Annual medical report / Southern Nigeria.

SOUTHERN NIGERIA.

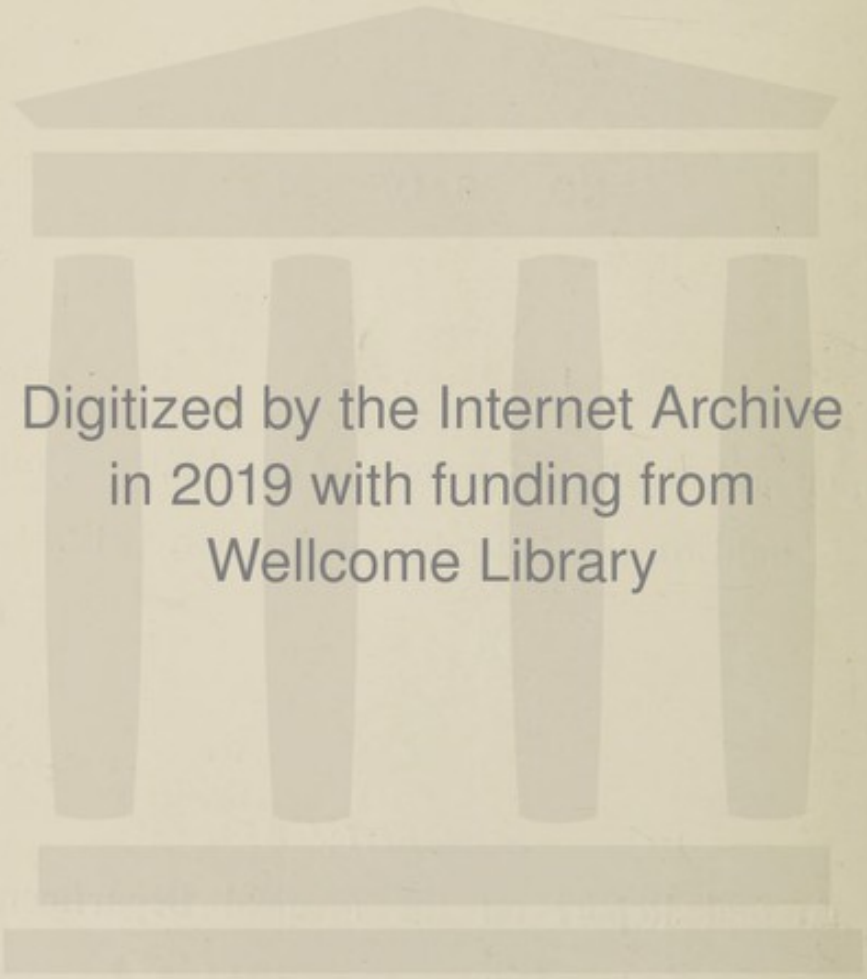
NO. 36 OF 1912.

Paper laid on the Table of the Legislative Council held on the 19th day of August, 1912.

SUBJECT:—

Annual Report on the Medical Department for the year 1911.

Printed by the Government Printer, Lagos. 25-10-12 152 [1231]



ANNUAL REPORT

ON THE

MEDICAL DEPARTMENT

FOR THE YEAR

1911.

Printed by the Government Printer, Lagos. 2-11-12 152 [1231]

MEDICAL REPORT.

PRINCIPAL MEDICAL OFFICE,
LAGOS, SOUTHERN NIGERIA,
18th May, 1912.

SIR,

I have the honour to submit for the information of His Excellency the Governor and for transmission to the Right Honourable the Secretary of State, the Medical Report on the Health and Sanitary condition of Southern Nigeria for the year 1911, with the returns, &c., appended thereto.

I have the honour to be,

SIR,

Your obedient servant,

T. HOOD,

Acting Principal Medical Officer.

The Honourable
The Colonial Secretary.

SOUTHERN NIGERIA.

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

I.—ADMINISTRATIVE—STAFF.

The Medical Staff consists of:—

1 Principal Medical Officer.
1 Deputy Principal Medical Officer.
1 Senior Sanitary Officer.
2 Provincial Medical Officers.
3 Senior Medical Officers.
1 Sanitary Officer.
63 Medical Officers, one of whom is seconded as Medical Officer of Health to the Lagos Municipal Board and
4 Native Medical Officers.

The following changes have taken place on the staff:—

Dr. H. W. H. Strachan, C.M.G., Principal Medical Officer, retired on pension 9th September.

Dr. W. H. Langley, C.M.G., Principal Medical Officer of the Gold Coast, appointed Principal Medical Officer of Southern Nigeria September 11th and assumed duty on September 13th.

Dr. F. G. Hopkins, Deputy Principal Medical Officer, acted as Principal Medical Officer from April 20th (Dr. Strachan having proceeded on leave) to September 12th and left for Accra on September 21st on promotion to the post of Principal Medical Officer of the Gold Coast.

Dr. T. Hood, Senior Medical Officer of the Gambia, promoted Deputy Principal Medical Officer of Southern Nigeria, *vice* Dr. Hopkins, and assumed duty December 8th.

Dr. J. A. Clough was transferred to the Gold Coast on promotion as Senior Medical Officer on 29th November.

Dr. J. W. Collett was transferred to Sierra Leone on promotion as Senior Medical Officer on 11th December.

Dr. H. S. Coghill, Medical Officer, who was seconded 17th August, 1909 while holding the post of Demonstrator in the London School of Tropical Medicine, was appointed Assistant at the Medical Research Institute at Lagos 20th September.

RETIREMENTS.

Drs. E. J. Kelleher and R. L. Roe retired on pension through ill-health.

RESIGNATIONS ETC.

