.

——	1910.	1911.	1912.
Number of pools and excavations		125	
Number of excavations filled up		123	
Amount of low-lying and marsh land raised and drained		59,817	
Number of pools, marshes, streams, &c., fish-stocked		2	
Number of cubic yards of material used for filling up pools and excavations...		54,503	
Number of persons fined for making new excavations		*nil*	
Average number of men daily employed in filling up pools, &c. ...		399	

16. Oiling.

——	1910.	1911.	1912.
Number of drains oiled...		109	
Number of pools and excavations oiled		1,126	
Number of tanks and barrels oiled		1,646	
Average number of men daily employed for oiling drains, pools, and watertanks or barrels		5	

17. Inspections and Prosecutions.

——	1910.	1911.	1912.
Number of inspectors employed		9	
Number of houses inspected		42,372	
Number of houses where larvæ were found		634	
Number of notices served to remove conditions causing the breeding of larvæ		279	
Number of persons fined for having mosquito larvæ on premises ...		371	
Number of notices served to remove insanitary conditions on premises		113	
Number of persons fined for not removing insanitary conditions after notice...		175	
Number of soda and aërated water factories inspected		*nil*	

GOLD COAST.

No.

SUMMARY OF ROUTINE SANITARY WORK DONE DURING THE YEAR IN THE TOWN.

1. Name of Town: AXIM.

——	Approximate area.	Number of proclaimed open spaces.
1910		
1911	1 square mile	2
1912		

2. Population.

——	Number of Natives.		Number of Europeans.		Total.
	Males.	Females.	Males.	Females.	
1910					
1911	2,052	1,231	20	2	3,307
1912					

3. Housing.

——	Number occupied by Europeans.	Number occupied by Natives.
Number of Houses:—		
1910		
1911	11	851
1912		

Number of Huts:—
1910 ... ...
1911 518
1912 ... ...

4. Mosquito Protection of Houses.

——	1910.	1911.	1912.
Number of European houses wholly mosquito-protected		*nil*	
Number of European houses with mosquito room		2	
Number rendered during the year wholly mosquito-protected ...		*nil*	
Number rendered during the year partially mosquito-protected ...		2	

5. Erection of New Buildings During the Year.

——	1910.	1911.	1912.
Number of public buildings erected with sanction as to site, construction, and relation to other buildings		*nil*	
Number of houses erected with sanction as to site, construction, and relation to other buildings		13	
Number of huts erected with sanction as to site, construction, and relation to other buildings		*nil*	
Number of houses built without sanction		1	
Number of huts built without sanction		10	

ACTION TAKEN:—

	Number of Prosecutions.		Number demolished.	
	Huts.	Houses.	Huts.	Houses.
1910				
1911	—	—	10	1
1912				

6. MARKETS.

	Total number.	Number paved and drained.	Number unpaved.
1910			
1911	1	1	—
1912			

7. SLAUGHTER-HOUSES.

	Total number.	Number paved and drained.	Number unpaved.
1910			
1911	1	1	—
1912			

8. LATRINES.

	For Males.		For Females.	
	Number.	Number of Seats.	Number.	Number of seats.
Number of Public Latrines :—				
1910				
1911	7	61	7	54
1912				
Number of new Public Latrines erected during the year :—				
1910				
1911	2			
1912				
Number of Public Latrines repaired during the year :—				
1910				
1911	1		1	
1912				
Number of Public Latrines demolished during the year :—				
1910				
1911	*nil*		*nil*	
1912				

	1910.	1911.	1912.
Number of Private Latrines		24	
Average number of pails of nightsoil removed daily		143	
Average number of soiled pails removed and clean pails substituted ...		—	
Number of nightsoil men employed to clean latrines and remove excreta		8	
Number of cesspools		*nil*	
Number of cesspools cleansed		,,	
Number of new cesspools constructed during the year		,,	
Number of old cesspools abolished		,,	
Number of cesspools oiled regularly by Department		,,	

9. Removal of Refuse.

	1910.	1911.	1912.
Number of dustbins		10	
Number of carts (if employed) at work daily to remove refuse from streets		2	
Amount of refuse removed daily from streets		12 cartloads	
Number of carts (if employed) at work daily to remove refuse from yards and premises		*nil*	
Amount of refuse removed daily from yards and premises		½ a cartload	
Number of men employed for moving refuse		12	

10. Mode of Disposal of Excreta, Refuse and Offal.

	Daily average number of pails of excreta.			Daily average number of cartloads of refuse.			Daily average number of cartloads of slaughter house and market offal.		
	1910.	1911.	1912.	1910.	1911.	1912.	1910.	1911.	1912.
Buried or trenched									
Burnt					12½				
Thrown into sea		143							
*Otherwise dealt with									

*State mode of disposal.

11. Average Daily Number of Cartloads of Tin Cans, Bottles, Broken Crockery and other Incombustible Material Removed from Houses, Huts and Compounds.

1910.	1911.	1912.
	2 cartloads	

12. Water Supply.

Nature of Water Supply.	1910.	1911.	1912.
Pipe-borne water :—			
Source (river, lake or spring) :—			
Number of linear yards			
Number of stand pipes along roads		*nil*	
Number of stand pipes in compounds and houses			
Wells :—			
Public :—			
Number		4	
Number with pumps protected against surface water and mosquito-protected		3	
Private :—			
Number		18	
Number protected against surface water and mosquito-protected		18	
Tanks:—			
Public :—			
Number underground		1	
Number mosquito-protected and served by pumps		1	
Number above ground		6	
Number mosquito-protected		6	
Number of 400 gallons capacity or less		2	
Number above 400 gallons		4	

——	1910.	1911.	1912.
Tanks :—			
Private :—			
Number underground		1	
Number mosquito-protected		1	
Number above ground		41	
Number mosquito-protected		41	
Number of 400 gallons capacity or less		33	
Number above 400 gallons		8	
Nature of tanks :—			
Wood		4	
Iron		43	
Concrete		3	
Barrels :—			
Number		37	
Number mosquito-protected		37	

13. Drainage.

Nature of Drainage.	Public.	Private.
Masonry drains :—		
Linear yards of masonry drains :—		
1910		
1911		
1912		
Linear yards reconstructed during the year :—		
1910		
1911	87	
1912		
Linear yards repaired during the year :—		
1910		
1911		
1912		
Linear yards of new drains constructed during the year :—		
1910		
1911		
1912		
Earth drains or ditches :—		
Number of linear yards of ditches cleaned :—		
1910		
1911	620	
1912		
Number of linear yards of ditches dug and graded :—		
1910		
1911	40	
1912		
Average frequency of clearing ditches of grass :—		
1910		
1911		
1912		

14. Clearance of Undergrowth, Long Grass and Jungle.

——	1910.	1911.	1912.
Number of square yards of weeds, grass and vegetation cut and removed		236,790	
Average frequency of clearance of rank vegetation on same area		6 times	

15. Excavations and Low-lying Land.

——	1910.	1911.	1912.
Number of pools and excavations			
Number of excavations filled up			
Amount of low-lying and marsh land raised and drained	81 square yards		
Number of pools, marshes, streams, &c., fish-stocked			
Number of cubic yards of material used for filling up pools and excavations			
Number of persons fined for making new excavations			
Average number of men daily employed in filling up pools, &c. ...			

16. Oiling.

——	1910.	1911.	1912.
Number of drains oiled		225	
Number of pools and excavations oiled			
Number of tanks and barrels oiled			
Average number of men daily employed for oiling drains, pools, and watertanks or barrels			

17. Inspections and Prosecutions.

——	1910.	1911.	1912.
Number of inspectors employed		3	
Number of houses inspected		6,158	
Number of houses where larvæ were found		61	
Number of notices served to remove conditions causing the breeding of larvæ		173	
Number of persons fined for having mosquito larvæ on premises ...		61	
Number of notices served to remove insanitary conditions on premises		162	
Number of persons fined for not removing insanitary conditions after notice		28	
Number of soda and aërated water factories inspected		*nil*	

GOLD COAST.

No.

SUMMARY OF ROUTINE SANITARY WORK DONE DURING THE YEAR IN THE TOWN.

1. Name of Town: DUNKWA.

—	Approximate area.	Number of proclaimed open spaces.
1910	1 square mile	*nil*
1911		
1912		

2. Population.

—	Number of Natives.		Number of Europeans.		Total.
	Males.	Females.	Males.	Females.	
1910					
1911	1,333	1,000	30	1	2,364
1912					

3. Housing.

—	Number occupied by Europeans.	Number occupied by Natives.
Number of Houses:—		
1910		
1911	11	304
1912		
Number of Huts:—		
1910		
1911	201	
1912		

4. Mosquito Protection of Houses.

—	1910.	1911.	1912.
Number of European houses wholly mosquito-protected		*nil*	
Number of European houses with mosquito room		,,	
Number rendered during the year wholly mosquito-protected ...		,,	
Number rendered during the year partially mosquito-protected ...		,,	

5. Erection of New Buildings during the Year.

—	1910.	1911.	1912.
Number of public buildings erected with sanction as to site, construction, and relation to other buildings		*nil*	
Number of houses erected with sanction as to site, construction, and relation to other buildings		2	
Number of huts erected with sanction as to site, construction, and relation to other buildings		*nil*	
Number of houses built without sanction		,,	
Number of huts built without sanction		,,	

ACTION TAKEN :—

—	Number of Prosecutions.		Number demolished.	
	Huts.	Houses.	Huts.	Houses.
1910				
1911			5	1
1912				

6. MARKETS.

—	Total number.	Number paved and drained.	Number unpaved.
1910			
1911	1	*nil*	1
1912			

7. SLAUGHTER-HOUSES.

—	Total number.	Number paved and drained.	Number unpaved.
1910			
1911	*nil*		
1912			

8. LATRINES.

—	For males.		For females.	
	Number.	Number of seats.	Number.	Number of Seats.
Number of Public Pit Latrines :—				
1910				
1911	5		4	
1912				
Number of new Public Pit Latrines erected during the year :—				
1910				
1911	15		15	
1912				
Number of Public Pit Latrines repaired during the year :—				
1910				
1911				
1912				
Number of Public Latrines demolished during the year :—				
1910				
1911	15		15	
1912				

—	1910.	1911.	1912.
Number of Private Latrines		12	
Average number of pails of nightsoil removed daily...		8	
Average number of soiled pails removed and clean pails substituted ...		8	
Number of nightsoil men employed to clean latrines and remove excreta		4	
Number of cesspools		*nil*	
Number of cesspools cleansed		,,	
Number of new cesspools constructed during the year		,,	
Number of old cesspools abolished		,,	
Number of cesspools oiled regularly by department		,,	

9. Removal of Refuse.

——	1910.	1911	1912.
Number of dustbins		2	
Number of carts (if employed) at work daily to remove refuse from streets		*nil*	
Amount of refuse removed daily from streets		30 head loads	
Number of carts (if employed) at work daily to remove refuse from yards and premises		*nil*	
Amount of refuse removed daily from yards and premises		*nil*	
Number of men employed for moving refuse		5	

10. Mode of Disposal of Excreta, Refuse and Offal.

——	Daily average number of pails of excreta.			Daily average number of cartloads of refuse.			Daily average number of cartloads of Slaughter House and Market Offal.		
	1910.	1911.	1912.	1910.	1911.	1912.	1910.	1911.	1912
Buried or trenched									
Burnt		4			30			10	
Thrown into sea									
*Otherwise dealt with									

* State mode of disposal.

11. Average Daily Number of Headloads of Tin Cans, Bottles, Broken Crockery and other Incombustible Material removed from Houses, Huts and Compounds.

1910.	1911.	1912.
	16	

12. Water Supply.

Nature of Water Supply.	1910.	1911.	1912.
Pipe-borne water :—			
Source (river, lake or spring) :—			
Number of linear yards		*nil*	
Number of stand pipes along roads			
Number of stand pipes in compounds and houses ...			
Wells : —			
Public :—			
Number		2	
Number with pumps protected against surface water and mosquito-protected		*nil*	
Private :—			
Number		18	
Number protected against surface water and mosquito-protected		*nil*	
Tanks :—			
Public :—			
Number underground		*nil*	
Number mosquito protected and served by pumps ...		*nil*	
Number above ground		*nil*	
Number mosquito-protected		*nil*	
Number of 400 gallons capacity or less		*nil*	
Number above 400 gallons		*nil*	

	1910.	1911.	1912.
Tanks:—			
Private :—			
Number underground		*nil*	
Number mosquito-protected		*nil*	
Number above ground		8	
Number mosquito-protected		8	
Number of 400 gallons capacity or less		6	
Number above 400 gallons...		2	
Nature of tanks :—			
Wood			
Iron			
Concrete		8	
Barrels :—			
Number		9	
Number mosquito-protected		9	

13. Drainage.

Nature of Drainage.	Public.	Private.
Masonry drains :—		
Linear yards of masonry drains :—		
1910		
1911	*nil*	
1912		
Linear yards reconstructed during the year :—		
1910		
1911	*nil*	
1912		
Linear yards repaired during the year :—		
1910		
1911	*nil*	
1912		
Linear yards of new drains constructed during the year :—		
1910		
1911	*nil*	
1912		
Earth drains or ditches :—		
Number of linear yards of ditches cleaned :—		
1910		
1911	*nil*	50 yards
1912		
Number of linear yards of ditches dug and graded :—		
1910		
1911	*nil*	
1912		
Average frequency of clearing ditches of grass :—		
1910		
1911	Once a quarter	
1912		

14. Clearance of Undergrowth, Long Grass and Jungle.

	1910.	1911.	1912.
Number of square yards of weeds, grass and vegetation cut and removed		8,000	
Average frequency of clearance of rank vegetation on same area		Once a quarter	

15. Excavations and Low-lying Land.

	1910.	1911.	1912.
Number of pools and excavations		31	
Number of excavations filled up		8	
Amount of low-lying and marsh land raised and drained		150 square yards	
Number of pools, marshes, streams, &c., fish-stocked		*nil*	
Number of cubic yards of material used for filling up pools and excavations		60 cubic feet	
Number of persons fined for making new excavations		*nil*	
Average number of men daily employed in filling up pools, &c. ...		14	

16. Oiling.

	1910.	1911.	1912.
Number of drains oiled		28	
Number of pools and excavations oiled		43	
Number of tanks and barrels oiled		10	
Average number of men daily employed for oiling drains, pools, and watertanks or barrels		2	

17. Inspections and Prosecutions.

	1910.	1911.	1912.
Number of inspectors employed		1	
Number of houses inspected		896	
Number of houses where larvæ were found		3	
Number of notices served to remove conditions causing the breeding of larvæ		2	
Number of persons fined for having mosquito larvæ on premises		*nil*	
Number of notices served to remove insanitary conditions on premises		21	
Number of persons fined for not removing insanitary conditions after notice		18	
Number of soda and aërated water factories inspected		*nil*	

There being no M.O. stationed here for parts of the year, and owing to want of proper records, many of the figures are only approximate.

(Sgd.) P. M. TOBIT, M.O.

GOLD COAST.

No.

SUMMARY OF ROUTINE SANITARY WORK DONE DURING THE YEAR IN THE TOWN.

1. Name of Town: ELMINA.

——	Approximate area.	Number of proclaimed open spaces.
1910		
1911	20 acres	13
1912		

2. Population.

——	Number of Natives.		Number of Europeans.		Total.
	Males.	Females.	Males.	Females.	
1910					
1911	2,256	2,835	4	3	5,098
1912					

3. Housing.

——	Number occupied by Europeans.	Number occupied by Natives.
Number of Houses :—		
1910		
1911	3	900
1912		

Number of Huts :—

1910	
1911	*nil*
1912	

4. Mosquito Protection of Houses.

——	1910.	1911	1912.
Number of European houses wholly mosquito-protected		2	
Number of European houses with mosquito room		2	
Number rendered during the year wholly mosquito-protected ...		*nil*	
Number rendered during the year partially mosquito-protected ...		*nil*	

5. Erection of New Buildings during the Year.

——	1910.	1911.	1912.
Number of public buildings erected with sanction as to site, construction, and relation to other buildings		*nil*	
Number of houses erected with sanction as to site, construction, and relation to other buildings		3	
Number of huts erected with sanction as to site, construction, and relation to other buildings		2	
Number of houses built without sanction		*nil*	
Number of huts built without sanction		*nil*	

ACTION TAKEN :—

—	Number of Prosecutions.		Number demolished.	
	Huts.	Houses.	Huts.	Houses.
1910				
1911		2		2
1912				

6. MARKETS.

——	Total Number.	Number paved and drained.	Number unpaved.
1910			
1911	1	partially paved	
1912			

7. SLAUGHTER-HOUSES.

——	Total Number.	Number paved and drained.	Number unpaved.
1910			
1911	*nil*		
1912			

8. LATRINES.

——	For Males.		For Females.	
	Number.	Number of seats.	Number.	Number of seats.
Number of Public Latrines :—				
1910				
1911	6	47	6	47
1912				
Number of new Public Latrines erected during the year :—				
1910				
1911	*nil*		*nil*	
1912				
Number of Public Latrines repaired during the year :—				
1910				
1911	*nil*		*nil*	
1912				
Number of Public Latrines demolished during the year :—				
1910				
1911	*nil*		*nil*	
1912				

——	1910.	1911.	1912.
Number of Private Latrines		2	
Average number of pails of nightsoil removed daily		94	
Average number of soiled pails removed and clean pails substituted ...		—	
Number of nightsoil men employed to clean latrines and remove excreta ...		6	
Number of cesspools		*nil*	
Number of cesspools cleansed		*nil*	
Number of new cesspools constructed during the year		*nil*	
Number of old cesspools abolished		*nil*	
Number of cesspools oiled regularly by Department...		*nil*	

9. Removal of Refuse.

	1910.	1911.	1912.
Number of dustbins		6	
Number of carts (if employed) at work daily to remove refuse from streets		1 cart & 3 barrows	
Amount of refuse removed daily from streets		3 carts & 9 barrow-loads	
Number of carts (if employed) at work daily to remove refuse from yards and premises		*nil*	
Amount of refuse removed daily from yards and premises		*nil*	
Number of men employed for moving refuse		12	

10. Mode of Disposal of Excreta, Refuse and Offal.

	Daily average number of pails of excreta.			Daily average number of cartloads of refuse.			Daily average number of cartloads of Slaughter-House and Market Offal.		
	1910.	1911.	1912.	1910.	1911.	1912.	1910.	1911.	1912.
Buried or trenched									
Burnt									
Thrown into sea		94			3 and 9 barrow loads			1	
*Otherwise dealt with									

* State mode of disposal.

11. Average Daily Number of Cartloads of Tin Cans, Bottles, Broken Crockery and other Incombustible Material Removed from Houses, Huts and Compounds.

1910.	1911.	1912.

12. Water Supply.

Nature of Water Supply.	1910.	1911.	1912.
Pipe-borne water :—			
Source (river, lake or spring) :—			
Number of linear yards		*nil*	
Number of stand pipes along roads			
Number of stand pipes in compounds and houses			
Wells :—			
Public :—			
Number		3	
Number with pumps protected against surface water and mosquito-protected			
Private :—			
Number		16	
Number protected against surface water and mosquito-protected		16	
Tanks :—			
Public :—			
Number under ground		4	
Number mosquito-protected and served by pumps... ...		3	
Number above ground		*nil*	
Number mosquito-protected		4	
Number of 400 gallons capacity or less		*nil*	
Number above 400 gallons		4	

——	1910.	1911.	1912.
Tanks :—			
Private :—			
Number underground		8	
Number mosquito-protected		6	
Number above ground		86	
Number mosquito-protected		86	
Number of 400 gallons capacity or less		80	
Number above 400 gallons		6	
Nature of tanks :—			
Wood		2	
Iron		59	
Concrete		25	
Barrels :—			
Number		401	
Number mosquito-protected		401	

13. Drainage.

Nature of Drainage.	Public.	Private.
Masonry drains :—		
Lineal yards of masonry drains :—		
1910		
1911	400	
1912		
Lineal yards reconstructed during the year :—		
1910		
1911	*nil*	
1912		
Lineal yards repaired during the year :—		
1910		
1911	*nil*	
1912		
Lineal yards of new drains constructed during the year :—		
1910		
1911	*nil*	
1912		
Earth drains or ditches :—		
Number of linear yards of ditches cleaned :—		
1910		
1911	*nil*	
1912		
Number of linear yards of ditches dug and graded :—		
1910		
1911	*nil*	
1912		
Average frequency of clearing ditches of grass :—		
1910		
1911	*nil*	
1912		

14. Clearance of Undergrowth, Long Grass and Jungle.

——	1910.	1911.	1912.
Number of square yards of weeds, grass and vegetation cut and removed		5,987	
Average frequency of clearance of rank vegetation on same area			

15. Excavations and Low-lying Land.

——	1910.	1911.	1912.
Number of pools and excavations		25	
Number of excavations filled up		5	
Amount of low-lying and marsh land raised and drained		500 square	yards
Number of pools, marshes, streams, &c., fish-stocked		—	
Number of cubit yards of material used for filling up pools and excavations		—	
Number of persons fined for making new excavations		1	
Average number of men daily employed in filling up pools, &c. ...		*nil*	

16. Oiling.

——	1910.	1911.	1912.
Number of drains oiled		1	
Number of pools and excavations oiled		*nil*	
Number of tanks and barrels oiled		*nil*	
Average number of men daily employed for oiling drains, pools, and watertanks or barrels		*nil*	

17. Inspections and Prosecutions.

——	1910.	1911.	1912.
Number of inspectors employed		1	
Number of houses inspected		5,557	
Number of houses where larvæ were found		170	
Number of notices served to remove conditions causing the breeding of larvæ		394	
Number of persons fined for having mosquito larvæ on premises ...		171	
Number of notices served to remove insanitary conditions on premises		660	
Number of persons fined for not removing insanitary conditions after notice		97	
Number of soda and aërated water factories inspected		*nil*	

GOLD COAST.

No.

SUMMARY OF ROUTINE SANITARY WORK DONE DURING THE YEAR IN THE TOWN.

1. Name of Town: OBUASSI.

—	Approximate area.	Number of proclaimed open spaces.
1910	4 sq. miles	2
1911		
1912		

2. Population.

—	Number of Natives.		Number of Europeans.		Total.
	Males.	Females.	Males.	Females.	
1910					
1911	2,812	1,614	254	3	4,683
1912					

3. Housing.

—	Number occupied by Europeans.	Number occupied by Natives.
Number of Houses:—		
1910		
1911	6*	934
1912		

* Refers to houses occupied by Government officials only.

Number of Huts:—
1910 ... ...
1911 ... ... *nil*
1912 ... ...

4. Mosquito Protection of Houses.

——	1910.	1911.	1912.
Number of European houses wholly mosquito-protected		*nil*	
Number of European houses with mosquito room		*nil*	
Number rendered during the year wholly mosquito-protected ...		*nil*	
Number rendered during the year partially mosquito-protected ...		*nil*	

5. Erection of New Buildings during the Year.

—	1910.	1911.	1912.
Number of public buildings erected with sanction as to site, construction, and relation to other buildings		9	
Number of houses erected with sanction as to site, construction, and relation to other buildings		*nil*	
Number of huts erected with sanction as to site, construction, and relation to other buildings		*nil*	
Number of houses built without sanction		Unknown	
Number of huts built without sanction		*nil*	

ACTION TAKEN:—

—	Number of Prosecutions.		Number demolished.	
	Huts.	Houses.	Huts.	Houses.
1910				
1911	*nil*	*nil*	*nil*	57
1912				

6. MARKETS.

—	Total number.	Number paved and drained.	Number unpaved.
1910			
1911	4	2	2
1912			

7. SLAUGHTER-HOUSES.

—	Total number.	Number paved and drained.	Number unpaved.
1910			
1911	1	1	*nil*
1912			

8. LATRINES.

—	For Males.		For Females.	
	Number.	Number of Seats.	Number.	Number of seats.
Number of Public Latrines :—				
1910				
1911	8	60	8	60
1912				
Number of New Public Latrines erected during the year :—				
1910				
1911	5	38	5	38
1912				
Number of Public Latrines repaired during the year :—				
1910				
1911	*nil*		*nil*	
1912				
Number of Public Latrines demolished during the year :—				
1910				
1911	2	14	2	14
1912				

———	1910.	1911.	1912.
Number of Private Latrines		23	
Average number of pails of nightsoil removed daily...		130	
Average number of soiled pails removed and clean pails substituted ...		—	
Number of nightsoil men employed to clean latrines and remove excreta ...		14	
Number of cesspools		*nil*	
Number of cesspools cleansed		*nil*	
Number of new cesspools constructed during the year		*nil*	
Number of old cesspools abolished		*nil*	
Number of cesspools oiled regularly by Department...		*nil*	

9. Removal of Refuse.

	1910.	1911	1912.
Number of dustbins		*nil*	
Number of carts (if employed) at work daily to remove refuse from streets		*nil*	
Amount of refuse removed daily from streets		14 headloads	
Number of carts (if employed) at work daily to remove refuse from yards and premises		*nil*	
Amount of refuse removed daily from yards and premises		641 headloads	
Number of men employed for moving refuse		13	

10. Mode of Disposal of Excreta, Refuse and Offal.

	Daily average number of pails of excreta.			Daily average number of headloads of refuse.			Daily average number of cartloads of Slaughter-House and Market Offal.		
	1910.	1911.	1912.	1910.	1911.	1912.	1910.	1911.	1912.
Buried or trenched		130			24			3	
Burnt					641			14	
Thrown into sea									
*Otherwise dealt with									

* State mode of disposal.

11. Average Daily Number of Headloads of Tin Cans, Bottles, Broken Crockery and other Incombustible Material Removed from Houses, Huts and Compounds.

1910.	1911.	1912.
	24	

12. Water Supply.

Nature of Water Supply.	1910.	1911.	1912.
Pipe-borne water :—			
Source (river, lake or spring) :—		Spring	
Number of linear yards		2146	
Number of stand pipes along roads...		14	
Number of stand pipes in compounds and houses		1	
Wells :—			
Public :—			
Number		6	
Number with pumps protected against surface water and mosquito-protected		*nil*	
Private :—			
Number		2	
Number protected against surface water and mosquito-protected		1	
Tanks :—			
Public :—			
Number underground		*nil*	
Number mosquito-protected and served by pumps ...			
Number above ground			
Number mosquito-protected			
Number of 400 gallons capacity or less			
Number above 400 gallons			

——	1910.	1911.	1912.
Tanks :—			
Private :—			
Number underground		*nil*	
Number mosquito-protected		*nil*	
Number above ground		13	
Number mosquito-protected		11	
Number of 400 gallons capacity or less		*nil*	
Number above 400 gallons		13	
Nature of tanks :—			
Wood		1	
Iron		12	
Concrete		*nil*	
Barrels :—			
Number		8	
Number mosquito-protected		8	

13. Drainage.

Nature of Drainage.	Public.	Private.
Masonry drains :—		
Lineal yards of masonry drains :—		
1910		
1911	122	
1912		
Lineal yards reconstructed during the year :—		
1910		
1911	*nil*	
1912		
Lineal yards repaired during the year :—		
1910		
1911	*nil*	
1912		
Lineal yards of new drains constructed during the year :—		
1910		
1911	132	
1912		
Earth drains or ditches :—		
Number of linear yards of ditches cleaned :—		
1910		
1911	24,200	
1912		
Number of linear yards of ditches dug and graded :—		
1910		
1911	*nil*	
1912		
Average frequency of clearing ditches of grass :—		
1910		
1911	monthly	
1912		

14. Clearance of Undergrowth, Long Grass and Jungle.

——	1910.	1911.	1912.
Number of square yards of weeds, grass, and vegetation cut and removed		2,992,059	
Average frequency of clearance of rank vegetation on same area ...		monthly	

15. Excavations and Low-lying Land.

	1910.	1911.	1912.
Number of pools and excavations		150	
Number of excavations filled up		13	
Amount of low-lying and marsh land raised and drained ...		1,710	
Number of pools, marshes, streams, &c., fish-stocked		*nil*	
Number of cubic yards of material used for filling up pools and excavations		Unknown	
Number of persons fined for making new excavations		—	
Average number of men daily employed in filling up pools, &c. ...		40·62	

16. Oiling.

	1910.	1911.	1912.
Number of drains oiled		74	
Number of pools and excavations oiled		196	
Number of tanks and barrels oiled		12	
Average number of men daily employed for oiling drains, pools, and watertanks or barrels		1	

17. Inspections and Prosecutions.

	1910.	1911.	1912.
Number of inspectors employed		2	
Number of houses inspected		30,438	
Number of houses where larvæ were found		144	
Number of notices served to remove conditions causing the breeding of larvæ		...	
Number of persons fined for having mosquito larvæ on premises			
Number of notices served to remove insanitary conditions on premises...			
Number of persons fined for not removing insanitary conditions after notice		260	
Number of soda and aërated water factories inspected		*nil*	

GOLD COAST.

No.

SUMMARY OF ROUTINE SANITARY WORK DONE DURING THE YEAR IN THE TOWN.

1. Name of Town: COOMASSIE.

——	Approximate area.	Number of proclaimed open spaces.
1910		
1911	3½ sq. miles	*nil*
1912		

2. Population.

—	Number of Natives.		Number of Europeans.		Total.
	Males.	Females.	Males.	Females.	
1910					
1911	18,853		90	6	18,949
1912					

3. Housing.

——	Number occupied by Europeans.	Number occupied by Natives.
Number of Houses:—		
1910		
1911	40	1,900
1912		

Number of Huts:—	
1910	
1911	100
1912	

4. Mosquito Protection of Houses.

——	1910.	1911.	1912.
Number of European houses wholly mo-quito-protected		*nil*	
Number of European houses with mosquito room		4	
Number rendered during the year wholly mosquito-protected ...		*nil*	
Number rendered during the year partially mosquito-protected ...		*nil*	

5. Erection of New Buildings during the Year.

——	1910.	1911.	1912.
Number of public buildings erected with sanction as to site, construction, and relation to other buildings		1	
Number of houses erected with sanction as to site, construction, and relation to other buildings		30	
Number of huts erected with sanction as to site, construction, and relation to other buildings		*nil*	
Number of houses built without sanction		*nil*	
Number of huts built without sanction		*nil*	

ACTION TAKEN:—

—	Number of Prosecutions.		Number demolished.	
	Huts.	Houses.	Huts.	Houses.
1910	*nil*	*nil*	*nil*	50
1911				
1912				

6. MARKETS.

—	Total number.	Number paved and drained.	Number unpaved.
1910	1	*nil*	1
1911			
1912			

7. SLAUGHTER-HOUSES.

—	Total number.	Number paved and drained.	Number unpaved.
1910	1	1	*nil*
1911			
1912			

8. LATRINES.

—	For Males.		For Females.	
	Number.	Number of seats.	Number.	Number of seats.
Number of Public Latrines :—				
1910				
1911	28	153	28	140
1912				
Number of new Public Latrines erected during the year :—				
1910				
1911	2	10	*nil*	
1912				
Number of Public Latrines repaired during the year :—				
1910				
1911	2	12	2	12
1912				
Number of Public Latrines demolished during the year :—				
1910				
1911	*nil*			
1912				

—	1910.	1911.	1912.
Number of Private Latrines		40	
Average number of pails of nightsoil removed daily		223	
Average number of soiled pails removed and clean pails substituted ...		293	
Number of nightsoil men employed to clean latrines and remove excreta		26	
Number of cesspools		*nil*	
Number of cesspools cleansed		*nil*	
Number of new cesspools constructed during the year		*nil*	
Number of old cesspools abolished		*nil*	
Number of cesspools oiled regularly by Department		*nil*	

9. Removal of Refuse.

	1910.	1911.	1912.
Number of dustbins		*nil*	
Number of carts (if employed) at work daily to remove refuse from streets		20 wheel-barrows	
Amount of refuse removed daily from streets		40 wheel-barrows	
Number of carts (if employed) at work daily to remove refuse from yards and premises		10	
Amount of refuse removed daily from yards and premises		30	
Number of men employed for moving refuse		12	

10. Mode of Disposal of Excreta, Refuse and Offal.

	Daily average number of pails of excreta.			Daily average number of cartloads of refuse.			Daily average number of cartloads of Slaughter-House and Market Offal.		
	1910.	1911.	1912.	1910.	1911.	1912.	1910.	1911.	1912.
Buried or trenched		293			30			1 head-load.	
Burnt									
Thrown into sea									
*Otherwise dealt with									

* State mode of disposal.

11. Average Daily Number of Cartloads of Tin Cans, Bottles, Broken Crockery and other Incombustible Material Removed from Houses, Huts and Compounds.

1910.	1911.	1912.
	2 cartloads	

12. Water Supply.

Nature of Water Supply.	1910.	1911.	1912.
Pipe-borne water :—			
Source (river, lake or spring) :—			
Number of linear yards		*nil*	
Number of stand pipes along roads			
Number of stand pipes in compounds and houses			
Wells :—			
Public :—			
Number		11	
Number with pumps protected against surface water and mosquito-protected		8	
Private :—			
Number		51	
Number protected against surface water and mosquito-protected		51	
Tanks :—			
Public :—			
Number underground		*nil*	
Number mosquito-protected and served by pumps ...		*nil*	
Number above ground		*nil*	
Number mosquito-protected		*nil*	
Number of 400 gallons capacity or less		*nil*	
Number above 400 gallons		*nil*	

	1910.	1911.	1912.
Tanks :—			
Private :—			
Number under ground		2	
Number mosquito-protected		2	
Number above ground		20	
Number mosquito-protected		20	
Number of 400 gallons capacity or less		5	
Number above 400 gallons		15	
Nature of tanks :—			
Wood		13	
Iron		2	
Concrete		—	
Barrels :—			
Number		120	
Number mosquito-protected		120	

13. Drainage.

Nature of Drainage.	Public.	Private.
Masonry drains :—		
Lineal yards of masonry drains :—		
1910		
1911	1,760	
1912		
Lineal yards reconstructed during the year :—		
1910		
1911	*nil*	
1912		
Lineal yards repaired during the year :—		
1910		
1911	*nil*	
1912		
Lineal yards of new drains constructed during the year :—		
1910		
1911	140	
1912		
Earth drains or ditches :—		
Number of linear yards of ditches cleaned :—		
1910		
1911	682,803	
1912		
Number of linear yards of ditches dug and graded :—		
1910		
1911	411	
1912		
Average frequency of clearing ditches of grass :—		
1910		
1911		
1912		

14. Clearance of Undergrowth, Long Grass and Jungle.

	1910	1911.	1912.
Number of square yards of weeds, grass, and vegetation cut and removed		1,904,665	
Average frequency of clearance of rank vegetation on same area		8 times yearly	

15. Excavations and Low-lying Land.

——	1910.	1911.	1912.
Number of pools and excavations		*nil*	
Number of excavations filled up		*nil*	
Amount of low-lying and marsh land raised and drained... ...		100 sq. yds.	
Number of pools, marshes, streams, &c., fish-stocked		*nil*	
Number of cubic yards of material used for filling up pools and excavations		*nil*	
Number of persons fined for making new excavations		*nil*	
Average number of men daily employed in filling up pools, &c. ...		*nil*	

16. Oiling.

——	1910.	1911.	1912.
Number of drains oiled		8 daily	
Number of pools and excavations oiled		*nil*	
Number of tanks and barrels oiled		*nil*	
Average number of men daily employed for oiling drains, pools, and watertanks or barrels		*nil*	

17. Inspections and Prosecutions.

——	1910.	1911.	1912.
Number of inspectors employed		1	
Number of houses inspected		19,673	
Number of houses where larvæ were found		249	
Number of notices served to remove conditions causing the breeding of larvæ		738	
Number of persons fined for having mosquito larvæ on premises ...		246	
Number of notices served to remove insanitary conditions on premises		922	
Number of persons fined for not removing insanitary conditions after notice		310	
Number of soda and aërated water factories inspected		1	

GOLD COAST.

No.

SUMMARY OF ROUTINE SANITARY WORK DONE DURING THE YEAR IN THE TOWN.

1. Name of Town: QUITTAH.

——	Approximate area.	Number of proclaimed open spaces.
1910	70 acres	10
1911		
1912		

2. Population.

——	Number of Natives.		Number of Europeans.		Total.
	Males.	Females.	Males.	Females.	
1910	1,587	1,783	14	9	3,393
1911					
1912					

3. Housing.

——	Number occupied by Europeans.	Number occupied by Natives.
Number of Houses :—		
1910	9	585
1911		
1912		

Number of Huts :—
1910 ... ...
1911 258
1912 ... ...

4. Mosquito Protection of Houses.

——	1910.	1911.	1912.
Number of European houses wholly mosquito-protected		1	
Number of European houses with mosquito room		1	
Number rendered during the year wholly mosquito-protected ...		*nil*	
Number rendered during the year partially mosquito-protected ...		*nil*	

5. Erection of New Buildings during the Year.

——	1910.	1911.	1912.
Number of public buildings erected with sanction as to site, construction, and relation to other buildings		4	
Number of houses erected with sanction as to site, construction, and relation to other buildings		14	
Number of huts erected with sanction as to site, construction, and relation to other buildings		*nil*	
Number of houses built without sanction		2	
Number of huts built without sanction		11	

ACTION TAKEN :—

——	Number of Prosecutions.		Number demolished.	
	Huts.	Houses.	Huts.	Houses.
1910	—	2	*nil*	8
1911				
1912				

6. MARKETS.

——	Total number.	Number paved and drained.	Number unpaved.
1910	1	*nil*	1
1911			
1912			

7. SLAUGHTER-HOUSES.

——	Total number.	Number paved and drained.	Number unpaved.
1910	1	1	*nil*
1911			
1912			

8. LATRINES.

——	For Males.		For Females.	
	Number.	Number of seats.	Number.	Number of seats.
Number of Public Latrines :—				
1910				
1911	9	54	8	48
1912				
Number of new Public Latrines erected during the year :—				
1910				
1911	*nil*		*nil*	
1912				
Number of Public Latrines repaired during the year :—				
1910				
1911	4		2	
1912				
Number of Public Latrines demolished during the year :—				
1910				
1911	*nil*		*nil*	
1912				

——	1910.	1911.	1912.
Number of Private Latrines		142	
Average number of pails of nightsoil removed daily		118	
Average number of soiled pails removed and clean pails substituted ...		—	
Number of nightsoil men employed to clean latrines and remove excreta ...		7	
Number of cesspools		*nil*	
Number of cesspools cleansed		*nil*	
Number of new cesspools constructed during the year		*nil*	
Number of old cesspools abolished		*nil*	
Number of cesspools oiled regularly by Department		*nil*	

9. Removal of Refuse.

——	1910.	1911.	1912.
Number of dustbins		6	
Number of carts (if employed) at work daily to remove refuse from streets		1	
Amount of refuse removed daily from streets...		1 cartload	
Number of carts (if employed) at work daily to remove refuse from yards and premises		2	
Amount of refuse removed daily from yards and premises		16 cartloads	
Number of men employed for moving refuse		8	

10. Mode of Disposal of Excreta, Refuse and Offal.

——	Daily average number of pails of excreta.			Daily average number of cartloads of refuse.			Daily average number of cartloads of Slaughter-House and Market Offal.		
	1910.	1911.	1912.	1910.	1911.	1912.	1910.	1911.	1912.
Buried or trenched		92						½ head load	
Burnt									
Thrown into sea					4½				
*Otherwise dealt with								2 cartloads	

* State mode of disposal.

11. Average Daily Number of Cartloads of Tin Cans, Bottles, Broken Crockery and other Incombustible Material Removed from Houses, Huts and Compounds.

1910.	1911.	1912.
	½ cartload buried	

12. Water Supply.

Nature of Water Supply.	1910.	1911.	1912.
Pipe-borne Water :—			
Source (river, lake or spring) :—			
Number of linear yards			
Number of stand pipes along roads...		*nil*	
Number of stand pipes in compounds and houses ...			
Wells :—			
Public :—			
Number		5	
Number with pumps protected against surface water and mosquito-protected		*nil*	
Private :—			
Number		59	
Number protected against surface water and mosquito-protected		59	
Tanks :—			
Public :—			
Number under ground		*nil*	
Number mosquito-protected and served by pumps ...		*nil*	
Number above ground		7	
Number mosquito-protected		7	
Number of 400 gallons capacity or less		*nil*	
Number above 400 gallons		7	

	1910.	1911.	1912.
Tanks :—			
Private : —			
Number under ground		4	
Number mosquito-protected		4	
Number above ground		7	
Number mosquito-protected		7	
Number of 400 gallons capacity or less		5	
Number above 400 gallons		6	
Nature of tanks :—			
Wood		*nil*	
Iron		7	
Concrete		4	
Barrels :—			
Number		60	
Number mosquito-protected		60	

13. Drainage.

Nature of Drainage.	Public.	Private.
Masonry drains :—		
Lineal yards of masonry drains :—		
1910		
1911	724	
1912		
Lineal yards reconstructed during the year :—		
1910		
1911	*nil*	
1912		
Lineal yards repaired during the year :—		
1910		
1911	*nil*	
1912		
Lineal yards of new drains constructed during the year :—		
1910		
1911	30	
1912		
Earth drains or ditches :—		
Number of linear yards of ditches cleaned :—		
1910		
1911	*nil*	
1912		
Number of linear yards of ditches dug and graded :—		
1910		
1911	*nil*	
1912		
Average frequency of clearing ditches of grass :—		
1910		
1911	*nil*	
1912		

14. Clearance of Undergrowth, Long Grass and Jungle.

	1910.	1911.	1912.
Number of square yards of weeds, grass, and vegetation cut and removed		18,962	
Average frequency of clearance of rank vegetation on same area ...		Once a week	

15. Excavations and Low-lying Land.

——	1910.	1911.	1912.
Number of pools and excavations		*nil*	
Number of excavations filled up		*nil*	
Amount of low-lying and marsh land raised and drained		*nil*	
Number of pools, marshes, streams, &c., fish-stocked...		*nil*	
Number of cubic yards of material used for filling up pools and excavations		*nil*	
Number of persons fined for making new excavations		*nil*	
Average number of men daily employed in filling up pools, &c. ...		*nil*	

16. Oiling.

——	1910.	1911.	1912.
Number of drains oiled...		5	
Number of pools and excavations oiled		*nil*	
Number of tanks and barrels oiled		*nil*	
Average number of men daily employed for oiling drains, pools, and watertanks or barrels		*nil*	

17. Inspections and Prosecutions.

——	1910.	1911.	1912.
Number of inspectors employed		1	
Number of houses inspected		2,493	
Number of houses where larvæ were found		108	
Number of notices served to remove conditions causing the breeding of larvæ		114	
Number of persons fined for having mosquito larvæ on premises		47	
Number of notices served to remove insanitary conditions on premises		185	
Number of persons fined for not removing insanitary conditions after notice...		77	
Number of soda and aërated water factories inspected		*nil*	

GOLD COAST.

No.

SUMMARY OF ROUTINE SANITARY WORK DONE DURING THE YEAR IN THE TOWN.

1. Name of Town: CAPE COAST.

——	Approximate area.	Number of proclaimed open spaces.
1910		
1911	2½ square miles	3
1912		

2. Population.

——	Number of Natives.		Number of Europeans.		Total.
	Males.	Females.	Males.	Females.	
1910					
1911	5,422	5,847	29	8	11,306
1912					

3. Housing.

——	Number occupied by Europeans.	Number occupied by Natives.
Number of Houses:—		
1910		
1911	11	1,161
1912		
Number of Huts:—		
1910		
1911	499	
1912		

4. Mosquito Protection of Houses.

——	1910.	1911.	1912.
Number of European houses wholly mosquito-protected		*nil*	
Number of European houses with mosquito room		4	
Number rendered during the year wholly mosquito-protected ...		*nil*	
Number rendered during the year partially mosquito-protected ...		1	

5. Erection of New Buildings during the Year.

——	1910.	1911.	1912.
Number of public buildings erected with sanction as to site, construction, and relation to other buildings		*nil*	
Number of houses erected with sanction as to site, construction, and relation to other buildings		*nil*	
Number of huts erected with sanction as to site, construction, and relation to other buildings		2	
Number of houses built without sanction		14	
Number of huts built without sanction		1	

ACTION TAKEN :—

—	Number of Prosecutions.		Number demolished.	
	Huts.	Houses.	Huts.	Houses.
1910				
1911	1	14	1	137
1912				

6. MARKETS.

——	Total number.	Number paved and drained.	Number unpaved.
1910			
1911	1	*nil*	1
1912			

7. SLAUGHTER-HOUSES.

——	Total number.	Number paved and drained.	Number unpaved.
1910			
1911	1	1	
1912			

8. LATRINES.

———	For Males.		For Females.	
	Number.	Number of seats.	Number.	Number of seats.
Number of Public Latrines :—				
1910				
1911	19	151	18	149
1912				
Number of new Public Latrines erected during the year :—				
1910				
1911	1	16	1	16
1912				
Number of Public Latrines repaired during the year :—				
1910				
1911	4		4	
1912				
Number of Public Latrines demolished during the year :—				
1910				
1911	1	8	1	8
1912				

———	1910.	1911.	1912.
Number of Private Latrines		88	
Average number of pails of nightsoil removed daily			
Average number of soiled pails removed and clean pails substituted			
Number of nightsoil men employed to clean latrines and remove excreta			
Number of cesspools		*nil*	
Number of cesspools cleansed		*nil*	
Number of new cesspools constructed during the year		*nil*	
Number of old cesspools abolished		*nil*	
Number of cesspools oiled regularly by Department		*nil*	

9. Removal of Refuse.

	1910.	1911.	1912.
Number of dustbins		60	
Number of carts (if employed) at work daily to remove refuse from streets		11	
Amount of refuse removed daily from streets		116 cartloads	
Number of carts (if employed) at work daily to remove refuse from yards and premises		*nil*	
Amount of refuse removed daily from yards and premises		*nil*	
Number of men employed for moving refuse		32	

10. Mode of disposal of Excreta, Refuse and Offal.

	Daily average number of pails of excreta.			Daily average number of cartloads of refuse.			Daily average number of cartloads of Slaughter-House and Market Offal.		
	1910.	1911.	1912.	1910.	1911.	1912.	1910.	1911.	1912.
Buried or trenched								$\frac{1}{12}$ headload	
Burnt					1				
Thrown into sea		609			115				
*Otherwise dealt with								$\frac{1}{2}$ headload	

* State mode of disposal.