Drs. J. W. Archibald, C. S. Thompson, W. F. Roach, J. G. Copland and O. G. F. Luhn.

Appointments.

Dr.	L. H. Booth	4th January.
„	A. Hipwell	4th „
„	E. L. Sieger	4th „
„	A. Hutton	3rd May.
„	W. M. Woods	21st June.
„	R. H. Brierley	16th August
„	E. C. Braithwait ...	6th September.
„	H. R. M. Ferguson ...	27th „
„	W. I. Martyn-Clark ...	1st November.
„	E. J. Wyler	1st „

During the year 16 Medical Officers were granted extensions of leave varying from 3 months to a week involving in the aggregate nearly two years loss of service in the Colony. I draw attention to this as the staff of Medical Officers is barely sufficient for all stations and in consequence of the extensions of leave the Medical Department has been greatly inconvenienced by the shortage of Medical Officers.

European Nurses.

With a staff of 17 the hospitals at Lagos, Calabar, Warri and Onitsha were provided with Nurses.

A similar provision for the Hospital at Ibadan is under consideration. Their duties are frequently very trying and arduous but I am glad to report that no serious illness occurred amongst the European Nurses during the year and that their services are greatly appreciated by the Medical Officers-in-charge and by patients of all classes.

Native Staff.

The staff of Dispensers and Nurses is difficult to maintain at the proper level mainly on account of the scarcity of eligible candidates to fill vacancies.

There are 95 Dispensers and Nurses on the Native Staff and at the end of the year there were twenty-three vacancies which will be filled in the course of time by the Dispensers and Nurses now in training.

The Clerical Staff of the Department has had to cope with a great amount of work during the year; correspondence, statistics and returns are all on the increase and, if medical records are to be kept as carefully as they should be, it will soon be necessary to consider the appointment of an European Statistician for the Medical Department.

FINANCIAL.

Statement of Revenue for the year 1911.

	Head and Sub-heads.	Eastern.	Central.	Western.	Total.
	Head 4.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
5	Hospital Fees and receipts	490 8 11	524 17 8	636 10 8	1,651 17 3
51	Medical Staff on Railway Construction—refund ...	—	—	1,393 9 5	1,393 9 5
					£3,045 6 8

Estimated Revenue.

Hospital Fees, etc., ... £1,350

Statement of Expenditure for the year 1911.

	Estimate.	Actual Expenditure.
Medical Department including Personal emoluments of Head-quarters Sanitary Branch	£ 59,507	£ s. d. 53,523 18 11
Sanitary	5,003	5,378 12 8
	£64,510	£58,902 11 7

In addition to the above expenditure Native Court Funds have been utilized for the purposes of sanitation and vaccinations in the Central and Eastern Provinces. £1,324 2s. 8d. was spent on sanitary work and £577 9s. 11d. on vaccinations in the Central Province alone from this source. Details from the Eastern Province are not to hand.

II.—PUBLIC HEALTH.

Except at Lagos and Ebute Metta Vital Statistics are unreliable and it is only possible to state that the Public Health in the Colony and Protectorate has been fairly good during 1911.

In Lagos the incidence of infant mortality is high and deaths connected with pregnancy are of too frequent occurrence. The establishment of a Lying-in Hospital is now under consideration and one can only hope that sound principles of infant hygiene will, in the course of time, spread and that the training of midwives will become general.

For Vital Statistics at Lagos and Ebute Metta see page 9.

Tuberculosis is apparently of more frequent occurrence in Lagos than elsewhere in the Colony. Land is valuable in the Town and congested areas are the result; the new Building regulations, now in force, will prove useful in remedying this evil.

Malaria is widespread throughout the whole of Southern Nigeria and it is estimated that quite 90% of the cases are of the Aestivo-Autumnal variety.

Blackwater Fever.—25 Europeans and one Syrian suffered from blackwater fever in Southern Nigeria during 1911. There were 17 recoveries and 9 deaths. Eleven officials contracted the disease and 7 recovered. Five cases occurred amongst the subordinate European staff of the Railway.

Although *Trypanosomiasis* is probably endemic in the Niger Delta only five cases have come under observation during the year and two of these were certainly imported from Fernando Po. As soon as cases are discovered they are segregated in fly—proof rooms.

Yellow Fever has not been observed during the year. A suspicious case of fever in a native at Forcados suggested yellow fever in a mild form; the Patient recovered and no similar case occurred.

Beri-beri patients are seen from time to time in Lagos. The majority of these patients are Kroomen and not natives of the Colony Kroomen are for the most part engaged on ships or by the merchants as coopers and labourers and receive rations of rice. They are not accustomed to living on yams, the staple food of the natives of Southern Nigeria. The disease in their case probably results from the consumption of inferior imported rice.

Towards the end of the year an outbreak of *Epidemic Dropsy* occurred in the Abeokuta Prison 25 cases and 9 deaths. Whether this outbreak was a form of Beri-beri it is difficult to say but in none of the patients was there any marked irregularity of the heart, or loss of knee jerks or hyperaesthesia of the calf muscles. Oedema of the legs was a late sympton. The exciting causes of the disease were probably overcrowding and unsuitable dieting as immediate improvement took place on removing the patients to the sea shore and providing them with a generous meat and fish diet. Prisoners receive a rice ration three times a week but preparations of yam form the bulk of their diet.

Small-Pox fetish worship still obtains in parts of Southern Nigeria and in spite of the disease appearing in several small villages there was no great epidemic. The disease manifested itself mostly at Ibadan and in the neighbourhood of Northern Nigeria.

Chicken Pox has been epidemic at Warri, Onitsha, Calabar and Ikot-Ekpene.