11. Average Daily Number of Cartloads of Tin Cans, Bottles, Broken Crockery and other Incombustible Material Removed from Houses, Huts and Compounds.

1910.	1911.	1912.
	nil	

12. Water Supply.

Nature of Water Supply.	1910.	1911.	1912.
Pipe-borne water :—			
Source (river, lake or spring) :—			
Number of linear yards		*nil*	
Number of stand pipes along roads			
Number of stand pipes in compounds and houses			
Wells :—			
Public :—			
Number		7	
Number with pumps protected against surface water and mosquito-protected		3	
Private :—			
Number		188	
Number protected against surface water and mosquito-protected		176	
Tanks:—			
Public :—			
Number underground		12	
Number mosquito-protected and served by pumps ...		12	
Number above ground		8	
Number mosquito-protected		8	
Number of 400 gallons capacity or less		*nil*	
Number above 400 gallons		20	

——	1910.	1911.	1912.
Tanks :—			
Private :—			
Number underground		47	
Number mosquito-protected		37	
Number above ground		110	
Number mosquito-protected		109	
Number of 400 gallons capacity or less		68	
Number above 400 gallons		89	
Nature of tanks :—			
Wood		9	
Iron		109	
Concrete		59	
Barrels :—			
Number		637	
Number mosquito-protected		634	

13. Drainage.

Nature of Drainage.	Public.	Private.
Masonry drains :—		
Lineal yards of masonry drains :—		
1910		
1911	16,666	
1912		
Lineal yards reconstructed during the year :—		
1910		
1911	324	
1912		
Lineal yards repaired during the year :—		
1910		
1911	60	
1912		
Lineal yards of new drains constructed during the year :—		
1910		
1911	828	
1912		
Earth drains or ditches :—		
Number of linear yards of ditches cleaned :—		
1910		
1911	4,935	
1912		
Number of linear yards of ditches dug and graded :—		
1910		
1911		
1912		
Average frequency of clearing ditches of grass :—		
1910		
1911	continuously	
1912		

14. Clearance of Undergrowth, Long Grass and Jungle.

——	1910.	1911.	1912.
Number of square yards of weeds, grass, and vegetation cut and [illegible] removed		321,809	
Average frequency of clearance of rank vegetation on same area ...		continuously	

15. Excavations and Low-lying Land.

——	1910.	1911.	1912.
Number of pools and excavations			
Number of excavations filled up		39	
Amount of low-lying and marsh land raised and drained		470 sq. yds.	
Number of pools, marshes, streams, &c., fish-stocked...		*nil*	
Number of cubic yards of material used for filling up pools and excavations		1,991	
Number of persons fined for making new excavations		—	
Average number of men daily employed in filling up pools, &c. ...		6	

16. Oiling.

——	1910.	1911.	1912.
Number of drains oiled		312	
Number of pools and excavations oiled		299	
Number of tanks and barrels oiled		124	
Average number of men daily employed for oiling drains, pools, and watertanks or barrels		4	

17. Inspections and Prosecutions.

——	1910.	1911.	1912.
Number of inspectors employed		6	
Number of houses inspected		16,828	
Number of houses where larvæ were found		1,137	
Number of notices served to remove conditions causing the breeding of larvæ		926	
Number of persons fined for having mosquito larvæ on premises ...		127	
Number of notices served to remove insanitary conditions on premises		1,177	
Number of persons fined for not removing insanitary conditions after notice		178	
Number of soda and aërated water factories inspected		*nil*	

GOLD COAST.

No.

SUMMARY OF ROUTINE SANITARY WORK DONE DURING THE YEAR IN THE TOWN.

1. Name of Town: WINNEBAH.

——	Approximate area.	Number of proclaimed open spaces.
1910	About $\frac{3}{4}$ square miles	8
1911		
1912		

2. Population.

——	Number of Natives.		Number of Europeans.		Total.
	Males.	Females.	Males.	Females.	
1910					
1911	2,946	2,896	27	1	5,870
1912					

3. Housing.

——	Number occupied by Europeans.	Number occupied by Natives.
Number of Houses:—		
1910		
1911	14	200
1912		
Number of Huts:—		
1910		
1911	726	
1912		

4. Mosquito Protection of Houses.

——	1910.	1911.	1912.
Number of European houses wholly mosquito-protected		*nil*	
Number of European houses with mosquito room		1	
Number rendered during the year wholly mosquito-protected ...		*nil*	
Number rendered during the year partially mosquito-protected ...		1	

5. Erection of New Buildings During the Year.

——	1910.	1911.	1912.
Number of public buildings erected with sanction as to site, construction, and relation to other buildings		1	
Number of houses erected with sanction as to site, construction, and relation to other buildings		80	
Number of huts erected with sanction as to site, construction, and relation to other buildings		*nil*	
Number of houses built without sanction		*nil*	
Number of huts built without sanction		4	

ACTION TAKEN :—

	Number of Prosecutions.		Number demolished.	
	Huts.	Houses.	Huts.	Houses.
1910				
1911			4	
1912				

6. MARKETS.

	Total Number.	Number paved and drained.	Number unpaved.
1910			
1911	2	2	*nil*
1912			

7. SLAUGHTER-HOUSES.

	Total Number.	Number paved and drained.	Number unpaved.
1910			
1911	*nil*	*nil*	*nil*
1912			

8. LATRINES.

	For Males.		For Females.	
	Number.	Number of Seats.	Number.	Number of Seats.
Number of Public Latrines :—				
1910				
1911	9	69	9	69
1912				
Number of new Public Latrines erected during the year :—				
1910				
1911	*nil*		*nil*	
1912				
Number of Public Latrines repaired during the year :—				
1910				
1911	3		1	
1912				
Number of Public Latrines demolished during the year :—				
1910				
1911	*nil*		*nil*	
1912				

	1910.	1911.	1912.
Number of Private Latrines		33	
Average number of pails of nightsoil removed daily		276	
Average number of soiled pails removed and clean pails substituted ...		—	
Number of nightsoil men employed to clean latrines and remove excreta ...		12	
Number of cesspools		*nil*	
Number of cesspools cleansed		*nil*	
Number of new cesspools constructed during the year		*nil*	
Number of old cesspools abolished		*nil*	
Number of cesspools oiled regularly by Department		*nil*	

9. Removal of Refuse.

——	1910.	1911.	1912.
Number of dustbins		18	
Number of carts (if employed) at work daily to remove refuse from streets ...		3	
Amount of refuse removed daily from streets		26 cart loads	
Number of carts (if employed) at work daily to remove refuse from yards and premises		*nil*	
Amount of refuse removed daily from yards and premises		*nil*	
Number of men employed for moving refuse		8	

10. Mode of Disposal of Excreta, Refuse and Offal.

——	Daily average number of pails of excreta.			Daily average number of cartloads of refuse.			Daily average number of cartloads of Slaughter House and Market Offal.		
	1910.	1911.	1912.	1910.	1911.	1912.	1910.	1911.	1912.
Buried or trenched		*nil*			26				
Burnt		*nil*							
Thrown into sea		278							
*Otherwise dealt with		*nil*							

* State mode of disposal.

11. Average daily number of cartloads of Tin Cans, Bottles, Broken Crockery and other incombustible material removed from Houses, Huts and Compounds.

1910.	1911.	1912.
	2*	

* The occupiers of premises bring tins, &c., to the dust-bins, whence the scavengers remove them.

12. Water Supply.

Nature of Water Supply.	1910.	1911.	1912.
Pipe-borne water :—			
Source (river, lake or spring) :—		*nil*	
Number of linear yards			
Number of stand pipes along roads...			
Number of stand pipes in compounds and houses			
Wells :—			
Public :—			
Number		*nil*	
Number with pumps protected against surface water and mosquito-protected.			
Private :—			
Number		31	
Number protected against surface water and mosquito-protected		29	
Tanks :—			
Public :—			
Number undergound...		3	
Number mosquito-protected and served by pumps ...		3 (1 only with pump)	
Number above ground		3	
Number mosquito-protected		3	
Number of 400 gallons capacity or less		1	
Number above 400 gallons		5	

	1910.	1911.	1912.
Tanks :—			
Private :—			
Number Underground		9	
Number mosquito-protected		8	
Number above ground		106	
Number mosquito-protected		106	
Number of 400 gallons capacity or less		35	
Number above 400 gallons		80	
Nature of tanks :—			
Wood		17	
Iron		87	
Concrete		11	
Barrels :—			
Number		125	
Number mosquito-protected		115	

13. Drainage.

Nature of Drainage.	Public.	Private.
Masonry drains :—		
Linear yards of masonry drains :—		
1910		
1911	6,600	120
1912		
Linear yards reconstructed during the year :—		
1910		
1911		
1912		
Linear yards repaired during the year :—		
1910		
1911		
1912		
Linear yards of new drains constructed during the year :—		
1910		
1911	3,580	
1912		
Earth drains or ditches :—		
Number of linear yards of ditches cleaned :—		
1910		
1911	9,400	
1912		
Number of linear yards of ditches dug and graded :—		
1910		
1911	3,440	
1912		
Average frequency of clearing ditches of grass :—		
1910		
1911	Every 2 months.	
1912		

14. Clearance of Undergrowth, Long Grass and Jungle.

	1910.	1911.	1912.
Number of square yards of weeds, grass, and vegetation cut and removed		Not recorded	
Average frequency of clearance of rank vegetation on same area		Every 2 months	

15. Excavations and low-lying land.

	1910.	1911.	1912.
Number of pools and excavations		2	
Number of excavations filled up		10	
Amount of low-lying and marsh land raised and drained		10,000 square yards.	
Number of pools, marshes, streams, &c., fish-stocked...		*nil*	
Number of cubic yards of material used for filling up pools and excavations		20,000	
Number of persons fined for making new excavations		*nil*	
Average number of men daily employed in filling up pools, &c. ...		15	

16. Oiling.

	1910.	1911.	1912.
Number of drains oiled...		467	
Number of pools and excavations oiled		322	
Number of tanks and barrels oiled		1,018	
Average number of men daily employed for oiling drains, pools, and watertanks or barrels		2	

17. Inspections and Prosecutions.

	1910.	1911.	1912.
Number of inspectors employed		1	
Number of houses inspected		4,477	
Number of houses where larvæ were found		212	
Number of notices served to remove conditions causing the breeding of larvæ		not necessary on Gold Coast.	
Number of persons fined for having mosquito larvæ on premises ...		99	
Number of notices served to remove insanitary conditions on premises		240	
Number of persons fined for not removing insanitary conditions after notice...		44	
Number of soda and aerated water factories inspected		*nil*	

GOLD COAST.

No.

SUMMARY OF ROUTINE SANITARY WORK DONE DURING THE YEAR IN THE TOWN.

1. Name of Town: AKUSE.

——	Approximate area.	Number of proclaimed open spaces.
1910		
1911	½ Sq. Mile.	*nil*
1912		

2. Population.

——	Number of Natives.		Number of Europeans.		Total.
	Males.	Females.	Males.	Females.	
1910					
1911	1,728	1,356	22	1	3,107
1912					

3. Housing.

——	Number occupied by Europeans.	Number occupied by Natives.
Number of Houses:—		
1910		
1911	10	228 Compounds.
1912		
Number of Huts:—		
1910		
1911	160	
1912		

4. Mosquito Protection of Houses.

——	1910.	1911.	1912.
Number of European houses wholly mosquito-protected		*nil*	
Number of European houses with mosquito room		3	
Number rendered during the year wholly mosquito-protected ...		*nil*	
Number rendered during the year partially mosquito-protected ...		2	

5. Erection of New Buildings during the Year.

——	1910.	1911.	1912.
Number of public buildings erected with sanction as to site, construction and relation to other buildings		1	
Number of houses erected with sanction as to site, construction, and relation to other buildings		42	
Number of huts erected with sanction as to site, construction, and relation to other buildings		30	
Number of houses built without sanction		*nil*	
Number of huts built without sanction		*nil*	

ACTION TAKEN :—

	Number of prosecutions.		Number demolished.	
	Huts.	Houses.	Huts.	Houses.
1910				
1911	—	4	6	3
1912				

6. MARKETS.

	Total Number.	Number paved and drained.	Number unpaved.
1910			
1911	1	*nil*	1
1912			

7. SLAUGHTERHOUSES.

	Total Number.	Number paved and drained.	Number unpaved.
1910			
1911	2	1	1
1912			

8. LATRINES.

	For Males.		For Females.	
	Number.	Number of seats.	Number.	Number of seats.
Number of Public Latrines :—				
1910				
1911	8	48	9	54
1912				
Number of new Public Latrines erected during the year :				
1910				
1911	*nil*		*nil*	
1912				
Number of Public Latrines repaired during the year :—				
1910				
1911	5		5	
1912				
Number of Public Latrines demolished during the year :—				
1910				
1911	*nil*		*nil*	
1912				

	1910.	1911.	1912.
Number of Private Latrines		15	
Average number of pails of nightsoil removed daily		66	
Average number of soiled pails removed and clean pails substituted ...		—	
Number of nightsoil men employed to clean latrines and remove excreta ...		8	
Number of cesspools		4	
Number of cesspools cleansed		4	
Number of new cesspools constructed during the year		*nil*	
Number of old cesspools abolished		1	
Number of cesspools oiled regularly by Department		*nil*	

9. Removal of Refuse.

——	1910.	1911.	1912.
Number of dustbins		13	
Number of carts (if employed) at work daily to remove refuse from streets		3	
Amount of refuse removed daily from streets...		35 cart and 30 head-loads.	
Number of carts (if employed) at work daily to remove refuse from yards and premises		*nil*	
Amount of refuse removed daily from yards and premises		—	
Number of men employed for moving refuse		9	

10. Mode of Disposal of Excreta, Refuse, and Offal.

——	Daily average number of pails of excreta.			Daily average number of cartloads of refuse.			Daily average number of cartloads of Slaughter House and Market Offal.		
	1910.	1911.	1912.	1910.	1911.	1912.	1910.	1911.	1912.
Buried or Trenched		66			20				
Burnt					20				
Thrown into sea					*nil*			6	
*Otherwise dealt with					*nil*				

*State mode of disposal.

11. Average Daily Number of Cartloads of Tin Cans, Bottles, Broken Crockery and other Incombustible Material removed from Houses, Huts and Compounds.

1910.	1911.	1912.
	All such materials is deposited in the dustbins by the inhabitants.	

12. Water Supply.

Nature of Water Supply.	1910.	1911.	1912.
Pipe-borne Water :—			
Source (river, lake or spring) :—			
Number of linear yards			
Number of stand pipes along roads...		*nil*	
Number of stand pipes in compounds and houses... ...			
Wells :—			
Public :—			
Number		*nil*	
Number with pumps protected against surface water and mosquito-protected.			
Private :—			
Number			
Number protected against surface water and mosquito-protected.		*nil*	
Tanks :—			
Public :—			
Number underground			
Number mosquito-protected and served by pumps ...			
Number above ground		*nil*	
Number mosquito-protected...			
Number of 400 gallons capacity or less			
Number above 400 gallons			

——	1910.	1911.	1912.
Tanks :—			
Private :—			
Number underground		3	
Number mosquito-protected		3	
Number above ground		22	
Number mosquito-protected		22	
Number of 400 gallons capacity or less		11	
Number above 400 gallons		14	
Nature of tanks :—			
Wood		3	
Iron		19	
Concrete		3	
Barrels :—			
Number		126	
Number mosquito-protected		126	

13. Drainage.

Nature of drainage.	Public.	Private.
Masonry drains :—		
Linear yards of masonry drains :—		
1910		
1911	151	
1912		
Linear yards reconstructed during the year :—		
1910		
1911	*nil*	
1912		
Linear yards repaired during the year... ...		
1910		
1911	*nil*	
1912		
Linear yards of new drains constructed during the year :—		
1910		
1911	75	
1912		
Earth drains or ditches :—		
Number of linear yards of ditches cleaned :—		
1910		
1911	11,546	
1912		
Number of linear yards of ditches dug and graded :—		
1910		
1911	3,601	
1912		
Average frequency of clearing ditches of grass :—		
1910		
1911	Once a month.	
1912		

14. Clearance of Undergrowth, Long Grass and Jungle.

——	1910.	1911.	1912.
Number of square yards of weeds, grass, and vegetation cut and removed		248,562	
Average frequency of clearance of rank vegetation on same area ...		Every 2 months.	

15. Excavations and Low-lying Land.

——	1910.	1911.	1912.
Number of pools and excavations		2	
Number of excavations filled up		78	
Amount of low-lying and marsh land raised and drained		174	
Number of pools, marshes, streams, &c., fish-stocked		*nil*	
Number of cubic yards of material used for filling up pools and excavations...		1,249	
Number of persons fined for making new excavations		*nil*	
Average number of men daily employed in filling up pools, &c. ...		6	

16. Oiling.

——	1910.	1911.	1912.
Number of drains oiled		248	
Number of pools and excavations oiled		197	
Number of tanks and barrels oiled		270	
Average number of men daily employed for oiling drains, pools, and watertanks or barrels		Various.	

17. Inspections and Prosecutions.

——	1910.	1911.	1912.
Number of inspectors employed		1	
Number of houses inspected		2646	
Number of houses where larvæ were found		386	
Number of notices served to remove conditions causing the breeding of larvæ		50	
Number of persons fined for having mosquito larvæ on premises ...		84	
Number of notices served to remove insanitary conditions on premises		200	
Number of persons fined for not removing insanitary conditions after notice		104	
Number of soda and aërated water factories inspected		*nil*	

(Sgd.) H. F. HAMILTON
M.O.

ESTIMATES OF REVENUE AND EXPEN-

FOR THE

Dr.

STATEMENT SHOWING TOTAL RECEIPTS AND PAYMENTS OF THE ACCRA

Date 1909.	Particulars.	Amount.	Total.
	BALANCE :—	£ s. d.	£ s. d.
January 1	Chest £3 6s. 6d. Bank £94 1s. 5d.		97 7 11
December 31	1. LICENSES :—		
	Spirit	2,350 0 0	
	Auctioneers'	74 0 0	
	Wine & Beer	28 0 0	
	Dog	23 5 0	
	Hawkers'	11 19 0	
	2. TAXES :—		
	House Rates	1,016 14 4	
	Wheel Rates	465 16 3	
	3. FEES :—		
	Slaughter House	295 18 9	
	Market Dues	157 7 2	
	Pound	48 0 9	
	Penalties on Prosecutions	282 18 0	
	4. RE-IMBURSEMENTS :—		
	Refund of Scavenging and Lighting Government Bungalows, etc. ...	914 2 11	
	5. INTEREST :—		
	On Deposit in Bank of British West Africa, Limited	18 15 0	
	6. MISCELLANEOUS :—		
	Sale of Water	1 13 0	
	Sale of Stock	30 8 6	
	Total Revenue	5,718 18 8	
	Overpayment Recovered	293 13 11	
	Deposits	37 1 0	
	Advances Repaid	177 9 2	
			6,227 2 9
	Amount transferred from Fixed Deposit Account (B.B.W.A.) Limited ...		1,300 0 0
	Overdrawn on Bank of British West Africa Limited, at 31st December, 1910		129 19 11
		£	7,754 10 7

DITURE OF THE ACCRA TOWN COUNCIL YEAR 1911.

Cr.

TOWN COUNCIL FOR THE YEAR ENDED 31ST DECEMBER, 1910.

Date, 1910.	Particulars.	Amount.	Total.
December 31	Payments during 1910 :—	£ s. d.	£ s. d.
	1. Town Clerk's Office	429 18 9	
	2. Sanitary	4,038 6 4	
	3. Lighting...	349 8 1	
	4. Markets	148 3 3	
	5. Slaughter House	43 14 6	
	6. Pounds	11 12 9	
	7. Roads	272 0 7	
	8. Extraordinary Works and Expenditure	1,432 16 0	
	Total Expenditure...	6,726 0 3	
	Revenue Refunded	64 3 9	
	Advances	194 1 10	
	Deposits Repaid	17 18 5	
	Fixed Deposits	700 0 0	
			7,702 4 3
	Balance :—		
	In Town Clerk's Chest	52 6 4	
			52 6 4
		£	7,754 10 7

Details of Revenue.	Approved Estimate, 1910.		Estimates, 1911.	
	£ s. d.	£ s. d.	£ s. d.	£ s. d.
1. LICENCES.				
Spirit	2,500 0 0		[a] 2,500 0 0	
Auctioneers...	29 0 0		45 0 0	
Wine and Beer	38 0 0		25 0 0	
Dog	36 0 0		30 0 0	
Hawkers	23 0 0		30 0 0	
Total Licences	...	2,626 0 0	...	2,630 0 0
2. TAXES.				
House Rates	1,080 0 0		[b] 1,000 0 0	
Wheel Rates	500 0 0		530 0 0	
Total Taxes	...	1,580 0 0	...	1,530 0 0
3. FEES.				
Slaughter House	240 0 0		[c] 280 0 0	
Market Dues	200 0 0		200 0 0	
Pound	100 0 0		50 0 0	
Penalties on Prosecutions	150 0 0		200 0 0	
Total Fees	...	690 0 0	...	730 0 0
4. RE-IMBURSEMENTS.				
Refund of Scavenging and Lighting Government Bungalows, and Clearing Government Land	1,000 0 0			
Latrine Services	...		480 0 0	
Scavenging	...		60 0 0	
Lighting	...		50 0 0	
Clearing Land	...		440 0 0	
Total re-imbursements ...	...	1,000 0 0	...	1,030 0 0
5. INTEREST.				
On deposit in Bank of British West Africa, Ltd.	30 0 0		[d] 20 0 0	
Total Interest...	...	30 0 0	...	20 0 0
6. MISCELLANEOUS.				
Sale of Water	15 0 0		[e] 5 0 0	
Sale of Stock	20 0 0		10 0 0	
Payments for Clearing Private Latrines	—		[e] 45 0 0	
Total Miscellaneous	...	35 0 0	...	60 0 0
Government Grant in Aid... ...	—		1,000 0 0	
	...		...	1,000 0 0
RECAPITULATION.				
1. Licences (Spirits, Beer and Wine, Auctioneers, Dog, Hawkers)	2,626 0 0		2,630 0 0	
2. Taxes (House Rates, Wheel Tax)	1,580 0 0		1,530 0 0	
3. Fees	690 0 0		730 0 0	
4. Re-imbursements	1,000 0 0		1,030 0 0	
5. Interest	30 0 0		20 0 0	
6. Miscellaneous	35 0 0		60 0 0	
7. Grant in Aid from the Government	—		1,000 0 0	
		5,691 0 0		
Total	...		...	7,000 0 0

TOWN COUNCIL, 1911.

Increase.	Explanation.	Decrease.
£ s. d.		£ s. d.
...	I. LICENCES.	...
16 0 0	[a] Based on receipts for 1910. An increased fee will be charged, but it is expected that fewer licences will be taken out.	...
...		13 0 0
...	Increase £23 0 0	6 0 0
7 0 0	Decrease 19 0 0	...
23 0 0	Net Increase ... £4 0 0	19 0 0
...	II. TAXES.	
30 0 0	Based on receipts for 1910; many houses demolished.	80 0 0
	Decrease £80 0 0	...
	Increase 30 0 0	
30 0 0	Net Decrease ... £50 0 0	80 0 0
	III. FEES.	
40 0 0		...
50 0 0	[c] Based on Receipts for 1910.	...
...		50 0 0
...	Increase £90 0 0	...
	Decrease 50 0 0	
90 0 0	Net Increase ... £40 0 0	50 0 0
	IV. RE-IMBURSEMENTS.	
	Increase £30 10 0	
...		...
	V. INTEREST.	
	[d] Based on receipts for 1910.	
...	Net Decrease ... £10 0 0	10 0 0
...		10 0 0
	VI. MISCELLANEOUS.	
...	[e] Based on receipts for 1910.	10 0 0
...	[f] do.	10 0 0
45 0 0	[g] Omitted from 1910 estimates.	...
5 0 0	Net Increase ... £25 0 0	20 0 0
		1,000 0 0
	RECAPITULATION.	
4 0 0		
...		
40 0 0		
30 0 0		
25 0 0		
...		
1,000 0 0	Increase ... £1,099 0 0	
	Decrease ... 60 0 0	
1,099 0 0	Net Increase ... £1,039 0 0	60 0 0

Details of Expenditure.	Approved Estimate, 1910.		Estimate, 1911.	
	£ s. d.	£ s. d.	£ s. d.	£ s. d.
1. TOWN CLERK'S OFFICE.				
(*a*) Personal Emoluments.				
Town Clerk (£150 to £170 by £5 p.a.)	160 0 0		[a]100 0 0	
Chief Clerk and Storekeeper (£50 to £60 by £5 per annum) ...	60 0 0		[b]—	
Chief Assistant Clerk	—		[c]50 0 0	
2 Assistant Clerks (£36 to £48 by £4 p.a.)	80 0 0		73 0 0	
Auditor	15 15 0		[d]36 0 0	
Bailiff	48 0 0		48 0 0	
Messenger	12 0 0		12 0 0	
Total Personal Emoluments ...	...	375 15 0	...	319 0 0
(*b*) Other Charges.				
Printing and Stationery	50 0 0		[e]60 0 0	
Contingent Expenses	5 0 0		[f] 7 10 0	
Court Fees	50 0 0		[g]40 0 0	
Bank Commission on Cheques drawn ...	7 10 0		[h] 8 0 0	
Total Other Charges		112 10 0		115 10 0
Total Town Clerk's Office ...	...	488 5 0	...	434 10 0
2. SANITARY.				
(*a*) Personal Emoluments.				
Health Officer	50 0 0		50 0 0	
Medical attendance on Council's employees	20 0 0		20 0 0	
Municipal Inspector	254 0 1		[a] 300 0 0	
Assist. Municipal Inspector @ (£250 to £300 by £10 per annum) ...	—		[b]125 0 0	
Chief Inspector of Nuisances	150 0 0		[c]—	
Personal Allowance to	15 0 0			
Chief Sanitary Inspector @ £100 to £120 by £5 per annum ...	—		[d]101 5 0	
1 1st class Insp. (£60 to £72 by £4 p.a.)	64 0 0		—	
4 1st class Insp. (£60 to £80 by £5 p.a.)	—		[e]245 0 0	
1 2nd class Inspector @ (£48 to £60 by £4 per annum)	49 6 8		[f]49 0 0	
3 3rd class Inspectors @ (£36 to £48 by £4 per annum)	150 6 8		[g]116 0 0	
Storekeeper	—		[h]52 1 9	
Carpenter	36 0 0		36 0 0	
Total Personal Emoluments ...	...	788 13 5	...	1,094 6 9
Carried forward ...	...	...	...	1,094 6 9

TOWN COUNCIL, 1911—*continued.*

Increase. £ s. d.	Explanation.	Decrease. £ s. d.
	1. MUNICIPAL OFFICE.	
...	[a] New Town Clerk appointed 3rd November, 1910.	60 0 0
...	[b] New Head Clerk and Storekeeper—under Sanitary.	60 0 0
33 0 0	[c] K. Norman promoted as Chief Assistant Clerk at £50 to £60 per annum from 1st January, 1911.	
9 5 0	[d] Auditor's remuneration increased by Resolution of Council.	
10 0 0	[e] Considered necessary: based on expenditure in 1910.	
2 10 0	[f] do.	
...	[g] Based on Expenditure for 1910.	10 0 0
...	[h] Considered necessary: based on expenditure in 1910.	
	Decrease £130 0 0	
	Increase 55 0 0	
	Net Decrease ... £75 0 0	
54 15 0		130 0 0
	2. SANITARY.	
45 10 11	[a] Increased to £300 per annum from 1st June 1911, by Resolution of Council.	48 15 0
125 0 0	To be appointed: Service to be at the disposal of Accra and Seccondee Town Councils alternately for relief purposes.	15 0 0
...	[c] Change in holder of Office.	0 6 8
101 5 0	Annual Increment from 1st October, 1911.	34 6 8
181 0 0	[e] 3 additional 1st Class Inspectors appointed. Annual Increment from 1st October, 1911.	...
...	[f] Change in holder of Office.	...
...	[g] " " "	...
52 1 8	[h] Transferred from Town Council Office. Increment 1st August, 1911.	...

Details of Expenditure.	Approved Estimates, 1910.		Estimates, 1911.	
	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Brought forward		788 13 5		1,094 6 9
2. SANITARY—*continued.*				
(*b*) OTHER CHARGES.				
1 Transport (Local)	132 0 0		[c] 156 0 0	
Passages to and from Europe	42 15 0		66 7 0	
Passages and Headmoney of Krooboys ...	147 0 0		[k] 425 0 0	
To Headman for Krooboys and passage of Headman	—		[l] 15 0 0	
Rations for Krooboys	483 0 0		[m] 500 0 0	
House Rent	18 0 0		[n] 48 0 0	
	...		...	1,210 7 0
CLEANING DUST BINS AND LATRINES:—				
Accra, Victoriaborg, & Christiansborg. Mules, Drivers, etc.				
12 Drivers : 9 @ £22 16s. 1d. p.a. 3 @ £27 7s. 6d. per annum	108 0 0		[o] 277 7 3	
9 Grass cutters @ £18 5s. per annum ...	108 0 0		[p] 164 5 0	
Fodder for Mules @ £12 per annum ...	96 0 0		[q] 144 0 0	
Inspector for care of Mules @ £12 p.a. ...	—		[r] 12 0 0	
Repairs and Contingencies	30 0 0		[s] 15 0 0	
Veterinary Medicines	6 5 0		3 0 0	
	...		...	615 12 3
LATRINES.				
Headman @ £18 per annum	18 0 0		[t] 20 10 0	
30 Latrine men	396 7 10		[u] —	
40 Latrine men @ £15 per annum ...	—		[v] 600 0 0	
Upkeep of Latrines	30 0 0		—	
	...		...	620 10 0
DUST BINS.				
1 Headman @ £18 per annum	—		18 0 0	
38 Boys @ 18/- per month	410 0 0		—	
24 Boys @ £15 per annum	—		[x] 360 0 0	
	...		...	378 0 0
SCAVENGING :—				
Accra No. 1 (1 headman and 10 boys) ...	—		130 0 0	
Accra No. 2 „ „ ...	261 0 0		130 0 0	
Bungalows „ „ ...	87 0 0		60 0 0	
Christiansborg „ „ ...	72 12 0		72 12 0	
Cleaning Lands	300 0 0		[y] 545 0 0	
Mosquito Brigade	120 0 0		[z] 96 0 0	
Uniforms	25 0 0		25 0 0	
Disinfectants, etc....	100 0 0		100 0 0	
Total Other Charges	...	964 12 0	...	1,158 12 0
Total Sanitary	...	3,780 0 11	...	5,077 8 0

TOWN COUNCIL, 1911—*continued.*

Increase.			Explanation.	Decrease.		
			2. SANITARY—*continued.*			
£	s.	d.		£	s.	d.
24	0	0	[i] M.I. £36 p.a.; C.S.I.T.C. Bailiff Asst. Clerk @ £12 p.a.; 8 Inspectors @ £9.	...		
23	12	0	[j] Passage to England and out of M.I., passage one way of Asst. M.I.	...		
277	4	0	[k] Passage and Headmoney each way of 100 to 130 Krooboys @ 35/2 each out, and 16/6 homeward;	...		
15	0	0	[l] No allowance made in Estimates of 1910. Headman's passage £3 6s. 0d: grant to headman of 2/- a boy.	...		
16	15	0	[m] Rations Rice @ 6/6 a bag for 184 Krooboys: underestimated in 1910. No of Krooboys to be increased.	...		
30	0	0	[n] Underestimated in 1910. Rent of Municipal Inspector's quarters at £48 p.a.	...		
169	7	3	[o] Increase of 6 Drivers.	...		
56	5	0	[p] Increase of 3 Grass Cutters.	...		
48	0	0	[q] Increase of 4 Mules.	...		
12	0	0	[r] Considered necessary (Salary to Yard Keeper).	...		
...			[s] Considered sufficient.	...		
...			[t] Some medicines in stock.	3	0	5
2	10	0	[u] Contract made with headman in May, 1910, for £24 per annum.	...		
204	0	0	[v] Increase of 10 latrine men: considered necessary	...		
...			[w] Included under head, works.	32	0	0
...			[x] Reduction of 14 boys. Four extra mules employed.	...		
...			Remanagement of Gangs.	27	0	0
245	0	0	Refunded in part by Government.			
...			[z] 8 Krooboys at £12 p.a. 2 Boys with each 1st Class Inspector.	... 24	0	0
...			Net Increase £1,246 7 1	...		

Details of Expenditure.	Approved Estimate, 1910.		Estimate, 1911.	
	£ s. d.	£ s. d.	£ s. d.	£ s. d.
3. LIGHTING.				
(*a*) PERSONAL EMOLUMENTS.				
14 Lamp Lighters at £15 per annum 1 „ „ „ £3 ...	198 0 0		[a]213 0 0	
Total Personal Emoluments ...	...	198 0 0	...	213 0 0
(*b*) OTHER CHARGES.				
Kerosene oil	250 0 0		250 0 0	
Repairs	60 0 0		40 0 0	
Total Other Charges	...	310 0 0	...	290 0 0
Total Lighting	...	508 0 0	..	503 0 0
4. MARKETS.				
(*a*) PERSONAL EMOLUMENTS.				
Clerk, Salaga Market (£36 to £48 by £4) per annum	40 0 0		[a]38 0 0	
4 Sweepers...	36 0 0		36 0 0	
Ration for Market Sweepers	15 0 0		[b] —	
Total Personal Emoluments... ...	...	91 0 0	...	74 0 0
(*b*) OTHER CHARGES.				
Maintenance (with tanks)	60 0 0		60 0 0	
Total Other Charges...	...	60 0 0	...	60 0 0
Total Markets	...	151 0 0	...	134 0 0
5. SLAUGHTER HOUSE.				
(*a*) PERSONAL EMOLUMENTS.				
Slaughter House Keeper (£36 to £48 p.a.)	40 0 0		[a]44 0 0	
Total Personal Emoluments... ...	...	40 0 0	...	44 0 0
(*b*) OTHER CHARGES.				
Maintenance	5 0 0		[b]5 0 0	
Total Other Charges...	...	5 0 0	...	5 0 0
Total Slaughter House... ...	...	45 0 0	...	49 0 0
6. POUNDS.				
(*b*) OTHER CHARGES.				
Upkeep of Pounds	5 0 0		[a]5 0 0	
Feeding Expenses...	25 0 0		[b]6 0 0	
Catching Fees	25 0 0		[c]6 0 0	
Total Other Charges...		55 0 0	...	17 0 0
Total Pounds.		55 0 0	...	17 0 0
7. ROADS.				
(*b*) OTHER CHARGES.				
Maintenance of Roads	100 0 0		[a]...	
Total Other Charges	...	100 0 0	...	...
Total Roads	...	100 0 0	...	...

TOWN COUNCIL, 1911—*continued.*

Increase.	Explanation.	Decrease.
£ s. d.	3. LIGHTING.	£ s. d.
15 0 0	[a] 1 Additional lamp lighter necessary in 1911.	...
	Considered sufficient.	20 0 0
	Decrease ... £20 0 0 Increase ... 15 0 0	
30 0 0	Net Decrease... £5 0 0	20 0 0
	4. MARKETS.	
...	[a] Change in holder of Office: Increment from 1st June, 1910.	2 0 0
...	[b] Included under Sanitary, Other Charges.	...
	Net Decrease ... £3 0 0	
...		2 0 0
	5. SLAUGHTER HOUSE.	
4 0 0	[a] Increment from 1st January, 1911.	...
	Net Increase ... £4 0 0	
4 0 0		...
	6. POUNDS.	
...	[a] Based on Expenditure in 1911.	19 0 0
...	[b] " " "	19 0 0
...	[c] " " "	...
	Net Decrease ... £38 0 0	38 0 0
...		
	7. ROADS.	
...	[a] Construction and Maintenance of Roads transferred to Public Works Department.	100 0 0
	Net Decrease... ... £100 0 0	100 0 0
...		

Details of Expenditure.	Approved Estimate, 1910.		Estimate, 1911.	
8. EXTRAORDINARY & WORKS EXPENDITURE.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
New Carts, Mules and Harness	140 0 0		[a] 120 0 0	
Chaff Cutting, Corn Crushing Machine ...	—		[b] 15 0 0	
Street Water Cart	120 0 0		—	
Latrine Drums	25 0 0		[c] 50 0 0	
Re-building London Market	230 0 0		—	
Improvements to Salaga Market... ...	250 0 0		—	
New Street Lamps—Reservoirs and Accessories	105 0 0		60 0 0	
New Latrines and Repairs	400 0 0		50 0 0	
Destructors	120 0 0		20 0 0	
New Dust Bins	200 0 0		20 0 0	
Wind Engine and Tank	—		—	
Erection of same	—		—	
Total Extraordinary Works and Expenditure	...	1,590 0 0	...	335 0 0
RECAPITULATION.				
1. Town Clerk's Office	488 5 0		434 10 0	
2. Sanitary	3,780 0 11		5,076 8 0	
3. Lighting	508 0 0		503 0 0	
4. Markets	151 0 0		134 0 0	
5. Slaughter House	45 0 0		49 0 0	
6. Pounds	55 0 0		17 0 0	
7. Roads	100 0 0		—	
8. Works	1,590 0 0		[a] 335 0 0	
Total Expenditure	...	6,717 5 11	...	6,549 8 0

TOWN COUNCIL, 1911—*continued.*

Increase.	Explanation.	Decrease.
£ s. d.	8. EXTRAORDINARY & WORKS EXPENDITURE.	£ s. d.
...	[a] 1 Horse or Mule £50, 4 Carts £108, 6 Collars £4, 12 Nose bags £3.	...
...	[b] Considered necessary.	...
...		...
200 0 0	[c] Latrine Drums required: for renewals of new latrines.	...
...		...
...		...
...		...
...		...
...		...
...	(Supplementary estimates to be taken later.)	...
...		...
...		...
...		...
...	[a] A Supplementary vote to be taken.	...

ESTIMATED REVENUE AND EXPENDITURE

Heads of Revenue.	Actual Revenue 1910.			Totals 1910.			Estimated for 1911.			Totals 1911.		
	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.
LICENSES.												
Spirit	730	0	0				730	0	0			
Wine and Beer ...	20	0	0				20	0	0			
Auctioneers'	10	0	0				10	0	0			
Dog	23	5	0				25	0	0			
				783	5	0				785	0	0
RATES AND TAXES.												
House Rates	824	2	2				600	0	0			
Wheel do.	66	10	0				70	0	0			
				890	12	2				670	0	0
FEES.												
Slaughter House Dues...	64	3	0				64	0	0			
Market Table do. ...	8	17	6				8	0	0			
Pound Fees		12	0				1	0	0			
				73	12	6				73	0	0
MISCELLANEOUS.												
Receipts not provided for	67	2	6				60	0	0			
Sanitation	300	0	0				300	0	0			
Court Fines	66	17	6				50	0	0			
Lighting	16	18	7				16	0	0			
Fines on Scavengers ...	7	13	1				6	0	0			
				458	11	8				432	0	0
Grant-in-aid to Cape Coast Town Council as provided for in Estimates for 1911	—	—	—	—	—	—	—	—	—	1,000	0	0
Balance Bank 1910	—	—	—	—	—	—	—	—	—	206	2	2
				2,206	1	4				3,166	2	2

FOR CAPE COAST TOWN COUNCIL, 1911.

Heads of Expenditure.	Actual Expenditure 1910. £	s.	d.	Totals 1910. £	s.	d.	Estimated for 1911. £	s.	d.	Totals 1911. £	s.	d.
BANK CHARGES.	3	14	10				4	0	0			
				3	14	10				4	0	0
LIGHTING DEPARTMENT.												
Wages, Lamplighters, etc.	77	8	0				78	0	0			
Purchase of Kerosine ...	117	10	0				118	0	0			
New Lamps and Repairs		—					150	0	0			
Contingent Expenses ...	2	19	7				5	0	0			
				197	17	7				351	0	0
OFFICE EXPENSES.												
Stationery	6	15	11				20	0	0			
Auditor's Fees	15	15	0				25	4	0			
Wheel Badges	4	6	8				5	0	0			
Petty Office Expenses ...		15	0					10	0			
				27	12	7				50	14	0
TOWN CLERK'S OFFICE.												
Personal Emoluments ...	213	15	8				182	0	0			
				213	15	8				182	0	0
SANITATION.												
Personal Emoluments ...	287	5	0				298	0	0			
Wages, extra Inspectors	12	5	9				36	0	0			
Scavengers and Labourers	1,017	9	9				1,440	0	0			
Upkeep of Latrines ...	19	16	6				10	0	0			
Passage Krooboys ...	12	3	6					—				
Prison Labour	253	12	6				300	0	0			
Latrine Drums ...	58	8	7					—				
Clothing for Staff ...	5	7	3				6	0	0			
Purchase of Carts ...		—					70	0	0			
Erection of New Latrines	28	9	8				30	0	0			
Erection of two Refuse Destructors ...		—					100	0	0			
Dustbins, tools, &c. ...	8	18	1				56	0	0			
				1,703	16	7				2,346	0	0
SLAUGHTER HOUSE.												
Wages to S. House Clerk	24	0	0				24	0	0			
Repairs to S. House ...	2	15	7					—				
				26	15	7				24	0	0
MISCELLANEOUS.												
Impounding Cattle, feeding of ...	1	6	2				1	10	0			
				1	6	2				1	10	0
				2,174	19	0				2,959	4	0

(Signed) J. E. SAMPSON,
Town Clerk.

(Signed) J. C. ADAMS,
President.

SEKONDI

ESTIMATES OF REVENUE

Revenue.	Estimates, 1910.	Estimates, 1911.
1. LICENSES.		
	£ s. d.	£ s. d.
Spirit	950 0 0	1,115 0 0
Auctioneers	10 0 0	30 0 0
Hawkers	*10 0 0*	10 0 0
Dog	6 5 0	5 0 0
Wine and Beer	10 0 0	2 0 0
Total Licenses	£986 5 0	£1,162 0 0

TOWN COUNCIL.
AND EXPENDITURE FOR 1911.

		Increase.	Decrease.
		£ s. d.	£ s. d
Duties of Spirit Licenses to be increased during 1911 by resolution of Council dated 15th September, 1910, by following additional duties :—		165 0 0	—
	£ s. d.		
For consumption on premises—½ yearly ...	2 10 0		
„ „ yearly ...	5 0 0		
Not for consumption on premises—½ yearly	10 0 0		
For quantities of gallon and over—yearly...	20 0 0		
During half-year ending 31st December, 1910, there were 26 "On Licences" at £20 each.			
Estimated for 1911—20 Licences at £25 ...	500 0 0		
Three Hotels at £20, *estimate* 3 at £25 ...	75 0 0		
Twenty-one Merchants' Licences :			
Millers' Ltd. at £20, 1910— *Estimate*, 1 at £40, 2 at £25 ...	90 0 0		
F. W. Rust, 2 at £20 in 1910— *Estimate*, 1 at £40, 1 at £25 ...	65 0 0		
African Association, 3 at £20— *Estimate*, 1 at £40, 2 at £25 ...	90 0 0		
Russell's, 3 as £20— *Estimate*, 1 at £40, 2 at £25 ...	90 0 0		
Swanzy Ltd., 3 at £20— *Estimate*, 1 at £40, 2 at £25 ...	90 0 0		
Fischer, 2 at £20— *Estimate*, 2 at £25	50 0 0		
Pickering & Berthoud, 3 at £25— *Estimate*, 1 at £40, 1 at £25 ...	65 0 0		
	£1,115 0 0		
Based on Receipts for 1910		20 0 0	—
„ „ „		—	1 5 0
„ „ „		—	8 0 0
		£185 0 0	£9 5 0

ESTIMATES OF REVENUE

Revenue.	Estimates, 1910.	Estimates, 1911.
2. TAXES.		
	£ s. d.	£ s. d.
House Rate	1,015 0 0	*1,190 0 0* [a]
Wheel Tax	50 0 0	45 0 0
Total Taxes	1,065 0 0	*1,235 0 0*
3. FEES.		
Slaughter House	60 0 0	50 0 0
Market Dues	48 0 0	40 0 0
Pound	25 0 0	10 0 0
Penalties on Prosecutions	125 0 0	150 0 0
Total Fees	258 0 0	250 0 0
4. MISCELLANEOUS.		
Government and other rents	616 0 0	541 6 0
Government grant-in-aid	—	1,000 0 0 [1]
Grant for clearing Government Lands	—	450 0 0 [2]
Total Miscellaneous	616 0 0	1,991 6 0
SUMMARY.		
(1) Licences	976 5 0	1,162 0 0
(2) Taxes	1,065 0 0	*1,235 0 0*
(3) Fees	258 0 0	250 0 0
(4) Miscellaneous	616 0 0	1,991 6 0
Grand Total	£2,915 5 0	*£4,638 6 0*

TOWN COUNCIL.

AND EXPENDITURE FOR 1911—*continued.*

		Increase.	Decrease.
		£ s. d.	£ s. d.
Based on new Assessment		*175 0 0*	—
Old Assessment £20,354 6*s.* 0*d.*			
New Assessment (subject to appeals):—	£ s. d.		
Commercial Town	*9,301 0 0*		
Accra „	*7,443 0 0*		
Lagos „	*3,217 4 0*		
Hausa „	*555 0 0*		
Essikado „	*3,845 12 0*		
			24,361 16 0
DEDUCT—Hausa Town to be removed			*555 0 0*
			23,806 16 0
* 5 per cent. rate on *£23,806 16s. 0d.*			
Based on Receipts for 1910			5 0 0
		175 0 0	5 0 0
Based on Receipts for 1910		—	10 0 0
„ „ „		—	8 0 0
„ „ „		—	15 0 0
„ „ „		25 0 0	—
		25 0 0	33 0 0
Overestimated in 1910		—	74 14 0
Revenue derived from Government Leases	470 0 0	1,000 0 0	—
„ „ Municipal Plots ...	71 6 0	450 0 0	—
	£541 6 0	£1,450 0 0	£74 14 0

Colonial Estimates, 1911, page 80.
Not included in Council's Estimates for 1910.
Grant increased from £300 to £450.