The number of people infected by *Ankylostomes* is extremely high—probably about 75% but fortunately the infection does not appear to give rise to serious symptoms. Most of the serious cases have been observed among prisoners and it seems more than probable that prison life lowers the system and causes symptoms of the disease to become more pronounced.

Patients suffering from *Guinea Worm* are fairly common in Southern Nigeria. In the Western Province the disease is most prevalent.

Bilharzia Hæmatobia appears to be endemic in the Western Province and is a disease well known to the natives as Dog's Gonorrhoea.

Vaccinations.—The total number of persons vaccinated during the year was 166,394 being an increase of 30,747 over 1910.

There are 23 Native Vaccinators employed in the Central Province who are paid salaries varying from £9 to £36 per annum from Native Court Funds.

In the Western Province there are 32 Native Vaccinators who receive two shillings a day from Colonial Funds.

Vaccinations in the Eastern Province are carried out for the most part by Medical Officers and two Native Officials.

The following table shows the distribution of vaccinations performed. It is not possible to give the actual number of successful cases on account of the difficulties encountered by the Vaccinators in their work. Only successful cases are recorded.

	1910. Total.		1911. Total.	
	Vaccinated.	Successful.	Vaccinated.	Successful.
Western Province	75,691	43,981	83,162	52,777
Central Province	12,902	6,935	35,123	22,431
Eastern Province	47,054	37,663	48,109	38,449
	135,647	88,579	166,394	113,657

TABLE SHOWING THE SICK, INVALIDINGS AND DEATH RATES OF EUROPEAN OFFICIALS.

Total number of Officials resident	1,372
Average number resident	595
Total number on Sick List	461
Total number of days on Sick List	4,525
Average daily number on Sick List	12·4
Percentage of Sick to average number resident ...	77·4
Average number of days on Sick List for each patient	9·8
Average Sick time to each resident	7·6
Total number invalided	41
Percentage of Invalidings to total residents ...	2·9
Total Deaths	9
Percentage of Deaths to total residents	·6
„ „ „ average number resident...	1·5
Number of cases of Sickness contracted away from residence	Not Known

---

Invaliding of European Officials 1911.

CAUSES.

WESTERN PROVINCE.

1. Anæmia and Debility following Blackwater Fever.
2. Epilepsy.
3. Anæmia and General Weakness after an attack of continued Fever.
4. Debility and Anæmia the result of Chronic Dysentery.
5 Malarial Debility following on concussion, the result of a fall from a horse.
6. Extreme Anæmia and Furunculus.
7. Blackwater Fever (the result of)
8. Gastritis.
9. Phthisis.
10. Anæmia, Insomia and generally run-down condition due to inflammation of suboccipital glands resulting in an abscess.
11. Enlarged inguinal and retroperitoneal glands and Anæmia.
12. Intra-Thoracic Swelling causing persistent pain in the thorax.
13. Cerebral instability at intervals-probably the effect of exposure to sun.
14. Anæmia.
15. Central Scotoma and Incipient Neuritis of both legs.
16. Gastritis and Anorexia.
17. Muscular Rheumatism following on an attack of intermittent fever.
18. Anæmia following on a prolonged attack of Fever.
19. Effect of recent sun Traumatism.
20. Anæmia after an attack of Rheumatism.
21. Anæmia following an attack of Blackwater Fever.

RAILWAY EXTENSION OFFICERS AND OFFICERS OF THE OPEN LINES SERVING UNDER AGREEMENT.

1. Nervous Break-down.
2. Anæmia and Debility.
3. Oedema of Legs, Shortness of Breath and Weak Heart.
4. Heat Exhaustion.
5. Anæmia and General Debility.
6. Results of Blackwater Fever.
7. Results of Blackwater Fever.

CENTRAL PROVINCE.

1. Duodenal Ulcer.
2. Facial Paralysis with constant neuralgic pains.
3. Anæmia, Debility and Chronic Rhinitis.

EASTERN PROVINCE.

1. Boils and General Debility after Dysentery.
2. General Breakdown due to Chronic Dyspepsia, Chronic Dysentery and Enlarged Liver.
3. Sub-acute Rheumatism, Anæmia, General Debility and Heart Murmur.
4. Delusion Insanity.
5. Nervous Breakdown.
6. Effects of Exposure to heat.
7. Results of Blackwater Fever.
8. Results of Blackwater Fever.
9. Mental Breakdown and Filariasis.
10. Suspected Liver Abscess

Deaths of European Officials, 1911.

CAUSES.

Western Province and Lagos Government Railway Extension.

Blackwater Fever	4
Meningitis (Malaria)	1
Heart Disease	1
Accident	1

CENTRAL PROVINCE.

Nephritis	1
Murdered	1

EASTERN PROVINCE. Nil.

Total 9

GENERAL POPULATION.

Vital Statistics.—Registration not being compulsory, reliable facts cannot be quoted.

Estimated Population 1911 ... ... 7,857,983.

	Natives.	Europeans.	Asiatics	Others.
Western Province ...	2,151,483	790	63	440
Central „ ...	2,407,664	430	3	21
Eastern „ ...	3,296,602	428	33	26
Total	7,855,749	1,648	99	487

Total Births and Birth Rates.—Registration not compulsory except in the Colony.

Total Deaths and Death Rates.—Registration not compulsory except in the Colony.

Infantile Mortality.—Registration not compulsory except in the Colony.

Statistics for Lagos and Ebute-Metta are shown below.

LAGOS.