Expenditure.	Estimates 1910. £ s. d.	Estimates 1911. £ s. d.	
1. TOWN CLERK'S OFFICE.			
(a) Personal Emoluments.			
Town Clerk (£120–£150 by £5 p.a.)	150 0 0	127 7 0	Change of Holder—Provision for Increment.
Assistant Clerk (£25)		25 0 0	
Auditor	15 15 0	15 15 0	
		168 2 0	
(b) Other Charges.			
Rent of Offices at £12 a month ...	144 0 0	204 0 0	Provision for five months' arrears in 1910.
Stationery and Printing		12 0 0	
Bank Commission		5 0 0	
Total Town Clerk's Office		389 2 0	
2. SANITARY.			
(2) Personal Emoluments.			
Health Officer	50 0 0	—	Not required—Provision made in Colonial Estimates.
Municipal Inspector (£275 to £300 by £25)	275 0 0	300 0 0	Increment
Acting Municipal Inspector at £12 a month		6 0 0	Provision for half a month.
Assistant Municipal Inspector (£250 to £300)		41 13 4	Provision for two months' salary. To assume duty at Accra in June, 1911. Available at Seccondee in November.
Sanitary Inspector (£72 to £75 p.a.)		75 0 0	Provision for Increment.
3 Assistant Sanitary Inspectors (at £36 p.a. each)		108 0 0	
1 Slaughter House and Market Keeper (at £36 p.a.)		36 0 0	
1 Timekeeper (at £48 p.a.) ...		48 0 0	
		614 13 4	
(b) Other Charges.			
Transport		73 0 0	For Municipal Inspector four Hammocksmen at 1/- a day for 365 days.
Passages		28 12 0	Return passage of Municipal Inspector in January.
Scavenging.			
3 Headmen at 1/9 a day for 365 days		95 16 3	
3 ,, 1/6 ,, ,,		82 2 6	
50 Labourers 1/- ,, ,,		912 10 0	
Carried forward		1,806 14 1	

TOWN COUNCIL.

AND EXPENDITURE FOR 1911—*continued.*

Expenditure.	Estimates 1910. £ s. d.	Estimates 1911. £ s. d.	
Brought forward ...		1,806 14 1	
2. SANITARY (other charges)—*continued.*			
MOSQUITO BRIGADES.			
1 Headman at 1/6 a day for 365 days		27 7 6	
8 Labourers „ 1/- „ „		146 0 0	
3 Headmen „ 1/9 „ „		95 16 3	
20 Labourers 1/- „ „		365 0 0	
3 Headmen at 30/- a month each and 6d. a day subsistence for 365 days		81 7 6	Provided by Transport Department.
18 Labourers at 25/- a month and 3d. a day subsistence for 365 days		352 2 6	
Uniforms for Six Sanitary Inspectors		13 13 0	2 each at £1 16/- for two and 9/6 helmet.
IMPLEMENTS.			
Dustcarts		36 0 0	6 at estimated cost of £6 each.
Dustbins		60 0 0	10 „ „ „
Disinfectants		53 0 0	15 drums carbolicene £20, 5 drums carbolic £6, 20 drums Izal £27.
Tools		25 0 0	
2 Beehives Destructors at Essikado (at £13)		26 0 0	
LATRINES.			
10 Pit Latrines at Essikado at £10 each...		100 0 0	
100 Latrine Drums		30 0 0	
Repairs to Latrine Houses ...		30 0 0	
Prison Labour for Latrine Service		83 0 0	8 Prisoners at 6d. a day for 365 days and one month's arrears in 1910.
Total Sanitary		3,331 0 10	
3. LIGHTING		88 16 0	By Contract at £7 8/- a month (4/- a lamp per month).
Contingencies		11 4 0	Provision for repairs, new lamps, etc.
Total Lighting		£100 0 0	

SEKONDI TOWN COUNCIL.

ESTIMATES OF REVENUE AND EXPENDITURE FOR 1911.

Expenditure.	Estimates 1910.	Estimates 1911.	
	£ s. d.	£ s. d.	
4. REFUSE DESTRUCTOR.			
1 Fitter at 4/- a day for 365 days		*73 0 0*	
1 Fireman at 1/3 a day for 365 days		22 16 0	
Firewood		64 1 0	Contract, 122 cords at 10/6 each.
Repairs and Inspection		30 0 0	
		189 17 0	
5. MISCELLANEOUS EXPENDITURE.			
Roads	78 0 0		Taken over by P.W.D. Col. Secretary's letter No. 93/1910, of 14th September, 1910.
Appraiser's Fee for Sextennial Appraisement, 1910 (½ % on total amount of appraisement) ...		121 16 2	Resolution of Council dated 15th Sept., 1910.
Drains		—	Taken over by P.W. Department.
Market Shed repairs		10 0 0	
Clearing Government Lands ...		450 0 0	
Clayton Machine Maintenance ...		20 0 0	
Slaughter House (repairs)		20 0 0	
Repairs to Quarters		10 0 0	
Wells (upkeep)		20 0 0	
		651 16 2	
SUMMARY.			
(1) Town Clerk's Office		389 2 0	
(2) Sanitary		3,331 0 10	
(3) Lighting		100 0 0	
(4) Refuse Destructor		*189 17 6*	
(5) Miscellaneous		651 16 2	
Grand Total		*4,661 16 6*	
			Amendment shown in italics adopted by Town Council at a meeting held on the 10th April, 1910.
NOTE :—Balance at Bank on 1st January, 1911		20 8 2	

Extracts from the Annual Report of the Medical Officer of Health, Cape Coast :—

(I.) SITUATION.

1. Cape Coast is situated on the Gulf of Guinea some 5° north of the Equator, facing S.S.E.

(II.) AREA.

2. The municipal area, which is very nearly rectangular in shape, occupies some $2\frac{1}{2}$ square miles. It extends some $3\frac{1}{2}$ miles along the coast, and inland an average of $\frac{3}{4}$ mile. Some $\frac{1}{2}$ square mile of this is more or less densely covered with houses, some $\frac{1}{5}$ square mile is occupied by a lagoon, whilst the remainder is chiefly bush, with a few houses here and there. There are, in addition, the small village of Sudu on the Jukwa Road, near the northern municipal boundary, and a few groups of huts unnamed on the Ordinance Map of 1907. (See Appendix A.)

(III.) PHYSICAL FEATURES.

3. Practically the whole municipal area is covered with many low steep hills; and that portion which is most densely populated has its houses packed along the valleys and lesser slopes—in a few cases the houses extend nearly or quite to the tops of the steeper slopes. On the other hand, a noticeable feature of Cape Coast, when viewed from almost any of the heights, is the considerable number of hills which have buildings of one sort or another on their levelled tops, whilst their slopes are quite bare; most of these are outside the more densely populated portion of the town. The Lighthouse (an old fort) and Fort Victoria (another old fort, now falling to ruins) form prominent objects in the general view of Cape Coast, whilst a striking feature of the panorama is the equality in altitude of many of the more prominent hills. The majority are some 80 to 120 feet in height.

(IV.) POPULATION.

4. The Census of 1911 gave the native population of Cape Coast as 11,269; in 1901 it was 28,948.

5. In 1901 allowance was made for probable errors; in 1911 none such was made. These two figures are, therefore, not strictly comparable. Cape Coast was in its zenith towards the close of the nineteenth century, and there is no doubt that the population has much diminished. The number of ruins in the town (see Section XXI.) alone bears this out. One meets with a great many cases where members of families have left Cape Coast to earn their livelihood. Merchants complain of loss of trade.

* * * * *

15. The European population on the 31st of December, 1911, was :—

Males.	Females.	Total.
29	8	37

(V.) METEOROLOGICAL CONDITIONS.

16. The following table gives some of the records for the year and for the two previous years :—

	1911.	1910.	1909.
Average Maximum Shade Temperature	83·6	86·1	84·9
Average Minimum „ „	71·3	71·8	71·8
Average Dew Point	73·4	76·0	75·2
Average Relative Humidity	82·3	84·7	81·2
Total Rainfall	22·4	25·9	33·7
Total No. of days on which rain fell	43	61	69

17. The following table gives the monthly rainfall for the year and the two preceding years :—

	1911.	1910.	1909.
January	2·70	·65	2·33
February	·52	·32	1·63
March	2·77	·92	4·99
April	2·90	3·18	3·70
May	4·95	1·73	5·43
June	2·97	9·34	7·61
July	·97	4·86	·91
August	·12	1·70	·35
September	·16	1·12	·48
October	1·25	1·21	·61
November	2·85	·93	1·80
December	·20	·03	3·89

(Appendix C shows some of the Meteorological data graphically.)

(VI.) DEATHS.

18. There is no compulsory death notification, but in every case of burial in any cemetery, in or adjacent to the town, authority for such burial must first be obtained.

* * * * *

20. Placing the control of death registration—as far as it exists—under the Medical Officer of Health is likely to greatly assist the early detection of epidemics and fatal infectious diseases. In order that any unusual mortality or, as far as possible, any death of a suspicious nature may be known at the earliest possible moment, the Assistant Registrar of Deaths sends daily a report of registered deaths to the Medical Officer of Health. The report gives symptoms, duration of illness and other matters of importance. The Assis-

tant Registrar has instructions to make careful enquiries into symptoms; should such report indicate suspicion of any dangerous infectious disease—especially yellow fever or plague—further enquiries are made by the Medical Officer of Health. Five such enquiries were made in 1911, but the explanation in each case was satisfactory.

21. Such a system leaves much to be desired. . . . . As a scientific record of causes of deaths it is useless, but from a public health point of view, as an indication of an abnormal death rate at any time or in any particular district, it is of material value. I think it is very improbable that a serious fatal epidemic could progress in Cape Coast, beyond a few early deaths, without its being recognised by the Sanitary Authority.

* * * * *

23. The following table gives the registered deaths since 1895; "s" stands for Syrians :—

	Natives.		Europeans.		Total
	Male.	Female.	Male.	Female.	
1911	132	134	1	1	268
1910	154	173	—	—	327
1909	123	144	—	—	267
1908	139	119	1	—	259
1907	113	128	1	—	242
1906	120	135	—	—	255
1905	150	117	1s	—	268
1904	160	125	2	—	287
1903	237	160	7	—	404
1902	269	175	12	—	456
1901	304	197	22	1	524
1900	290	171	13	1 + 1s.	476
1899	178	139	7	—	324
1898	169	155	5 + 1s	1s	331
1897	121	142	10	—	273
1896	203	145	11	—	359
1895	117	106	14	—	237
Totals (17 years)	2,979	2,465	106 + 2s	3 + 2s	5,557

24. Appendix D gives the monthly mortality curve for the 17 years, 1895-1911. It shows very clearly the increase of mortality during the middle months of the year, with marked remissions during the late and early months.

25. Appendix E shows still more clearly that the months of May to August are the most fatal, that October to April are the least so, and that September is intermediate. . . . . .

26. The majority of natives do not know their exact ages, but in a town such as Cape Coast it is possible to arrive at a fairly correct solution, in most cases from historical associations, by comparison with the known age of some relative or otherwise. The Assistant Registrar has instructions to obtain all

ages as approximately as possible. Of the 268 deaths recorded in 1911, the recorded age distribution is as follows :—

	Male.	Female.	Total.
Under 1	16	12	28
1 to 5	22	20	42
5 „ 10	8	3	11
10 „ 15	4	5	9
15 „ 25	11	19	30
25 „ 35	9	18	27
35 „ 45	22	14	36
45 „ 55	13	13	26
55 „ 65	7	11	18
65 „ 75	15	12	27
75 „ 85	1	6	7
85 „ 95	3	3	6
Over 95	—	1	1
Totals	131	137	268

27. The woman over 95 years of age was stated to be over 100, as she remembered Macarthy's Expedition (1824). She was said to have been about 14 years old at the time—it is probably correct.

28. . . . . One notices the very small number of recorded deaths of infants. There is no birth registration, hence the number of births is not known, but common observation in the streets of Cape Coast makes it evident that a large number of women are pregnant. The cause is evidently not due to a low birth rate. On the other hand it is almost impossible to accept the theory that the infant mortality is low. The only remaining explanation is that deaths of infants are not registered. It is difficult to get definite evidence of deaths of infants when not registered; for, although registration is not compulsory and it is no offence to bury a body in the bush, provided the place is not " in any town or adjacent to it," yet it seems to be, according to native views, to some extent a reproach to lose an infant, whilst a quiet burial removes the necessity for funeral customs—always an expense—and of burial fees. There is also the idea, I understand, that the death of an infant is not of the same importance as that of an adult or even of an older child. Formerly it was the custom to bury within the house or its precincts. This is now a statutory offence, and although it seems unlikely that such a practice is at the present time carried out with regard to adults, I have reason to believe that it is still done in the case of infants.

29. In the case of children over five years of age and of adults, the table given in paragraph 26 is probably nearly a correct record of the deaths in Cape Coast during 1911. I believe that very few such bodies are removed without registration. As one would expect, there is a considerable number of deaths of women at the child-bearing ages.

30. It is impossible to get a reliable death-rate. The population is not definitely known (there are numerous fallacies in the census figures), nor is the number of deaths of those under five years of age.

31. Appendix F shows the age distribution per 1,000 deaths at ages above that of five years for England and Wales (1894-1905) and Cape Coast (1911). It tends to show that there is a greater proportion of deaths at

younger ages in Cape Coast than in England and Wales, *i.e.*, that longevity is greater in the latter countries than in Cape Coast.

* * * * *

32. Causes of deaths as entered in the Register are of little scientific value (para. 21). But it may be noted that "Consumption" is frequently given as a cause of death. That this is so, is borne out by the Medical Officer's statement for the third quarter of the year that "The number of cases of tuberculosis is quite remarkable."

33. The following appear most frequently in the Register of Deaths :—

"Consumption"	...	46 times.
"Diarrhœa or Dysentery"	...	45 ,,
"Pneumonia"	...	30 ,,

Each occurs during each month of the year—no special seasonal distribution can be made out. The number of deaths under the first two of these names in each district is shown in the map (Appendix G).

34. Appendix G is a rough map showing the distribution of deaths during 1911. The districts must necessarily be arbitrarily chosen, but the boundaries are suggested by some physical feature (altitude, valley, natural drain, etc.), or by density of population (*e.g.*, congested), or there may be some natural congregation of people through similarity of race or occupation. The divisions are more or less sanctioned by local usage and by convenience.

* * * * *

(VIII.) STAFF.

36. Dr. R. A. Savage was the part-time Medical Officer of Health until the 31st March. He had held the appointment since the 1st July, 1907. He is in practice in Cape Coast, and naturally could not devote his whole time to sanitary duties.

37. By the Town Council (Amendment) Ordinance (1911) the Medical Officer of Health is no longer appointed by the President of the Town Council. A full-time Medical Officer of Health is now appointed by the Government. Dr. J. E. Moffatt acted from the 1st April until Dr. F. J. A. Beringer arrived in the Colony on the 3rd of May.

38. A European Sanitary Inspector was for the first time appointed to Cape Coast, when Mr. J. Hutton arrived for duty on the 2nd of September.

* * * * *

43. During the latter part of the year two learners were paid for by Government out of the Yellow Fever Preventive Measures Vote. These will be taken over by the Town Council in 1912. In addition, a mechanic paid periodical visits to Cape Coast to test and to keep in order the fumigating Clayton machine.

44. During the earlier part of the year the Medical Officer of Health was not provided with any regular clerical assistance. The Slaughter House and Market Clerk rendered some help, but was not paid extra for such clerical work. He was definitely appointed as part-time Medical Officer of Health's clerk from the 16th of May. In 1912 he will become full-time Clerk, a new Slaughter House and Market Clerk being appointed.

(IX.) SCAVENGERS AND LABOURERS.

* * * * *

46. The following table gives the number of labourers employed, the total number of work days per month, and the daily average number of men working each month :—

	No. of Labourers (exclusive of latrine men).	No. of work days.	Average No. of Scavengers working per day.
January	71	2,058	66·4
February	64	1,611	57·5
March	72	1,500	48·4
April	72	1,843	61·4
May	73	1,793	58
June	84	1,973	65·6
July	100	2,327	75
August	87	2,436	78·5
September	102	2,365	78·8
October	87	2,511	81
November	92	2,623	87·4
December	92	2,442	79

47. In order to minimise fluctuations in numbers, and to avoid the difficulty there has been at times in obtaining even the minimum number of men required for scavenging it was decided to re-introduce—none had been employed since the end of November, 1909—Kroo labour under the Master and Servants' Ordinance. It was not intended to do away with day labour altogether, but it seemed desirable to have a definite, non-fluctuating and reliable nucleus of labourers.

* * * * *

(X.) QUALITY OF LABOUR.

* * * * *

57. Under the conditions of service at present existing the Sanitary Service does not attract the best class of men for inspectorships. This appears to be so in the Government as well as in the Local Service.

58. The senior Town Council Sanitary Inspector receives £95 per annum, and a bicycle allowance of £9 per annum—adequate pay, and as much as the Town Council can be expected to pay. Of the other four inspectors, three received £40, and the fourth £36 per annum. All are provided with uniform. As there was no provision for regular increments of pay—two of the junior inspectors had been in the service for over 7 years and were still only drawing £40 per annum—it is not to be wondered at that the quality of the inspectors left much to be desired.

59. The services of the two who were of the least use were dispensed with. The Town Council was advised that the prospects of the service must be bettered if more desirable candidates were to be attracted, if better work were to be done. The recommendation was made that the pay should be brought more in line with the pay of Government Inspectors.

* * * * *

It was decided to increase the pay of the four Junior Inspectors and to grade them as follows, increased pay to begin on the 1st January, 1912 :—

1	5th Grade Inspector at	£48	per annum—	J. B. Longdon.
1	„ „ „	£44	„ „	H. Insarku.
1	6th „ „	£40	„ „	K. Atkins.
1	„ „ „	£36	„ „	J. H. Neville.

It is very desirable that annual increments be continuous for each grade until the maximum of that grade is reached, subject, of course, to good service. This would bring the Local Service in line with the Government. I need here only refer to my strong conviction that all Sanitary Inspectors should ultimately be Government Inspectors.

* * * * *

61. To summarize, the Sanitary Staff at the end of the year consisted of :—

1	Medical Officer of Health ...	(Government).
1	European Sanitary Inspector	„
1	3rd Grade Sanitary Inspector	(Town Council).
1	5th „ „ „	(Government).
2	5th „ „ „	(Town Council).
2	6th „ „ „	„
2	Sanitary Learners	(Government).
1	Clayton Mechanic (part time)	„
1	M.O.H. Clerk „	(Town Council).
4	Sub-Inspectors	„
92	Scavengers and Labourers ...	„
32	Prisoners for Latrine Work	„
140		

* * * * *

(XII.) ADMINISTRATION.

* * * * *

68. Precise instructions, as simply and as dogmatically worded as possible, are now issued for the guidance of Inspectors on the more important points of practical sanitation as applied to Cape Coast. Every Inspector is required to have a book in which all such instructions are entered. New instructions are added from time to time as occasion arises. Ignorance was frequently alleged as an excuse when certain acts had been omitted or wrongly committed. With rules in their pockets, Inspectors find such excuses no longer tenable.

* * * * *

(XIII.) OFFICE ADMINISTRATION.

72. . . . . An enormous amount of time was wasted in making out forms, etc., in manuscript. All this has been altered. Practically all forms are now printed or otherwise multiplied (by cyclostyle, etc.).

* * * * *

76. . . . . Daily record books are kept by House and Roads Inspectors. The Clerk daily brings up-to-date most other matters that require to be recorded, so that the condition in regard to each matter may be seen at a

glance. Separate notebooks are used for the various subjects—there is little work connected with this—a few words daily, and the record is sufficient and efficient.

* * * * *

(XV.) FINANCIAL.

88. The following statement shows the expenditure under all heads that may, I think, be legitimately classed as sanitation :—

A. EXPENDITURE BY GOVERNMENT.

		£	s.	d.
(*i.*)	European M.O.H., European Sanitary Inspector, West Indian and Native Inspectors with allowances, but not expenditure incurred in journeys to and from Cape Coast (nor clothing for Inspectors)	788	9	0
(*ii.*)	Proportion of pay of Clayton Mechanic, say	19	8	1
(*iii.*)	Grant in aid to Town Council	1,000	0	0
(*iv.*)	Grant for clearing Government Lands... ...	300	0	0
(*v.*)	Plague Preventive Measures (rat destruction, etc.)	4	19	4
(*vi.*)	Yellow Fever Preventive Measures (2 learners, compensation for breaking down houses, building segregation hospital, disinfectants, printing, etc., etc.)	499	13	1
(*vii.*)	Sanitary Improvements (drains, etc., by P.W.D.)	1,428	11	3
(*viii.*)	Medical Officer of Health's Laboratory, say ... Microscope, *re* agents, etc., I have no exact record of the cost.	45	0	0
	Total ...	£4,086	0	9

B. EXPENDITURE BY TOWN COUNCIL.

		£	s.	d.
(*i.*)	Native M.O.H., Inspectors and Clerk (part time)	296	12	4
(*ii.*)	Scavengers and Labourers	1,303	19	5
(*iii.*)	Prison Labour	268	8	0
(*iv.*)	Latrines (including 1 new type, 36 pan latrines nearly finished)	169	2	5
(*v.*)	Refuse destructor, concrete	60	17	0
(*vi.*)	Carts	82	1	6
(*vii.*)	Dustbins (including 1 new type, concrete, nearly finished)	14	4	1
(*viii.*)	Tools, disinfectants, etc....	30	10	0
(*ix.*)	Clothing for staff	6	0	0
(*x.*)	Printing and Stationery (Sanitary Dept.) ...	19	7	0
		2,251	1	9
	Less Government Grants ...	1,300	0	0
	Total ...	£951	1	9

In addition, the Government spent money on the improvement of Cape Coast roads, and, of course, in salaries and allowances to the European and Native permanent staff of the Public Works Department. None of these items are included in the above expenditure (*a*) because they are not classified under the heading of sanitation; if they were included—at least those portions of Public Works Department salaries and allowances that would represent the time spent on the Sanitary Improvements of Cape Coast—the difference between the two expenditures (*a*) and (*b*) would be still more marked. It will thus be seen that the Government spent more than four times as much as the Town Council on sanitation! The grant-in-aid appears in the Government estimates under sanitation.

* * * * *

(XVIII.) CONGESTED AREAS.