Year.	Total Births.	Birth rate per 1,000.	Total Deaths.	Death rate per 1,000.	Deaths.						Total Deaths under 5 years.	Rate per 1,000.	Total Still-births not included in Return.	Estimated Population.
					Under 1 year.	Rate per 1,000.	Between 1 and 2 years.	Between 2 and 3 years.	Between 3 and 4 years.	Between 4 and 5 years.				
1909	2,312	43.3	1,975	37.	729	13.6	135	90	52	49	1,055	19.4	155	53,299
1910	2,389	44.2	1,937	35.8	774	14.3	78	61	54	44	1,011	18.7	123	53,986
1911	2,430	39.8	1,873	30.7	692	11.3	74	54	38	31	889	14.5	132	61,000

EBUTE METTA.

1909	264	35.5	284	38.2	83	11.1	12	11	1	2	109	14.6	21	7,417
1910	262	32.3	325	40.1	83	10.2	20	4	7	2	116	14.3	17	8,104
1911	288	24.	317	26.4	91	7.5	12	4	2	7	116	9.6	22	12,000

LAGOS, 1911.

No. of deaths of Children under 5 years of age	889
Percentage of deaths of Children under 5 years to total number of deaths	47·4
Death rate of Children under 1 year per 1,000 births ...	284·7

EBUTE METTA, 1911.

No. of deaths of Children under 5 years of age	116
Percentage of deaths of Children under 5 years to total number of deaths	36·5
Death rate of Children under 1 year per 1,000 births ...	316

III.—SANITATION BY DR. A. PICKELS, SENIOR SANITARY OFFICER.

The year 1911 has, I am glad to say, been one of distinct progress in Sanitary Work in all parts of the Colony and Protectorate. At outside Stations, matters are being considered from the standpoint of Sanitation which were never so considered before. Executive Officers are taking much greater interest in the Sanitary Condition of their Stations and the Towns in their Districts and Medical Officers are receiving much more assistance in all matters pertaining to it.

In the chief centres and large Towns these changes are of course more in evidence, the rate of progress is increasing and the difference in the present condition of these places to what it was a few years ago is very marked indeed.

ADMINISTRATION.

2. At the beginning of the year I was on leave and during that time Dr. Laurie, Sanitary Officer, performed the duties of the Office. While away, I was favoured in being allowed to visit one of the main haunts of Yellow Fever in Brazil, where it was my good fortune to see a number of cases of that disease, and then to proceed to Panama and Cuba where I saw the means which had been adopted in combating it and clearing it out of places in which the population had previously been decimated by the affection. The information gained during that time has been, and will be, most useful in my work here.

3. I returned from leave on June 30th. Dr. Laurie, who was considerably overdue and had been good enough to wait for my return, left for England on July 7th and did not return before the end of the year.

During my absence Dr. Mackinnon acted as Junior Sanitary Officer from February and continued to do so after Dr. Laurie went away; when he in turn went on leave. Dr. Beatty continued the work till the end of the year.

4. During the year all the places in the Western Province together with the Stations and Quarters etc. on the Railway Line up to Jebba have been visited by the Sanitary Officers on one or more occasions; advice was tendered on sanitary matters and arrangements, and Reports sent in.

In the Central Province several visits have been paid to the Towns on and near the Coast but unfortunately it has not been possible to get up the river to Onitsha and other places.

In the Eastern Province, Bonny and Opobo were visited, with a view to making a more extended tour to Calabar and up the Cross River, but unfortunately the journey had to be curtailed and I was not able to leave Lagos again to continue it until the end of the year.

During the latter half of 1911 there was a large amount of work in and around Lagos which had to receive attention and which prevented me travelling about as much as I should have wished. As it is considered desirable that one of the Sanitary Officers should remain either at Lagos or within very easy reach, it is not always possible to get away to the more distant parts of the Protectorate.

ESTIMATES.

5. The Estimates for Sanitary Work for 1912 were prepared in the Medical Office on the old lines and sent in before I arrived but later the Principal Medical Officer put forward the request that money be voted for three European Sanitary Inspectors, two of whom would always be in the Colony. It was proposed that their duties should be mainly in Lagos but that they would be available for work in other places, if required, and if they could be spared. This request met with the approval of His Excellency, the money was arranged for and the men should arrive during 1912.

On my return from leave I found that £1,000 had been voted in the Estimates for Sanitary Work outside Lagos and of this various sums were spent on the large towns, Bonny, Warri, Forcados, Opobo, Badagry, Ibadan etc., and some very necessary work done. Indents also were sent to England for appliances for general sanitary purposes.

As however I was able to get away so little during the early part of my tour the whole sum was not expended but this, when there is so much work to do, will not be the case again.

Attached is a statement showing where and for what purposes the money was spent.

In addition a sum of £960 was issued under Special Warrant for Anti-Mosquito work in Lagos only, and this was disbursed by the Medical Officer of Health on the lines on which the work was started in 1910.

A Special Warrant for £60 was issued to cover necessary expenses at the Quarantine Station and was all expended.

A sum of £590 was also issued under a Special Warrant for the carrying out of a small scheme of Sanitation at Ibadan, in the proximity of the Station, but unfortunately the work could not be put in hand before the end of the year so that none of the money was spent. An application was therefore sent in before the end of December asking that the money might be re-voted as early as possible in 1912.

ORDINANCES, ETC.

6. The following Ordinances, Orders and Rules have been passed and have come into force during the year viz:—

1. The White Phosphorus Matches Prohibition Ordinance.
2. The Destruction of Mosquitoes (Amendment) Ordinance. (This gives a more full definition of the word "Premises").
3. The Building Lines Ordinance.

Orders in Council.

1. Under the Births, Deaths and Burials Ordinance. (Form of Death Certificate).
2. Under the Births and Deaths Registration (Protectorate) Ordinance. (Form of Death Certificate).

3. Under the Towns (Regulation) Ordinance.
   (Application of the Ordinance to certain specified places).
4. Under the Prisons Ordinance.
   (Part of the Leper Asylum, Yaba, declared to be a Prison).
5. Under the Infectious Diseases Ordinance.
   (Trypanosomiasis declared an Infectious Disease).
6. Under the Ordeal, witchcraft and Juju Ordinance.
   (Invocation of Chuku or the Long Juju and of Obonorio or Obonorie forbidden).
7. Under the Prisons Ordinance.
   (Old Isolation Hospital at Opobo declared a Prison).
8. Under the Ordeal, Witchcraft and Juju Ordinance.
   (Invocation of Iffallum prohibited)
   (Invocation of the three above-mentioned Jujus involves the sacrifice of human life).
9. Under the Towns (Regulation) Ordinance.
   (Application of the Ordinance to Benin City and Siluko.
10. Under the Towns (Regulation) Ordinance.
    (Application of the Ordinance to Degema and Abonema).
11. Under the Destruction of Mosquitoes Ordinance.
    (Application of the Ordinance to Koko Town).

Rules in Council.

1. Under the Quarantine Ordinance.
   (Any duly Licensed Pilot is included under the term "Visiting Officer").
2. Under the Towns (Regulation) Ordinance.
   (Definition of "Streets" and "Carts" and Rule as to the condition of the latter).

REPORTS, ETC.

7. During the year a large number of Reports, &c., have been made on various matters bearing on Sanitation, Towns, Buildings, Sites, Prisons, Mosquito proofing, etc, which have been forwarded with recommendations in the usual way.

PREVENTIVE MEASURES.

Insect-borne Diseases.

8. *Anti-mosquito work.*—This most important work, which was initiated at the instance of Sir Rubert Boyce, has been carried on throughout the year with considerable energy.

In Lagos especially, many people have been engaged in this crusade and a good deal of money spent. As everyone admits, wherever the work has been prosecuted with vigour, there has been a marked decrease in the number of these insect pests and therefore a diminution in the liability to contract Mosquito-borne Diseases.

The Returns attached are not complete for the whole year as in some places no work was recorded during the first Quarter and in others a Medical Officer was not always in residence and there was no Sanitary Inspector to carry on.

It will be noticed that the number of Receptacles with Larvæ in houses where Larvæ were found is now, in the majority of instances, barely above one, showing that much greater care is being exercised than formerly.

House guttering is a common and very troublesome breeding place as shown by the number of Larvæ which reach Mosquito-proof tanks. Although at first it may be put up well and apparently satisfactorily, the supports are usually so far apart that sagging soon occurs and quite double the number are required.

Tanks are unfortunately essential in most places so that guttering is a necessity but special precautions should be taken in the fixing. Puncturing, although a help, does not give complete protection, probably, partially at any rate, on account of the way it is carried out.

At Burutu the Niger Company is using adjustable supports so that any part can be easily and quickly raised or lowered as becomes necessary.

Altogether over 600,000 inspections of houses have been made and in 68,450 instances Larvæ were found, which gives a Mosquito Index of III.

In Lagos the Acting Sanitary Officer made a number of independent observations on the frequency with which Larvæ were found and obtained results similar to those reported by the Inspectors. Although here, the Mosquito Index is very considerably less than it used to be, it does not come down in the way it should, considering the amount of work done and money spent. This I largely attribute to the carelessness of the people in the matter and this again results, in my opinion, from the method of administration of the Ordinance for the Destruction of Mosquitoes, for the following reasons *viz*:—

a. The delay which exists between the occurrence of the offence and the hearing of the case; an interval of two months frequently intervening. On account of this delay it is found impossible to serve about a quarter of the Summonses obtained.

In all 1,150 offences were taken up under this Ordinance and Fines to the amount of £207 1s. 10d. were imposed.

789 Fines were imposed (each being 5/, except in 25 cases).
301 Summonses could not be served.
41 Persons were cautioned.
6 Prosecutions were withdrawn.
3 Cases were dismissed.
10 Defendants did not appear.

At the end of December, there were 123 Cases waiting to be heard, the earliest offence dating from November 21st, and the first batch of these was not heard till January 26th. At the present time there are between 300 and 400 Cases waiting.

b. The inadequacy of the Fine imposed.

When at first cases were taken under this Ordinance a fine of 5/ was imposed and now, after 18 months, it is still the same, and even yet it is the custom of the Magistrate not to punish unless two previous occasions of offence can be proved.

On a second prosecution (that is at least the fourth offence) the fine imposed is 7/6.

Until some method having more of a deterrent effect is adopted (the excitement and èclat attached to a case at Court being often appreciated at a cost of only 5/) I doubt if the Mosquito Index will reach a much lower figure.

At Badagry special steps are being taken. An Anti-mosquito gang has been started and the Index for the fourth Quarter of the year shows a much greater improvement than would have resulted simply from the change of the season.

At Aro for some reason or other the Index is maintained at a very high figure and calls for enquiry.

Ibadan.—Here the records are not of much value as yet; none of the Colonial Sanitary Ordinances apply and, although there is no means of training Inspectors, objections are raised to men being sent from elsewhere.

At Warri good work is done as the low Index shows.

Forcados is a place which requires much attention otherwise there would be a rapid return to old conditions.

The Indices at Sapele and Benin City unfortunately show a tendency to rise, especially at the latter place.

In the Eastern Province work is carried on with good results in all the large Coast Towns, Calabar, Bonny, Opobo, Degema, &c, and improvement is universally recognized, but in the up-country Stations the opportunities for observation and work are often small and irregular and the records generally incomplete.

Oiling.

9. *Oiling* of pools, drains, wells, tanks, canoes, etc, has been carried on throughout the year but nowhere to any extent except in Lagos, which is also the only place where mechanical sprays have been obtained.