97. Appendix A shows the congested areas of Cape Coast. In the more densely congested areas the hovels—the majority can be called little else—are placed without any relation whatever to one another: where there was room a house was built. It might touch a neighbouring house or it might not; it might block up a passage; it might intrude upon the yard of a neighbour; it might stop the ventilation of neighbouring houses or prevent the entrance of light; it might do anything. Only one question appeared to matter: Was there space for a room or two of any sort? If there was no space on the ground it was put on the top of another house!

98. The idea underlying this congestion is that a certain community have lived for many years within a given area. There the community must remain, however much its numbers increase; it cannot expand, as other communities surround it, and it will not emigrate. If a member has been abroad to earn a livelihood, when he returns he must live with his people, whether there is room for him or not.

99. One day the Acting Provincial Commissioner, a prominent native chief and I went to one of these congested areas. The question of compensation for breaking down houses in order to open up the area was discussed. The chief was asked if an individual were given, say, £10 for his house, whether he would go elsewhere to some less congested area, perhaps ten minutes' walk away, and build himself a new house. His reply was: No, he would rather live in one of the already overcrowded hovels with his own people! (*Re* work done in opening up certain districts, see paragraph 143.)

(XIX.) HOUSES.

100. The vast majority of houses in Cape Coast are badly planned; they are damp, dark and ill-ventilated. Some of the chief faults to be found are:—

(*a*) Ground floors below the surface level; some of the underground rooms in which human beings live are unfit for the meanest domestic animal;

(*b*) rooms too low, especially on the ground floor;

(*c*) rooms too small;

(*d*) rooms back to back, no through ventilation;

(*e*) too small openings—ill ventilated;

(*f*) rooms without direct ventilation into the open or even into some passage with through ventilation; this is one of the commonest causes of dark and damp rooms;

(*g*) adding innumerable lean-to outhouses, sheds, etc., and thus still further taking away light and air;

(*h*) damp, unpaved and undrained yards; and

(*i*) worst of all, and the crux of the whole matter, covering every available piece of the building plot, which is very rarely rectangular —it very frequently forms a sort of Chinese puzzle in its intricate ramifications amongst neighbouring plots—with structures of one sort or another, necessitated by the increase in the family. (Paragraph 98.)

101. If houses are badly built they are kept still worse. There is but one word for the majority—filthy. Some of the insanitary conditions most often found are :—

(*a*) keeping windows shut—closing ventilation openings with a bundle of rags or otherwise; the stench in some of the houses is terrible.

(*b*) keeping animals—goats, sheep, etc.—in close contact with kitchen, food, cooking utensils, next to sleeping rooms, etc.

(*c*) allowing dirty water to collect in yards, badly constructed drains, etc.

(*d*) keeping accumulations of decomposing rubbish—chiefly rags and old clothing—in dark, damp and ill-ventilated rooms, thus loading the atmosphere with a sickly stench that is bound to militate against good health.

102. I have little hesitation in saying that at least four-fifths of the people of Cape Coast sleep in rooms that are unfit for human habitation. This refers not only to the poorer classes, but also to those of a better class; there are very few of even the best class of houses in which one cannot find rooms, chiefly on the ground floor, which are occupied, but which are unfit to be used as sleeping rooms.

103. Advantage was taken of the Spirit License Ordinance to inspect all premises before licenses were granted. In the majority of cases some improvement was effected, chiefly in improving ventilation.

(XX.) BUILDING PERMITS.

104. There were records of 117 building permits in the Town Council Office on the 3rd of May, 1911. The first of these is dated 12th of January, 1907; that is, an average of 27·5 building permits per annum had been issued during the $4\frac{1}{4}$ years preceding the 3rd of May, 1911.

105. Of these 117 permits, 15 have plans that are sufficient to check the sanitary conditions of the proposed structures; the remaining 102 have either no plans or have so-called plans that are quite useless, as they consist for the most part of four lines forming a rectangle, which is supposed to represent the proposed building! Occasionally the plan is beautified by filling in the rectangle with a smear of red ink to indicate, one must suppose, which is house and which is not!

106. From the beginning of May, with one or two exceptions, no permit was accepted unless a plan was attached conforming with certain simple regulations (Appendix O). Later, when it was found that persons were expending money on plans which could not possibly be accepted on sanitary grounds, all applicants were advised, in the first instance, to consult the Medical Officer of Health in order to ascertain if the permit desired would be opposed on sanitary grounds. The Medical Officer of Health invariably went to the site of the proposed building, and so was often able to advise applicants to improve their present, or the plan of their proposed new, buildings.

107. The view was taken that it was in the interests of sanitation to enforce, with few exceptions, the taking out of permits for any kind of alteration or addition to any house, building, wall or fence.

* * * * *

109. As a result, from May to October (6 months) 37 permits were granted, only two of which had not at least working plans by which the new construction could be checked.

* * * * *

(XXI.) RUINOUS AND DANGEROUS HOUSES.

111. The following table gives the result of the year's work in this connection :—

Houses or parts thereof broken down by owners ... ... (In some of these cases owners only began demolition after Town Council labourers had been detailed for the work.)	128
Houses or parts broken down by Town Council	10
Building permits granted after notice to break down had been served ... ... (This number includes some which were also, in part, broken down.)	25
No action taken during the year, as notices had only been served a short time before the end of the year or for some other reason	175
	338

(But see also paragraph 116.)

112. These ruinous "houses or parts" may be divided into three classes :—

1. Old houses that have fallen into ruins on account of neglect. Such include houses in all stages of decay, from such as have merely their ceilings partly fallen in to such as are now only represented by an odd wall or two.

2. Occupied houses with one or more rooms in various stages of decay, as in 1, and consequently ruinous in parts.

3. Houses or parts that have never been completed, and that through similar neglect are in like decay. Some photographs are attached showing houses allowed to fall into ruins through sheer neglect : they are typical of Cape Coast.

113. With one exception, I think, no notice has been served to pull down a building or portion of a building in which building or portion thereof (where only a portion was declared ruinous or dangerous) any person was living. The one exception was a hovel unfit for human habitation.

114. Such "ruinous or dangerous houses" are insanitary because, amongst other reasons—

(*a*) they may become depositories for rubbish ;

(*b*) nuisances may be committed therein ;

(*c*) where ceilings leak, pools may form and mosquitoes may breed ;

(*d*) they unnecessarily increase and add to the difficulties of inspection.

115. But far and away the greatest good done in pulling down such houses, or parts of house, is the relief that is given to congested areas—it is the initial step in the most important sanitary problem of the moment in Cape Coast; every house, every room, every wall pulled down allows more fresh air and light to penetrate neighbouring rooms and houses; every demolition means less damp, fewer pathogenic organisms, less vermin, fewer flies, better health.

116. In addition to the numbers given in paragraph 111, other walls, etc., were pulled down with the consent of owners, notices not having been served—there is no record of these.

(XXII.) SANITARY SURVEY OF HOUSES.

117. During the assessment the European Sanitary Inspector, Mr. Hutton, went round with the Appraiser and made a short note of the sanitary condition of every house in Cape Coast; this should form the nucleus of a fuller system of sanitary records of all houses, etc., in which such details as prosecutions, etc., could be noted. This might be of assistance during an epidemic, special attention being paid to such houses as are notoriously insanitary.

(XXIII.) NAMING OF STREETS AND NUMBERING OF HOUSES.

118. Much unnecessary trouble was given, and confusion arose, in the identification of houses because—

(*a*) different streets were known by the same name;
(*b*) some streets were known by more than one name;
(*c*) some streets had no names;
(*d*) the beginnings and ends of many streets were not defined;
(*e*) many houses had no numbers; and
(*f*) there appeared little or no method in the numbering of houses.

119. During the year all streets were named and their limits definitely defined and name boards placed at their ends.

120. In some congested areas, where there are no definite streets and where the houses are scattered irregularly, the wider intervals between houses were given names corresponding to the principal thoroughfares out of which they lead; they were termed Lanes and were numbered, *e.g.*, Intin Lane, No. 5.

121. Several hills have houses scattered over them, but they have no definite roads; the hills were named without regard to roadways.

122. During the assessment the Appraiser gave numbers to all houses and huts or, where it seemed more convenient, a single number was given to a group of houses or huts. As a rule, odd numbers appear on one side of the street, even numbers on the other.

123. Owing to the irregular way in which houses are scattered about, and to the existence of congested areas without definite roads, it was quite impossible to give numbers consecutively to houses in definite lines or rows. But it is now comparatively easy to find any house in Cape Coast having name of street and number given. The new names are given in the rough map. (Appendix B.)

(XXIV.) WATER.

124. Wells and tanks form the water supply of Cape Coast. The absence of a pipe-borne supply is in a sense the indirect cause of mosquitoes ; larvæ are mostly found in water pots, though it cannot for a moment be supposed that a pipe-borne supply will banish mosquitoes. A supply to all houses will be, for many years, a practical impossibility ; water pots will still be used. Will the native empty his pots more often if he gets his water from a stand pipe in the street than if he gets it from a well or tank ?

* * * * *

126. The semi-rotary pumps used for public wells are not suitable, they are constantly getting out of order through misuse. The pumps are good when used under supervision, as is done in the case of Government tanks . . . .

127. Owners of underground tanks have been served with notices to attach pumps. The general excuse for not doing so has been that pumps soon get out of order ; a notice was consequently sent round advising owners as to the care of their pumps. The majority have complied with the notices.

128. Practically all tanks and barrels in Cape Coast were mosquito proof at the end of the year.

129. Wells are so open to pollution that it is considered unreasonable to expect owners of private wells, who are mostly poor, to expend money on pumps. On the other hand, wells cannot be closed until some better supply of water is substituted ; it is a serious problem.

(XXV.) PRIVATE LATRINES.

130. . . . . Every private latrine emptied by prisoners is inspected once a month by a senior Inspector, apart from the ordinary routine house inspections. There were 71 latrines with 79 pans (including private schools emptied by prisoners) in December. None is allowed to be emptied until it conforms with the Medical Officer of Health's required standard. I believe all private pit latrines have now been abolished.

(XXVI.) PUBLIC PAN LATRINES.

131. . . . . One of the new type was built during the year : it is of concrete, of the squatting type, and was built after the Accra model, but somewhat modified. For instance, the central passage is left uncovered and there are no doors behind the pans. The pan projects slightly above the level of the floor ; there seems to be little soiling of surroundings and I have heard of no objection to the squatting position necessitated.

* * * * *

(XXIX.) DISGUSTING HABITS OF THE PEOPLE OF CAPE COAST.

134. In connection with the subject of latrines it must be mentioned that the question of disposal is made doubly difficult by the filthy habits of the people ; the beach is often in an indescribably disgusting condition, especially in Division IV. ; there are three contributory causes :—

(*i*) The people use the beach itself ;

(*ij*) the sea washes matter from the sea latrines ;

(*iij*) and the prisoners frequently empty latrine pans at unauthorised portions of the beach.

135. In addition to fouling the beach there is endless fouling of the narrower lanes, passages between houses, bush and even of the widest streets. The Inspectors, Sub-Inspectors and Learners take it in turns to patrol daily with plain clothes constables at hours when such nuisances are chiefly committed; arrests and convictions result almost daily.

(XXX.) LATRINE ACCOMMODATION.

136. The Latrine accommodation for December was as follows:—

	No. of Latrines.	No of Pans.
Public Pan Latrines	23	300
School „ „	11	27
Public Pit „	8	—
„ Sea „	3	—
Private Pan Latrines emptied by prisoners (excluding Private School Latrines)	69	71
Private Pan Latrines emptied privately	No record.	No. record.
Officials' Pan Latrines	20	25

* * * * *

(XXXI.) LATRINE EMPTYING.

138. On account of the unsatisfactory prison labour for emptying latrines t was determined to try Krooboys. It failed because:—

(*a*) The Inspectors would not look after the men; two were tried, both were found wanting; they seemed unable to control the men;

(*b*) the Krooboys refused to work in gangs; apparently they thought they were too much like prisoners;

(*c*) when working singly, or in twos and threes, to which they had no objection, supervision was difficult; it would have been so even for conscientious Inspectors, and the work was badly done or neglected.

139. For the first week or so the work was excellently done, quickly done and done with half the number of men required when prisoners are used and done, moreover, at more suitable hours, *e.g.*, work began at 4.30 a.m. an hour impossible with prisoners. It showed that latrine emptying can be well done with free labour, but here, as always, the supervision is the difficulty.

(XXXII.) DUSTBINS.

140. The positions of all dustbins are shown on the map, Appendix B. They are of galvanised iron, and all but two are in bad condition. A new type concrete dustbin was nearly finished at the end of the year.

(XXXIII.) REFUSE DISPOSAL.

141. There are 3 refuse grounds: on one an old swish beehive destructor was occasionally used. It is of little more use than burning rubbish in the open. A concrete destructor is under construction: it is of the Elmina type, but im-

proved. There is a 15 ft. smoke stack ; the refuse shoot is on the top and away from the air inlet, and it is closed by an air-tight furnace door, thus ensuring a proper draught. The fire bars have a good fall as well as the floor beneath the bars.

(XXXIV.) ROADS.

142. A good deal of work has been done on the improvement of roads, apart from that done by the Public Works Department, though, with the concurrence of the Officer in charge of Public Works, with the primary object of facilitating the cartage of refuse, over some of the roads it was difficult to push the refuse carts. Holes and ruts have been filled in ; portions of two roads have been in great part remade—Coronation and Kawanupadu Streets—so that carts can now pass where it was formerly impossible.

143. £207 was spent in the purchase of houses or parts of houses and lands as a beginning to the opening up of certain districts. As the purchases were only completed towards the end of the year little had been done in demolishing the buildings, but, as a result,

(*a*) Coronation Street will be a thoroughfare from Kotokraba to Kawanupadu ;

(*b*) there will be a clearing parallel with Commercial Street and to the west of it through the badly congested Dawson Hill ;

(*c*) two of the four houses which have closed in the western end of Gegem Street have been purchased. These four houses have prevented Gegem Street from becoming a thoroughfare from Idan to Tantri, where a road is much wanted for cart traffic for sanitary purposes. The worst portions of the narrow passage through which carts have had to pass will now be opened up ; and

(*d*) two ways can now be made through the congested Hausa Village of Kotokraba.

144. The worse portions of Cape Coast have not been dealt with in this way. Every effort was made to persuade occupants to take compensation voluntarily, but without success.

(XXXV.) DRAINS.

145. The following new drains were made by the Public Works Department :—

1. Beulah Lane main drain into the Lagoon ...	2,076 feet.
(The end of this is shown in a photograph).	
2. Completing Intin Street drain, East side ...	314 feet.
3. Beulah Road drain, re-making	45 feet.
4. Under Intin Street from O'Connor Hill to Ashanti Road	50 feet.

146. A number of drains were repaired.

147. The drainage system of Cape Coast is excellent, as far as it goes. There are some 9½ miles of open masonry drains, which are shown in red on the map, Appendix B. A considerable number require minor repairs. Photographs of 2 roads without drains are given, showing their water-worn condition.

(XXXVI.) CLEARING OF WEEDS, ETC.

148. Government and Municipal Lands cleared by the Sanitary Department are given in Appendix R. Labourers are constantly at this work.

(XXXVII.) SLAUGHTER HOUSE.

149. The ventilation of the Slaughter House was improved by enlarging the openings.

150. Results of blood smears taken since June. None were taken before, I believe ; at least there is no record.

	No. examined.	No. with Trypanosomes.
Goats	25	—
Sheep	9	1
Pigs	1	—
Total	35	1

(XXXVIII.) FOOD UNFIT FOR HUMAN CONSUMPTION.

151. Much food eaten by natives is, from a European point of view, unfit for human consumption. But as the native does eat such food and is accustomed to it there does not seem to be sufficient justification for condemning it. The European would certainly suffer by eating some of the decomposing food that appears harmless to the native. How much harm it really does to the native, if any, is not yet known. I refer chiefly to native food prepared and sold in the native manner in open markets. But with food sold by European or native merchants to Europeans or to natives the matter assumes an entirely different aspect. I am strongly of opinion that only food that conforms to the European standard of fitness for human consumption should be allowed to be sold by such. The better class store is a civilizing agency—at least it comes with civilization—and as civilization advances, the consumption of decomposing food must diminish : if such food does little harm to the ordinary native, who has survived—it may be a case of survival of the fittest—there is no doubt whatever that it would seriously injure the European and the native who is not habituated to such food ; and the latter class is rapidly increasing.

152. Acting on this principle the following were recommended for destruction :—

20 cases dried Saithe.

The fish was wet, decomposing, full of maggots and smelling very badly. With the consent of the consignee the fish was committed to the sea.

(XXXIX.) OCCUPATION NUISANCES.

153. The only one of immediate importance is in connection with fish ; exposing, drying, smoking and storing. No complaints have been received and little has been done in the matter ; but it must be dealt with sooner or later.

(XL.) PROSECUTIONS.

154. The following table gives the number of prosecutions during the year :—

	Mosquito Larvæ.	Other insanitary conditions.	Nuisances.	Total No. of cases.	Fines.	No. of cases dismissed.
					£ s. d.	
January ...	17	2	8	27	6 11 6	3
February ...	6	16	9	31	6 16 6	3
March	8	33	3	44	9 19 0	—
April	6	23	1	30	4 14 0	4
May	21	9	1	31	7 3 0	2
June	10	5	—	15	4 2 6	—
July	91	22	14	127	53 19 0	4
August	43	17	20	80	20 0 6	3
September ...	31	43	43	117	24 13 6	7
October... ...	15	13	43	71	16 17 6	2
November ...	11	13	30	54	14 2 6	—
December ...	18	4	46	68	11 17 0	—
Total	277	200	218	695	180 16 6	28

Two were imprisoned.

(XLI.) CEMETERIES.

155. Some of the cemeteries are menaces to health by having dwellings and wells too near to them. The closing of all those at present in use is recommended ; the provision of a new one is under consideration. Appendix S gives the Cemeteries of Cape Coast, together with the areas occupied and unoccupied on the 30th of June, 1911, and other details. The position of all is shown on the map, Appendix B.

(XLII.) INFECTIOUS DISEASES. PROVISION FOR.

156. The two wooden buildings—formerly known as the Mfantsipim schools—on the hill to the north of Kotokraba Market Square (see Map, Appendix B) were repaired and made mosquito proof. Kitchens, etc., were also repaired. These buildings are rapidly decaying, repairs can only be temporary. Repairs are costly, but accommodation for infectious cases and for contacts must be available at all times. It is, therefore, important that more permanent Hospitals should be erected.

157. A new camp was planned, situated some 200 yards north of the above, to be used as a segregation camp. Unfortunately, owing to labour troubles, the Public Works Department was unable to complete the work by the end of the year.

158. Only one building has been erected ; this consists of two wards with an observation room between them. The foundations and the walls for about $2\frac{3}{4}$ feet are of solid concrete. It is, therefore, of a more permanent nature than the buildings mentioned in paragraph 156. There is no communication between the observation room and the wards except through the open air ; all angles of floors and concrete walls are rounded and the whole building, with the exception of the three doors, is mosquito proof. (Appendix T gives a rough plan of the building.) The camp should be completed.

159. The Medical Officer suggests that this should be used as the infectious diseases hospital and the Mfantsipim buildings as the segregation camp. The circumstances of any particular epidemic would possibly decide in what way the buildings could best be used.

(XLIII.) VACCINATION.

160. Vaccination is compulsory in the Colony by the Vaccination Ordinance, 1888; it is, however, a dead letter at present. The vaccination statistics are given by the Medical Officer as follows:—

	No. of Vaccinations.	No. successful.
Children	2	2
Adults	10	5
Total	12	7

(XLIV.) TSETSE FLIES.

161. I have found Tsetse flies in my quarters, the last house except the High Court at the West end of the town along the Elmina Road, and at the northern boundary of the Municipal area near a small group of Hausa huts along the path leading to the new European reservation. Dr. Le Fanu, in a report dated 13th July, 1910, states that he has found the following species:—

Glossina pallicera
„ longipalpis.
„ morsitans.
„ fusca.

This is a matter of importance with reference to sleeping sickness and the European reservation. Dr. Le Fanu states that he had not found Glossina palpalis near the town.

(XLV.) MOSQUITOES.

162. There has been no systematic examination of mosquitoes caught in Cape Coast with a view to their classification.

163. The general impression amongst Europeans, who in Cape Coast live for the most part surrounded by native houses, is that there are very few mosquitoes indeed. Many have stated that they had not seen a single specimen for weeks at a time. The Medical Officer, in his report for the September quarter, mentions "the quite noticeable absence of mosquitoes."

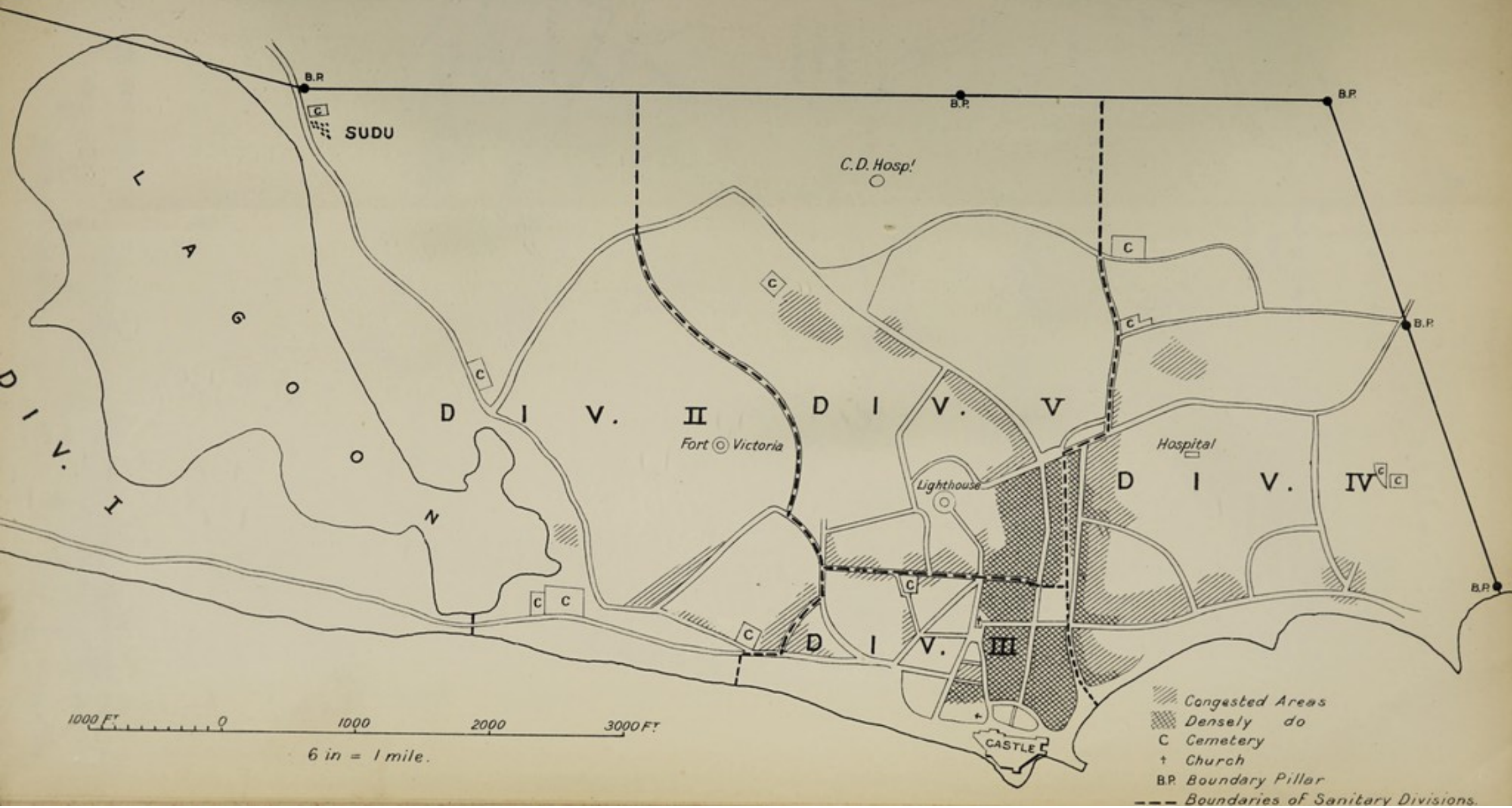
164. Since May domiciliary visits in quest of mosquitoe larvæ, and, of course, other nuisances, have taken up the greater portion of the time of the more intelligent and senior Inspectors.