Barrels.

10. *The Mosquito-proofing of Barrels* is still carried on. This form of water container is much more commonly used in Lagos and Forcados than in any other towns; at the former place 365 were rendered mosquito proof, most of which were also fitted with taps.

Reclamation, etc.

11. *Reclamation and Filling-in* is being carried on wherever necessary and possible, either by the Pump Dredger, Manual Labour or by means of the burnt material from the Refuse Destructors, and a large amount of very necessary work has been done.

In Lagos the Dredger has done a considerable amount of reclamation and raising in the Kimberly Swamp but unfortunately the piping was taken up before the work was complete. At the time it was stated the remainder would be finished by means of hand labour but up to the present this has not been done.

At the back of the Town filling in has been continously proceeding with the residue from the Destructors, in fact over 20 acres have been reclaimed and converted into good ground by this means. Parts also have been raised by sand dumped by manual labour so that altogether a great change for the better has been brought about.

At Forcados a small Pump Dredger has been working for some time and has made considerable improvement but the land has not been raised high enough, to allow for sinking, before buildings have been erected.

This small Dredger has also done work at *Bonny* and reclaimed ground from the swamp behind the Marine Beach. On it Quarters have been erected and Workshops are being put up.

At Opobo public and private enterprise are working with great advantage but here it all has to be done by manual labour.

Mosquito-proofing.

12. *Mosquito-proofing.* This most important method of protection against and prevention of Insect-borne disease does not make very rapid progress in public favour and especially is this noticeable in the Eastern Province. In Calabar there are only two mosquito-proof rooms used as such—these being in the houses of Medical Officers—and a mosquito-proof house is not to be found.

In the Western and Central Provinces more advantage is taken of this means of protection and progress is gradually being made, although not in all cases without objection being raised.

It is not always easy to induce the occupants of the houses, where mosquito-proof rooms are provided, to use them as such or to take an adequate interest in the condition of the gauze itself so as to obtain the greatest benefit and the smallest amount of disadvantage.

His Excellency Sir Walter Egerton encouraged the adoption of mosquito-proofing and directed that the last few houses he decided to build should be made mosquito-proof throughout, and issued instructions with that object in view.

I have been very glad indeed to note that in the Rivers some of the Merchant Firms have imported a number of portable Mosquito-proof Rooms for their Agents and the Assistants employed in the Factories. These are put up in the bedrooms and are used as sleeping apartments. From the enquiries I have been able to make no objections are raised to them, in fact they are very greatly appreciated and are considered a vast improvement on the old Mosquito Net. This, it should be noted, is by the youngest members of the community and by those who usually have had the reputation of being the most reckless in regard to the protection of their health. To my mind it rather indicates that the objections usually raised are more imaginary than real.

The fact that neither Sanitary Officer has Mosquito-proof Quarters, nor even a Mosquito-proof Room, rather places them at a disadvantage in recommending this method of protection.

Quinine.

13. *Quinine Prophylaxis.* Quinine is still taken in large quantities as a prophylactic and the tendency seems to be in favour of a regular daily dose rather than a large dose once or twice a week. From records kept, I understand that $\frac{3}{4}$ of the amount of Quinine issued for prophylactic purposes is taken by Natives and that with them the practice is steadily growing in favour.

The increase in the amount issued during 1911 is very marked as following figures show:—

	1910.	1911.	Increase.
Western Province ...	1,206,000	1,530,100	324,100
Central „ ...	140,532	229,963	89,431
Eastern „ ...	400,671	586,384	185,713
Total Grains ...	1,747,203	2,346,447	599,244

Plague.

14. Anti-plague measures have been continued but not quite so vigorously as might have been done with advantage.

During the year 12,365 Rodents have been destroyed in Lagos which shows an average of 34 a day, but, considering the number which are killed and thrown into the Streets, this is insufficient.

The Medical Officer of Health is obtaining a further supply of traps and more energetic action is to be taken.

Malaria and Blackwater.

15. I attach Tables showing the number of cases of Malaria and Blackwater Fevers during the last three years in each of the three Provinces and in the chief town of each one.

In looking over the Returns from Lagos, Warri and Calabar it will be noticed that in those from the two latter places a marked decrease is noticeable in the number of cases of Malaria affecting Europeans and that in Calabar the same is observed among the Natives.

As regards Blackwater there has been no case arising in an European in Calabar itself during the last three years, although an Asiatic living in the Native Town has succumbed to an attack of that disease and two other cases occurred in places not very far away. The ample area of the Reservation, the large amount of clearing and the Anti-Mosquito work all appear to be conducing to these results.

In spite of the fact that the total number of cases of Malaria has increased in Lagos and Warri it must not, I think, be concluded that the number of fresh infections has gone up.

It is practically impossible to obtain the total number of cases of Fever which occurs in Europeans as there is only a record kept in regard to Government Officers, and, among these also, slight attacks, probably only relapses, occur which are never seen on the records nor possibly even by a Medical Officer.

Amongst the Mercantile community no records whatever are kept.

In Blackwater Fever all cases come under medical observation and definite records of their numbers are obtainable.

Trypanosomes.

16. *Trypanosomiasis.* Although the Tsetse Fly is so numerous and widely distributed in the Eastern and Central Provinces, cases of human Trypanosomiasis coming under observation are very few in number, there being only five in all recorded during the year.

One European Officer who had been travelling in a Tsetse country and who left the Colony at the end of 1910 has been reported to be suffering from the affection.

Regular examinations of the blood of Officers stationed or travelling in Tsetse Districts might with advantage be made every three or six months.

Filariae.

17. *Filariasis.*—Only 22 cases of this disease have come under observation in the whole Colony during the year.

Apparently the liability to infection is not very great but if it were possible for observations to be made—which would take much time—in different centres as to the prevalence of the affection we should be able to obtain a much better idea as to what the danger really is.

Several Europeans in the Colony are known to harbour the Filaria Loa with, apparently, very little inconvenience to themselves.

Epidemic Disease.

18. *Epidemic Disease.*—Under the Paris Convention there have been several outbreaks of Infectious Disease reported during the year in Ports on the Coast and elsewhere with which Lagos is in more or less direct steamer communication.

Cholera existed at Madeira when the year came in and Yellow Fever has several times been declared at different places on the Coast viz :—

Dakar.	Once.	(November).
The Gambia.	Three times.	(May, July & November).
Sierra Leone.	Once.	(July).
Accra.	Twice.	(May & November).

Although at all times careful inspection is made of all Coast passengers arriving, yet, on each of the above occasions, special measures were immediately taken to prevent the introduction of the disease into the Colony or Protectorate, fortunately with success, and no case has come under the observation of any of the Medical Officers which has aroused their suspicions of either of the above affections, and been reported to the Sanitary Office. On one occasion when Yellow Fever had been declared it was considered advisable to isolate the Native Passengers from one of the steamers at the Quarantine Station, but after detaining them the necessary period it was found that all were free from the disease.

Plague.

19. There has been no resuscitation of the Plague Epidemic on the Gold Coast and no cases have occurred here to suggest the presence of the disease.

Enteric Fever.

20. *Enteric Fever and Cholera.*—No Patient has been reported suffering from Enteric Fever and as far as we are aware Cholera has been no nearer than Madeira.

General Diseases.

21. From the ordinary General Infectious Diseases which take on an epidemic character, the Colony and Protectorate has been very free and no report of any outbreak has been received in this Office.

Varicella.

22. *Varicella.*—A large number of cases of Varicella have occurred in Warri, Onitsha, Calabar and Ikot Ekpene, all of a very mild nature.

When I visited Warri an Epidemic of the disease had broken out in the Prison and in an Institution of this character, allowing under two square feet ventilation area, 15 square feet of floor area in the Cells and 14½ square yards of general Prison area per prisoner, it is not surprising a large number were affected. At Ikot Ekpene practically all the cases recorded occurred at the Prison; at Onitsha two-thirds and the same Institution at Calabar was responsible for one-third of the number which came under observation in that town.

Small Pox.

23. *Small Pox* occurs sporadically in most of the places here and occasionally, in Towns in out-lying Districts, takes on and epidemic character, partly, in some cases it is to be feared, by artificial means on the part of the Small Pox Juju Priests. The Prohibition of the Worship of the Small Pox Juju in 1907 has been of considerable effect in the main towns, many Priests have been compelled to remove, the places of worship have been closed and in some instances the Priests themselves have been heavily fined.

Vaccination.

24. *Vaccination* is a matter which is directed by the Principal Medical Officer and on which I have no information but, as far as my observation during inspections goes, the number of children efficiently protected is not as large as I had expected to find. Ibadan is, I believe, almost the only place where there are Vaccinators and where reliable inspection is carried out as there although the men receive a monthly salary yet in addition there is a bonus on each successful case produced for inspection, the size of which varies with the efficiency of the operation.

Dysentery.

25. *Dysentery.*—The amount of Dysentery existing still continues large and presumably the numbers will remain high in Lagos until we obtain the pipe-borne water supply, although it may be remarked that the number of cases, in proportion to size, is not much greater in Lagos than in Calabar with its much better service.

Tubercle.

26. *Tubercular Disease.*—More cases of Tubercular Disease have come under notice in Lagos (Municipal area) than elsewhere. The Returns show that 92 cases were treated in that town, of which 18 occurred in the Prison.

Venereal Disease.

27.—*Venereal Diseases.*—These account for a large proportion of affections of an Infectious nature.

Helminthic Diseases—Taeniae.

28. *Taeniae.* The cases of Tape Worm which have been observed are few in number, certainly the majority which I have seen have been in Syrians and Germans and not in the mainly vegetable-eating Native. The most common variety observed is the Taenia Solium.

Trichina.

29. *Trichinosis.* No case of this disease has ever been known in the Colony.

Ascaris Lumbricoides.

30. *Ascarides.* Ascaris Lumbricoides is extremely common, especially in the large towns, and this is not a matter for much surprise.

The figures in the Table only indicate the numbers treated and therefore only represent a very small proportion of the persons harbouring the parasite.

Bilharziosis.

31. *The cases of Schistosomum Haematobium*, are, I think, more numerous than would be supposed from the figures in the Returns, although it cannot be said to be a common affection; many who suffer occasionally from blood in the urine do not trouble about it after a time. Fortunately it does not take on a severe character as in some other parts of the world.

Anchylostomiasis.

32. *Anchylostomum Duodenale.*—This can be very frequently met with, if sought, even in persons who would from appearances never be suspected of harbouring it. Only when the worm, from its numbers, leads to severe ill-health do Patients seek treatment.

At Sapele some observations were made on a number of cases which occurred in the Prison and the Medical Officer sent in a Report to the Principal Medical Officer on the subject.

Guinea Worm.

33. *Dracunculus Medinensis.*—This is apparently most common in the Western Province, Lagos being said to account for 164 cases. This, I consider, gives rather a mistaken idea of its prevalence in that town. A very large proportion of these Patients become infected while in the Hinterland and then come down or return to Lagos. It is satisfactory however to observe that the number of sufferers is apparently diminishing.

Government employés suffering from this affection should not be sent to Stations where the disease is hardly known, otherwise a fresh centre will possibly be created.

General Measures—Sewage.