165. In December the Larval Index, *i.e.*, the percentage of houses inspected in which mosquitoe larvæ were found, was, according to the respective Inspectors, as follows:—

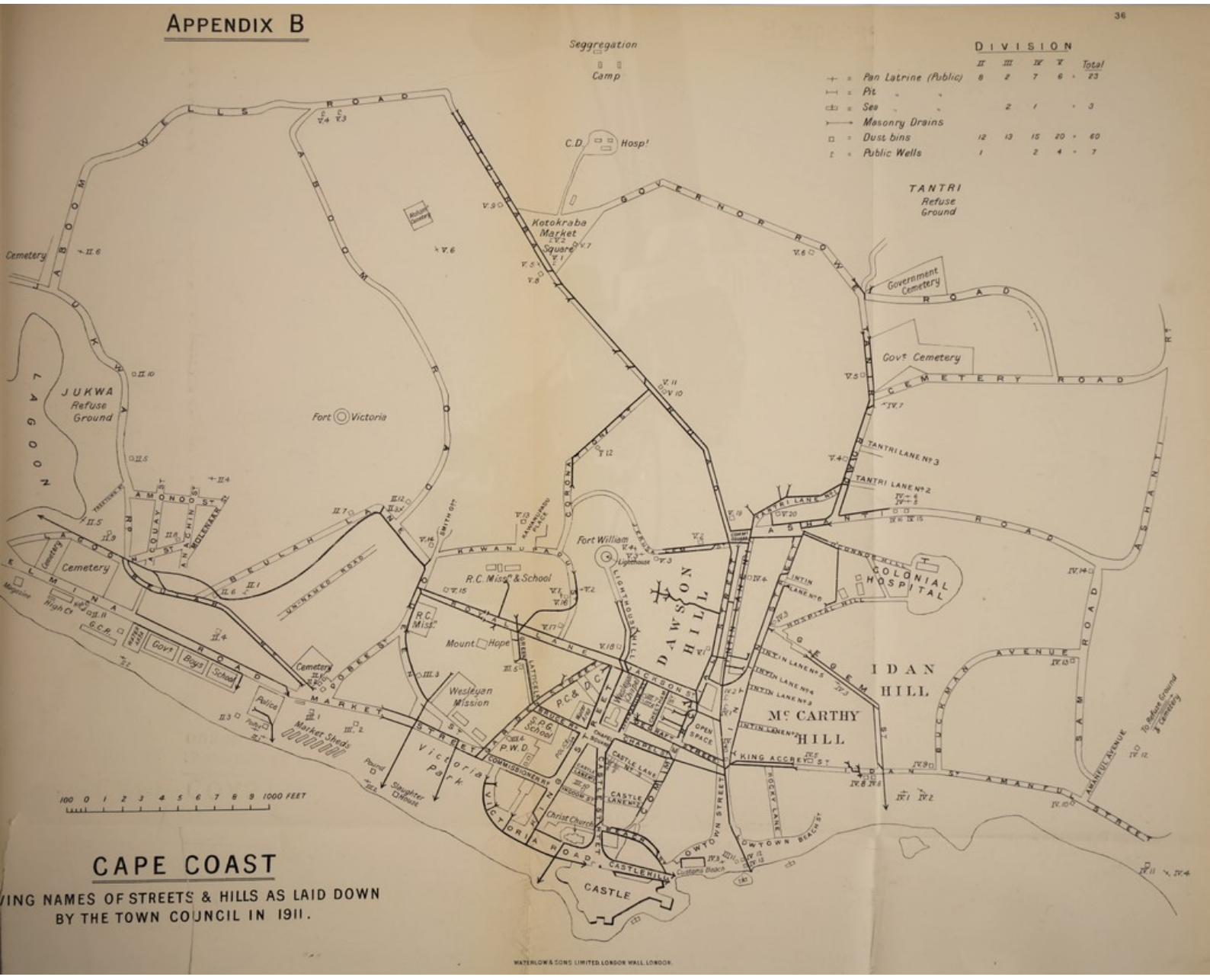
Division	II.	III.	IV.	V.
Larval Index	·95	·58	·36	·89

APPENDIX A.

MUNICIPAL AREA OF CAPE COAST: *A small portion of Division I is shown, it is almost uninhabited.*



APPENDIX B



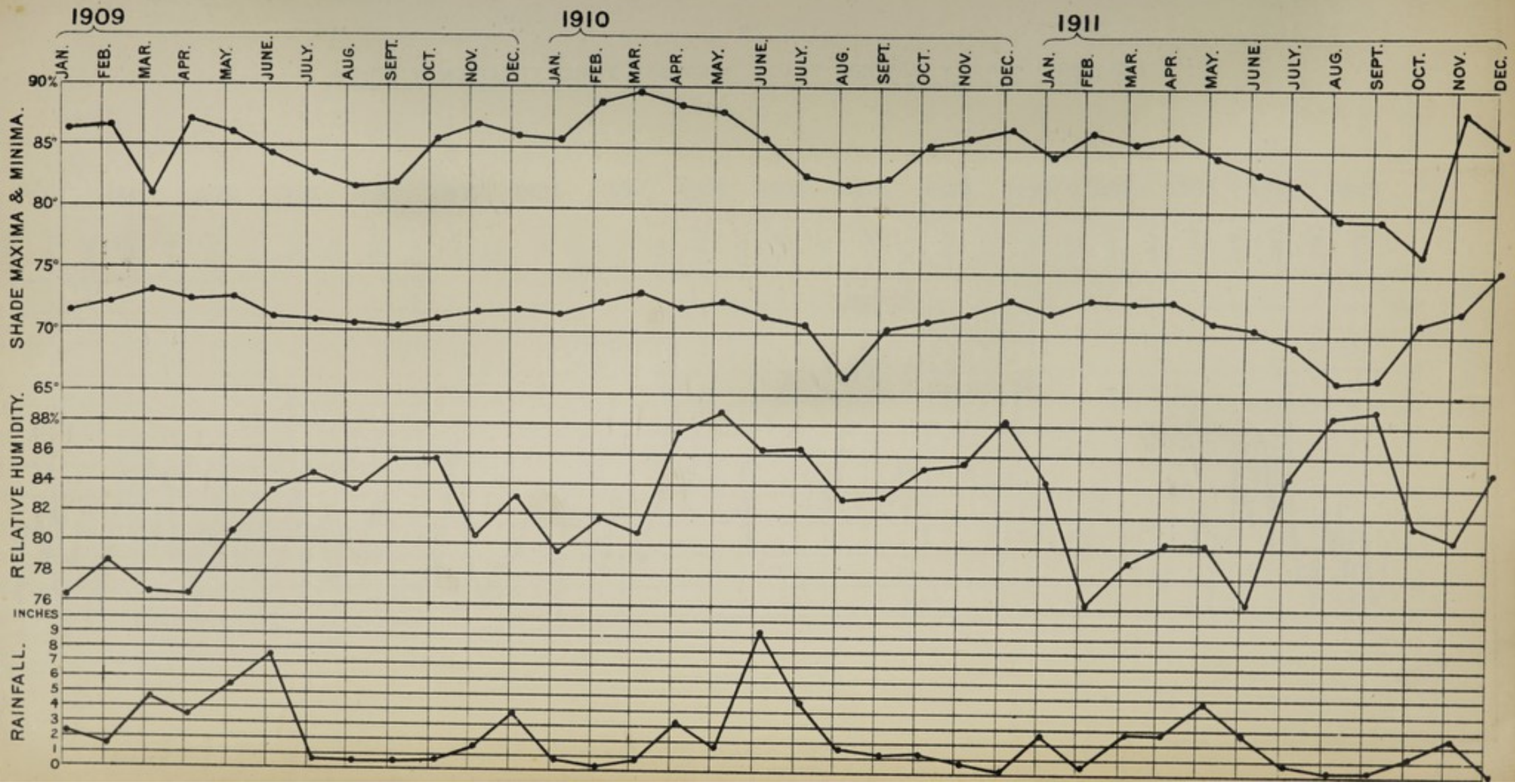
CAPE COAST

VING NAMES OF STREETS & HILLS AS LAID DOWN BY THE TOWN COUNCIL IN 1911.

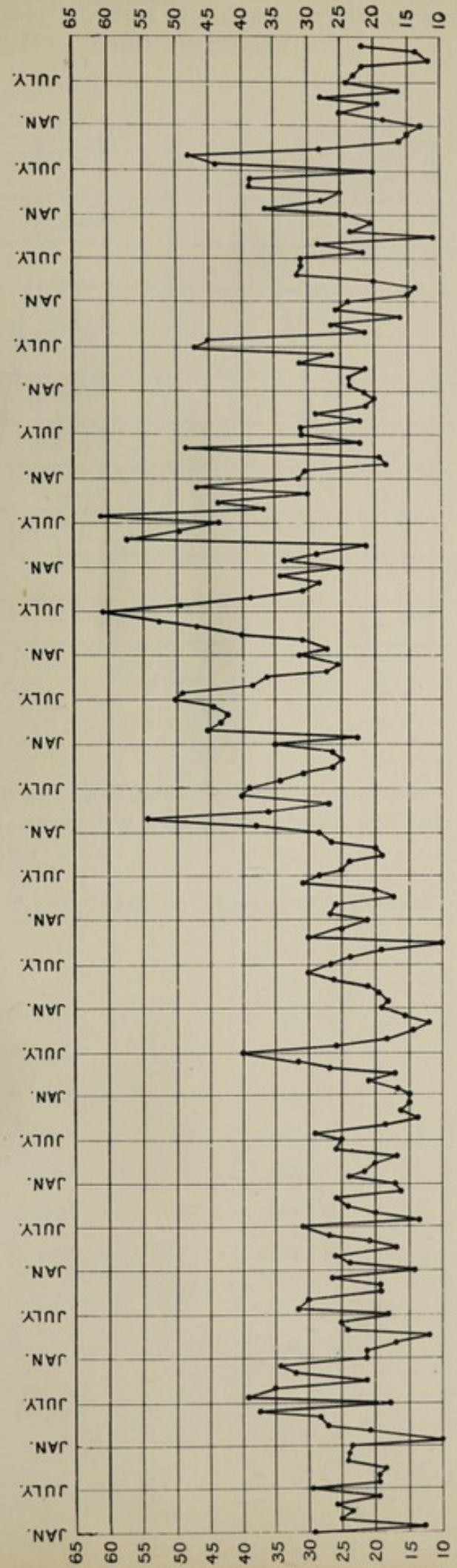
WATERLOW & SONS LIMITED, LONDON WALL, LONDON.

APPENDIX C.

CHARTS OF CERTAIN METEOROLOGICAL ELEMENTS REGISTERED AT CAPE COAST.

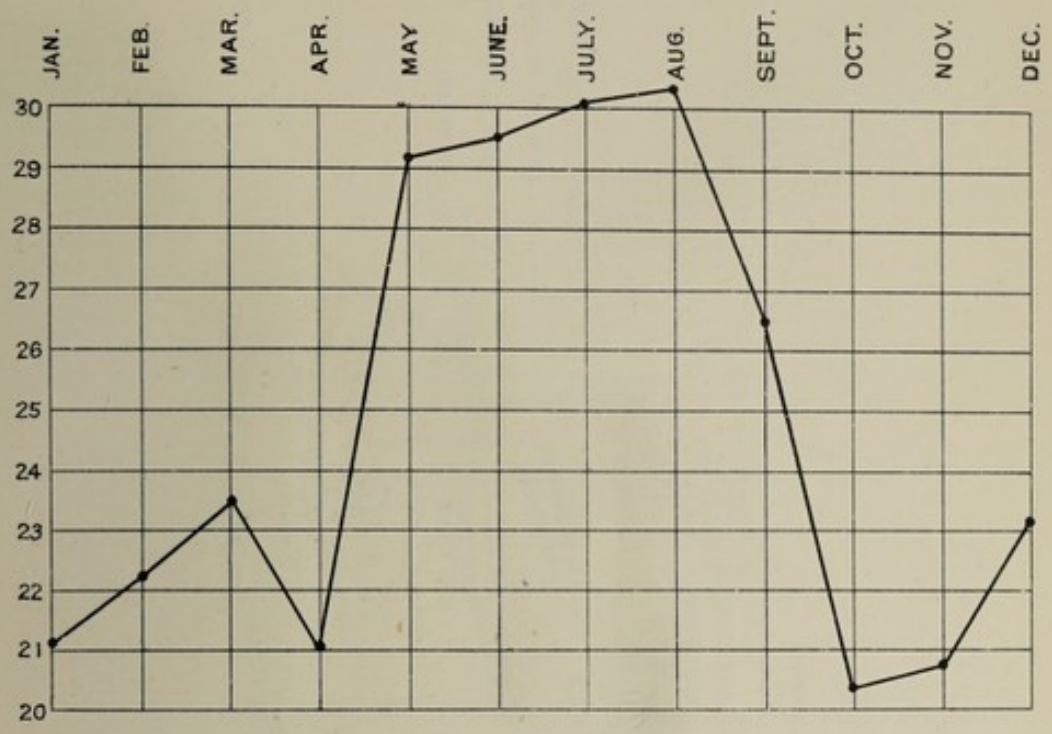


— MONTHLY MORTALITY CURVE FOR CAPE COAST FOR THE YEARS 1895 – 1911. —



Appendix E.

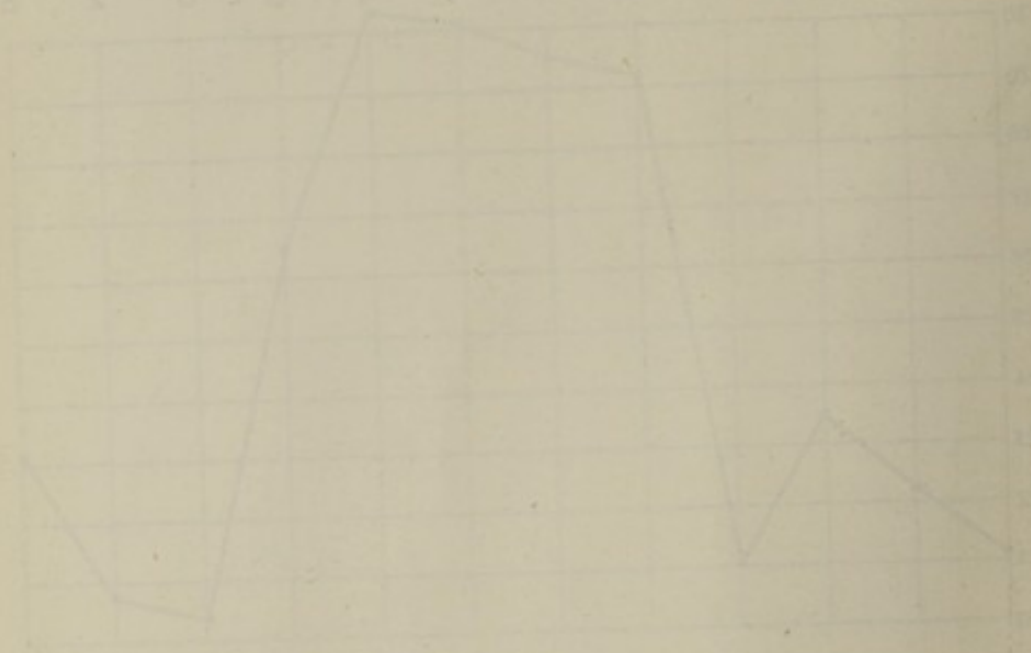
AVERAGE NUMBER OF DEATHS RECORDED EACH MONTH FOR THE YEARS 1895 – 1911.

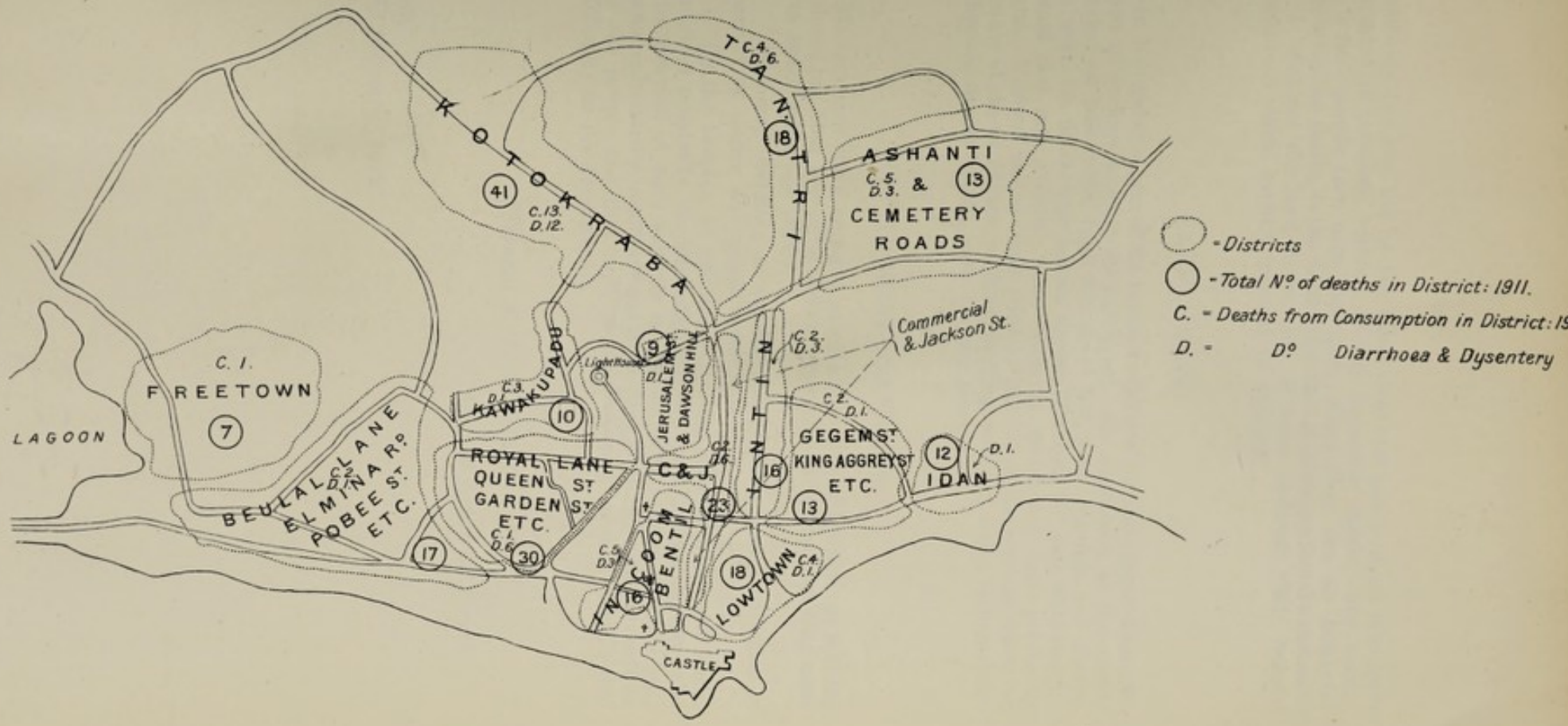


Appendix F.

Age Distribution per 1,000 Deaths at ages above 5 years of age for England and Wales (1894 – 1905) and for Cape Coast (1911).

Ages	Cape Coast	England & Wales.
5 to 10	55 . 5	40 . 3
10 - 15	45 . 5	22 . 3
15 - 25	151 . 5	72 . 0
25 - 35	136 . 4	93 . 3
35 - 45	181 . 8	115 . 0
45 - 55	131 . 3	130 . 6
55 - 65	90 . 9	163 . 9
over 65	207 . 1	362 . 6
	1000 . 0	1,000 . 0





- = Districts
- = Total N° of deaths in District: 1911.
- C. = Deaths from Consumption in District: 1911.
- D. = D° Diarrhoea & Dysentery

CAPE COAST.

This is probably too low, but at the same time one can now go into quite a large number of premises without finding mosquito larvæ; one reason, of course, is that people turn over their pots when they see an Inspector coming; another, no doubt, is the knowledge that if larvæ are found a summons follows. I have not the least doubt that if house-to-house visits became fewer mosquitoes would rapidly increase in number.

(XLVI.) RATS.

166. In November a sum of £5 became available for anti-plague measures; 30 rat traps of various kinds were purchased; the remainder of the money was expended on bait-kenki, fried fish, dried fish, ham, plantain and cheese. The traps were set in various houses during 32 days; 101 rats were caught. It was found that rats avoided those traps in which any had previously been caught. Various means were tried to get rid of the scent or whatever was the cause of the avoidance, such as smoking, washing, using various disinfectants, dipping in sea water, with varying success.

(XLVII.) MISCELLANEOUS.

168. Matters that have engaged attention, but in which little or nothing has been done, but that are nevertheless questions of importance that must be taken in hand sooner or later:— ... ...

(*a*) bread baking; a considerable industry, much of which is carried on under unhygienic conditions;

(*b*) the keeping of animals, especially sheep, goats and fowls, in close proximity to kitchens, sleeping rooms, bakeries, etc., and the straying of such animals in the midst of markets, streets, etc., is an undoubtedly insanitary condition that is inbred with the customs of the people and that will, in consequence, involve considerable difficulty in its amelioration.

(Signed) F. BERINGER,

Medical Officer of Health.

Cape Coast,
28*th*, *February*, 1912.

APPENDIX H.

RELATIVE COST OF DAY LABOUR AND KROO CONTRACT LABOUR, WITH SOME DISADVANTAGES AND ADVANTAGES OF KROO CONTRACT LABOUR—COST OF DAY LABOUR.

An adult costs 1/- per day : per year £18 5s. 0d.

COST OF KROO CONTRACT LABOUR.

An adult costs for the year:—

	£	s.	d.
Headmoney	0	16	8
Passage money 11/6 each way	1	3	0
Subsistence 3d. per day	4	11	3
Pay 17/- per month	10	4	0
Proportion expenses in sending a headman to bring a gang from Liberia, *i.e.* $\frac{1}{24}$ of £2 ("dash") + 23/- (passage) ...	0	2	8
Total	£16	17	7

SOME DISADVANTAGES OF KROO CONTRACT LABOUR.

He may turn out to be useless through sickness or otherwise—possibly he may run away—at least his headmoney and passage money have been paid, at least his subsistence must be paid whilst sick : day labourers are only paid whilst they work.

SOME ADVANTAGES OF KROO CONTRACT LABOUR.

The man is engaged for a year.
He is, as a rule, a fair worker and strong.
He will do work of a disagreeable nature, to which the Fanti usually objects
He is somewhat cheaper, as shown in the above Table.
On the whole the advantages, I think, outweigh the disadvantages.

APPENDIX M. (VIII.)

GOVERNMENT TANKS.

Name and Situation.	Nature of Tank.	Capacity.	Present Contents.	Nature of Catchment area.	Connection between Tank and Catchment Area.	Pump or No.	No. and Condition of Inlets.	No. and condition of overflow outlets.	No. and condition of trap doors or inspection openings.	Condition of Surroundings.	Remarks.
		Gallons.									
Castle No. 1	Underground	43,064	—	Castle roof	Iron and stone pipes	1	Underground	0	2		
,, ,, 2	,,	24,992	—	,,	Cut off	0	Cut off	0	1		Not used
,, ,, 3	,,	10,123	—	,,	Iron and stone pipes	1	Underground	0	1		
,, ,, 4	,,	17,288	—	,,	,,	1	,,	0	1		
,, ,, 5	,,	35,366	—	,,	,,	1	,,	0	1		
,, Prison Main Yard	,,	30,502	—	,,	,,	1	,,	0	1		
,, ,, North Yard	,,	4,200	—	Roof of Prison shed	Iron pipe	1	1 passes through top	1	1		
Commissioners' Q'ters.	,,	53,704	—	Cement area and roof of Wesleyan Chapel and Quarters (Commissioner's)	From roof; iron and stone pipes	1	7 from cement area, 1 from roof, not trapped	0	3		
Elmina Road	,,	107,654	—	Cement area and roofs of Government Schools	From roofs; iron and stone pipes	1	6 with catch pits	1	3		
Gothic House, P.W. Yd.	,,	26,240	—	Gothic House roof	Iron and stone pipes	1	Underground	0	1		
,, East Yd.	,,	15,699	—	Roof of Quarters of O.C.	,,	1	,,	0	1		
Lighthouse	,,	7,961	—	Roof of Lighthouse	Iron pipes	0	2, trapped	1	1		
C.D. Hospital, W ...	Iron, wood top	7,000	—	Hospital roof	Iron and stone pipes	—	1, ,,	1	1	*	No top
,, E. ...	,,	7,000	—	,,	,,	—	2, ,,	1	1	*	
Police Barracks, N.E.	,,	3,500	—	Roof of Barracks	Iron pipes	—	3, ,,	1	0		
,, N.W.	,,	3,500	—	,,	,,	—	3, ,,	1	1		
,, S.W.	,,	3,500	—	,,	,,	—	3, ,,	1	1		
,, S.E.	,,	3,500	—	,,	,,	—	3, ,,	1	1		
High Court, E. ...	,,	7,000	—	High Court roof	,,	—	1, ,,	1	1		
,, W. ...	,,	7,000	—	,,	,,	—	1, ,,	1	1		
European Hospital, E.	,,	7,000	—	Roof of European Hospital	,,	—	2, pipes pass through cover	1	1		
,, W.	,,	7,000	—	,,	,,	—	2, ,, ,,	1	1		
,, M.O. Kitchen	,,	3,000	—	Roof of M.O.'s Kitchen, etc.	,,	—	1, trapped	1	1		
Colonial Hospital Kitchen	,,	4,500	—	Cut off	Cut off	—	Cut off	0	1		Not used
Dispensary	,,	3,300	—	Roof of Dispensary	Iron pipes	—	1, trapped	0	Same as Inlet.		

* These tanks are sunk in a pit; there is one undisused cement pit under the tip.

APPENDIX O.

NOTICE.

To Persons Applying For Building Permits.

I. A properly drawn ground plan, signed by the person making the plan, must accompany every application.
II. The plan must be to scale.
III. The plan must distinctly show the alterations, additions or new structures proposed.
IV. The width of adjoining streets and the boundaries and owners of the adjoining premises on every side must be shown.
V. All windows, doors or other means of ventilation must be shown.
VI. Latrines, if any, should be shown.
VII. The materials of which walls and roofs are to be constructed should be shown.
VIII. The height of walls should be shown.
IX. Persons desiring building permits should consult "Building Regulations made by the Director of the Public Works" under Section 11 of The Towns Ordinance, 1892.
X. The boundaries of the land belonging to the premises must be shown.

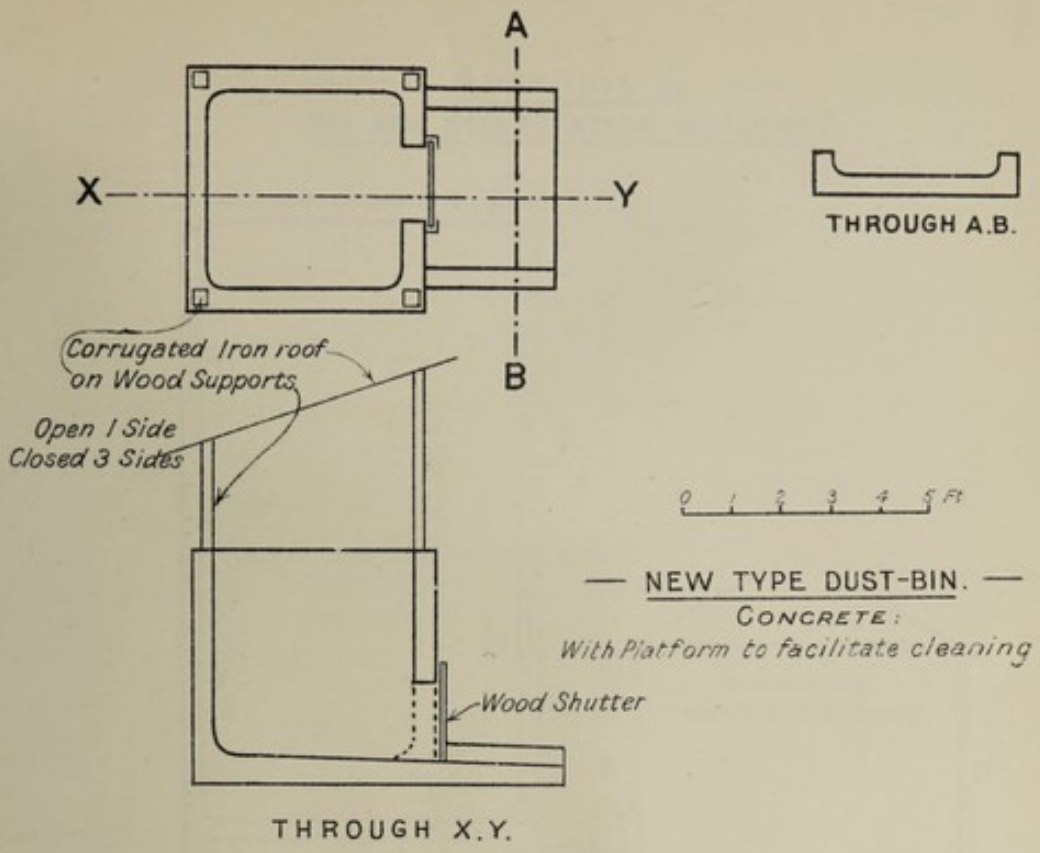
APPENDIX R:

GOVERNMENT AND MUNICIPAL LANDS, OPEN SPACES, ETC., CLEANED BY THE SANITARY DEPARTMENT.

(Roads not included here.)

	Name.	Situation.	Approx. Area acres.	Remarks.
I.	Open space (marked No. 1 on P.W.D. (C.C.) Map)	S. of Elmina Road and Market Street from Lagoon to Victoria Park	11½	On it: High Court, G.C.R. Lines, Government Tank, Government Schools, Police Barracks, Market and Pound.
II.	Kotokraba Market Square and Kroo Lines	—	3	Town Council Contract, Kroo boys shed here.
III.	Hospital Hill ...	—	16	On it: Colonial Hospital (European and Native) Dispensary, M.O's Quarters, etc.
IV.	Fort William ...	—	5	Old Fort, now the Lighthouse and Signal Station here.
V.	Fort Victoria... ...	—	11½	Old ruinous Fort here.
VI.	Old Public Cemetery...	Elmina Road ...	2⅓	Partly swamp.
VII.	„ „ „ ...	Royal Lane ...	⅓	
VIII.	Heathen Cemetry ...	Governor Rowe Road...	3	
IX.	Christian „ ...	Tantri Road ..	2⅔	Cleaned by grave diggers.
X.	Open space	Between Intin Street and Commercial Street	½	
XI.	"Sunday Market" ...	W. of Jukwa Road and N. of Elmina Road Cemetery	3	Market held here on Sundays only; includes Lagoon shore adjoining
XII.	Beach E. of Castle ...	To promontory E. of Amanful	—	⅔-mile long.
XIII.	„ W. „ ...	To Lagoon	—	⅔-mile long.
XIV.	Contagious Diseases and Segregation Hospitals	N. of Kotokraba ... Market Square ...	2	About this area cleared. Remainder thick bush.

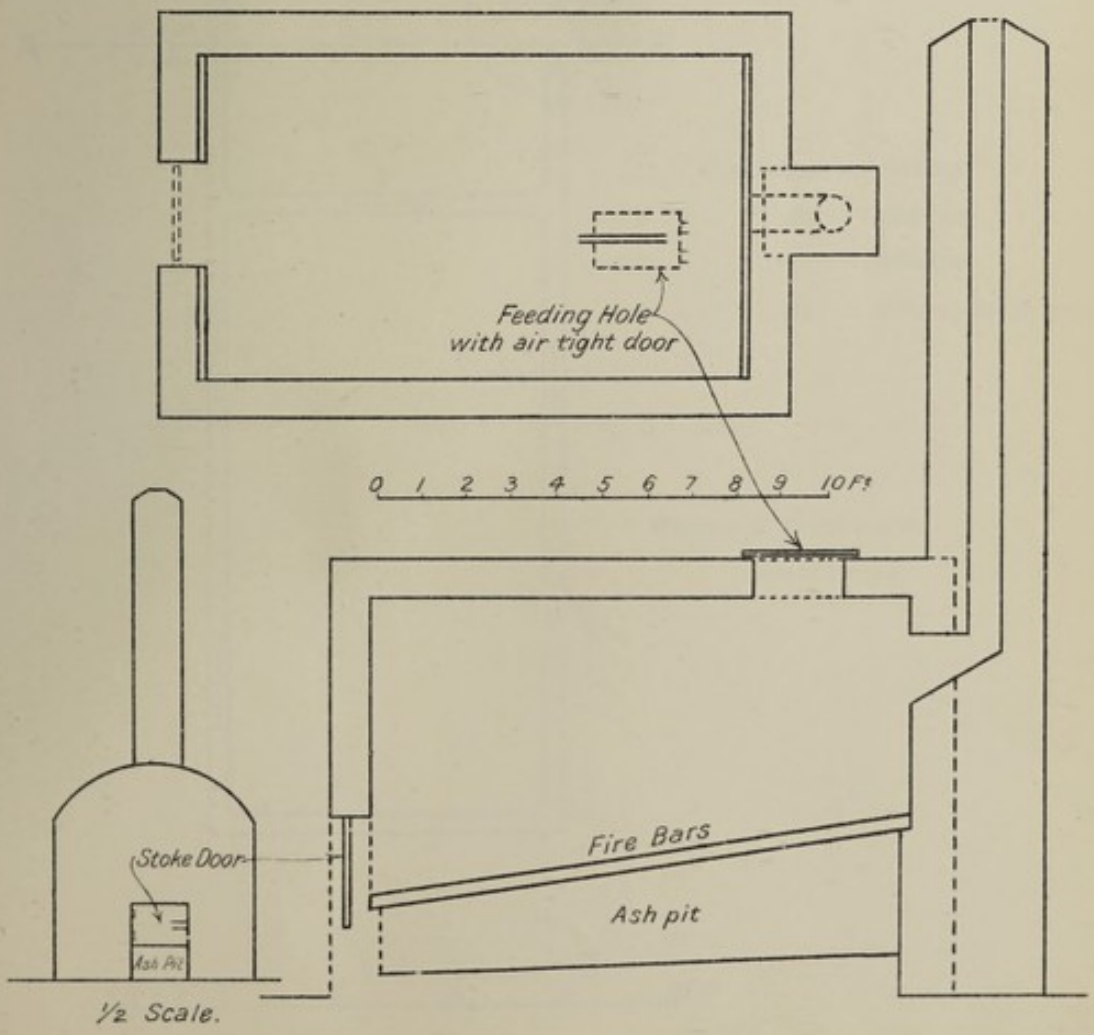
— APPENDIX Q. —



— NEW TYPE DUST-BIN. —

CONCRETE:

With Platform to facilitate cleaning

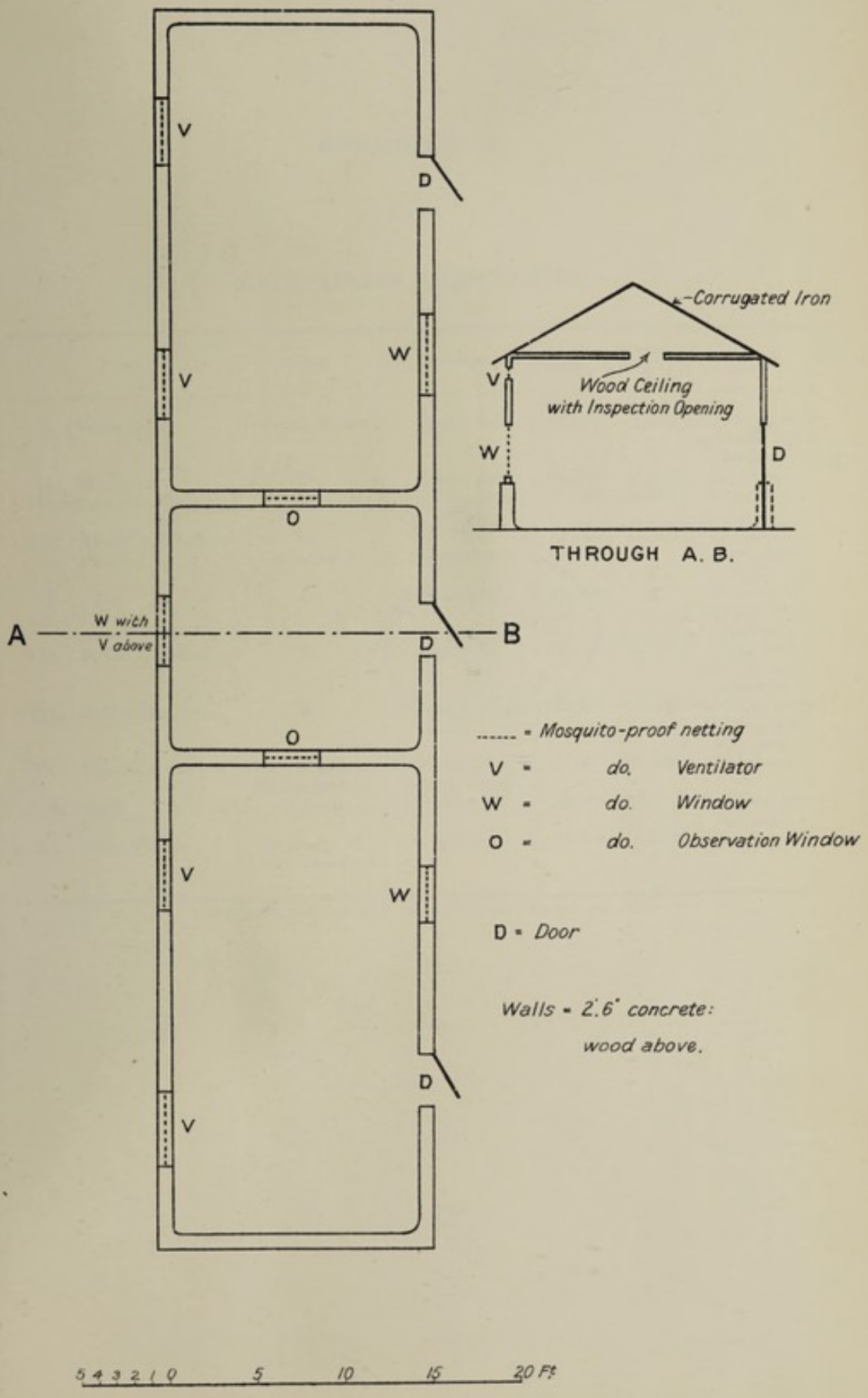


— NEW TYPE INCINERATOR. —

Brick Lined: Air-tight door to Feeding Hole.

APPENDIX T.

THE NEW SEGGREGATION BUILDING.




LIBRARY

APPENDIX S.

CAPE COAST CEMETERIES.

	Name.	Owner.	Situation.	Total Area.	Area unoccupied. *	Remarks.
				Sq. ft.	Sq. ft.	
I.	Wesleyan ...	Wesleyan Mission.	Beulah Rd.	37,380	1,203	Brick wall, only used for Office Bearers.
II.	Wesleyan ...	Do.	Jukwa Rd.	65,866	12,450	Brick wall.
III.	Amanful, Christian	Do.	N. of Amanful Village	28,700	13,125	Live fence.
IV.	Amanful, Heathen	Do.	Do.	12,333	11,434	Live fence.
V.	Public	Government	Royal Lane	12,728	—	Closed, brick wall.
VI.	Do.	Do.	Elmina Rd.	96,068	—	Closed, part swamp, wood fence.
VII.	Public, Christian	Do.	Tantri Rd.	105,155	52,323	Wood fence, part swampy, unuseable.
VIII.	Public, Heathen...	Do.	Governor Rowe Rd.	133,293	5,376	No fence, neighbouring land also used.
IX.	Mahommedan ...	Chief Nusah for Mahommedans	W. of Koto, Kraba Village	76,000	23,100	Live fence.
X.	Sey's	Private	Elmina Rd.	30,358	29,427	Wood and part live fence.
XI.	Sudu Village ...	In charge of Chief Quardoom	Sudu	10,769	5,785	Live fence.

* These figures were given by the Assistant Registrar of Deaths in June, 1911.

APPENDIX W.

CAPE COAST SCHOOLS.

THE INFORMATION HERE GIVEN WAS FURNISHED BY THE RESPECTIVE MANAGERS OR OTHER SCHOOL OFFICERS.

School.	Boys.		Girls.		No. of Latrine Pans.		Arrangements for Drinking Water.	Washing Accommodation for Boarders.		School Rooms.						
										Boys.				Girls.		
	Day.	Boarders.	Day.	Boarders.	Boys.	Girls.		Boys.	Girls.	No.	Dimensions. L. ft.	B. ft.	H. ft.	No.	Dimensions. L. ft.	B ft.	H. ft.
Government ...	568	—	130	—	13	3	Daily from Government tank	—	—	3	83 83 82	33 33 33	16 16 16	3	28 16 21	16 13 12	14 12 13
Mfantispim and Girls' Training College (Wesleyan)	88	27	64	18	2	2	Own tank	1 large bathroom	1 large bathroom	4	30 18 16 40	20 16 13 20	15 16 12 13	3	27 27 15	20 20 12	13 13 13
Nigritian ...	49	—	15	—	—	—	Nil	Nil	—	4	(mixed school)			—	38 12 10 17	11 10 9 9	8 8 8 8
Roman Catholic	355	12	80	24	4	2	Own tank.	Concrete area; galvanised iron walls; drained	Concrete area; galvanised iron walls; drained	2	88 70	29 21	14 11	1	30	28	14
S.P.G.	37	16	—	—	1	—	Own tank	The sea	—	1	77½	20	—	—	—	—	—
Wesleyan ...	337	—	101	—	1	1	Nil	—	—	2	(mixed school)			—	70 91	41 27	— —
Zion	177	—	22	—	1	1	From private tank	—	—	2	(mixed school)			—	70 30	30 16	17 17

TYPICAL RUINOUS HOUSES IN CAPE COAST.

Fig. 1. Elmina Road.

Fig. 2. Acquaye Street. Note large portion of wall fallen in.

Fig. 3. Coronation Street. Note bottles and tins on roof.

Fig. 4. Old type swish Incinerator; combustion very incomplete; rubbish put in and taken out at same opening; all openings are air inlets or outlets according to direction of wind.

Fig. 5. Old type galvanized iron Dustbins. Goats, fowls, etc., get in and on and scatter the rubbish; not durable. Public will not take trouble to close lid.

Fig. 6. Old type Latrine; not durable; not drained.

Fig. 7. Top-feed concrete Incinerator. (For plan see Appendix Q.)

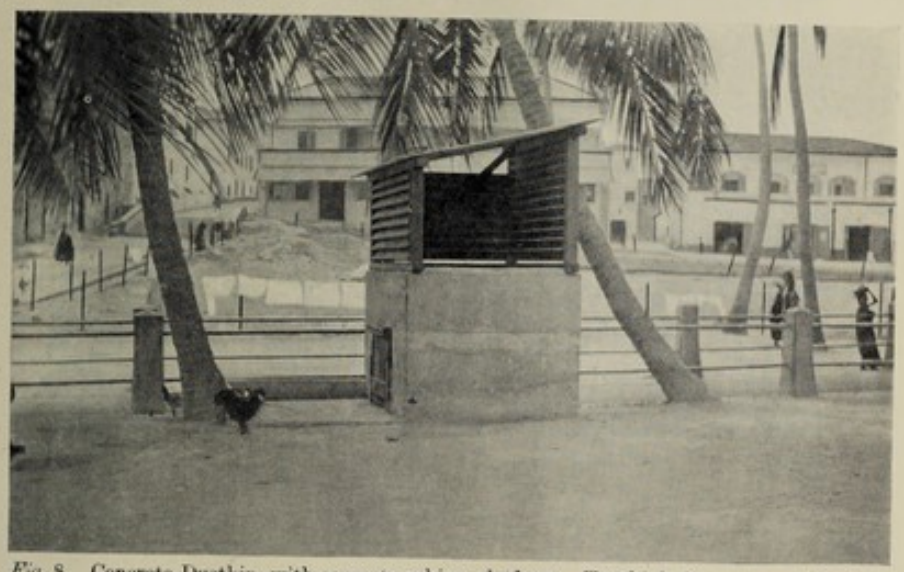


Fig. 8. Concrete Dustbin, with concrete raking platform. Too high for goats and fowls to get in. (For plan see Appendix Q.)

Fig. 9. Concrete squatting pan Latrine. Note passage, drained, between male and female sides. Note openings through which pans removed.

Fig. 10. Lagoon end of new Beulah Lane main drain.

Fig. 11. Water-worn road : Kawanupadu Street. Note planks over natural drain in middle of road.

Fig. 12. Water-worn road : Buckman Avenue. No made drains.