34. *Sewage Disposal.*—This matter does not in all instances receive that amount of attention which is desirable.

In all Towns and places in the Colony and Protectorate, where anything is done at all, the disposal of night soil is carried out by hand labour, assisted in one instance (Lagos) by a tramway. On the Coast or on the banks of large rivers dumping into the water is the simplest and most common method employed; danger however arises if the water is used for drinking purposes in the neighbourhood, and also on account of the possibility of Parasites entering through the skin. In most cases it is dumped from piers, wharves or from a water latrine which may be only over shallow water or even at certain states of the tide over dry ground or else it is taken out in canoes to the middle of the stream and dropped there. In some places the land method is employed, sometimes both it and water disposal, and in one or two instances burning has been tried on a small scale.

The means most commonly adopted on land and which, when properly looked after, has given the best results is the shallow trench system. I have also seen the deep trench method used but it has not been so satisfactory. The using of deep holes into which night soil is thrown works out very badly as although nominally a layer of earth is said to be used daily to cover everything up yet in practice this cannot be relied on without continual supervision and I have not yet come across an instance where it has been carried out in a manner worthy of imitation. In Lagos, the area of compulsory, removal of nightsoil has not been extended; not all the pans however

are removed to the Dejection Jetty by the tram but only those which are full, as at the Depot the contents of several may be emptied into one. This method leads to a nuisance both in the emptying and the cleansing of the pans.

I understand that a regular sewage system is to be introduced as soon as the water supply is an accomplished fact.

Refuse.

35. *Refuse.*—A number of dustbins has been erected in various towns during the year which have been of great value and have led to an improved condition of the Streets and Compounds, but more are still required.

There are several methods in use for the diposal of refuse viz:—

(*a*) By digging large holes, throwing the material in and setting it on fire, if it will burn; the major portion cannot however be destroyed by this means, especially in the wet weather.

(*b*) The most usual method of getting rid of it in towns on the Coast or on the banks of rivers is to put it in canoes and dump it in the water some little distance a way. This is certainly a very convenient way but is not to be always recommended, and a certain amount of refuse is certain to wash up on the banks.

(*c*) By burning. This is mainly exemplified in Lagos where there are a number of cheap and simple Destructors which have been built in various low lying situations about the town. The tins are roughly picked out of the refuse, thrown direct into the swamp and then covered up with the residue left from the Destructors. By this means large swampy areas have been filled in and reclaimed and parts of the town, which a few years ago were swamp and morass, are now quite respectable ground.

Water Supply.

36. *Water Supply.*—The arrangements mentioned in my previous Report are still in vogue.

At Lagos great progress is being made by the Water Engineer with the Iju Water Scheme and the Town is now within measurable distance of having a pipe-borne supply. At present all tanks and wells, which constitute the sole supply, are inspected at least once a week and when necessary cleaned out. During the year 44 Public Wells were deepened and cleared and six were fitted with pumps. The private wells are a source of danger as it is not so easy to get them properly attended to as those which are under the care of the Municipal Authorities; none of them are mosquito-proof and they doubtless serve as breeding places for numerous Mosquitoes although it is not always easy to find the Larvae.

Filters.

37. *Filters.*—All Officials and the majority of Europeans are supplied with Filters, the Pasteur-Chamberland being the most common and the most satisfactory. It is, unfortunately, not everyone who uses them properly or takes that amount of care of their condition which is essential to their being a protection instead of a source of danger; still, much more attention is given to them than used to be the case.

While travelling I found the Doulton Travelling Filter a very compact and useful article.

Drainage.

38. *Drainage.*—In no part of the Colony have I come across any system of subsoil drainage but there is a scheme on foot at present for utilizing this method on the Lagos Race Course.

In all places the surface system is adopted. In Lagos, however, where, in parts, the drains have to be at some little depth in order to obtain the necessary fall, they are covered over where any danger is likely to arise and openings (protected) are made about every 50 or 60 yards. In these covered parts the drains are made of such a size as easily to allow of a man passing along for cleaning purposes and on several occasions I have been through them and always found them sweet and clear. The method of construction appears very satisfactory and the earthenware invert is a great advantage as it is so much more easily kept clean than a cement one.

The dual system of responsibility for the drainage of Lagos still exists within the Municipal Area, that of the main portion of the town being under the Municipal Engineer and the remainder, mostly around the Government Quarters, under the Public Works Department.

As money is available, the scheme of drainage drawn up by the Municipal Engineer is being worked out but at the present rate of progress it will be many years before it is complete.

Where the new drains have been put in, the old smells, which used to be so much in evidence, have largely been done away with. In places like Forcados, Bonny, Aboh etc, the question of satisfactory drainage is a difficult one and to a large extent resolves itself into first raising the ground level.

At Calabar the majority of drains in the town are simply cuttings at the sides of the streets and where there is so much fall the washing away is very considerable.

Clearing.

39. *Clearance of Bush and Undergrowth.*—This, during the last year, has occupied a good deal of attention and in nearly every Station the cleared area has been increased and the whole maintained in a more or less proper condition, according to the amount of money or labour available. The importance of this is gradually coming to be recognized so that much more is now being done than was the case formerly.

The expense of maintaining extensive cleared areas round the Stations in a satisfactory condition is considerable but there is no doubt that it leads to a distinct improvement in the health of the Officers.

40. *Infectious Diseases Hospitals.*—In Lagos, as the present buildings have to come down and the Hospital has to be removed, a site has been selected on Ikoyi Plains about a mile beyond the Cemetery. Plans have been drawn up and approved and the buildings are already in course of construction. It being so far away, special means of transport will have to be provided.

This new Hospital, in which His Excellency Sir Walter Egerton and the Honourable Colonial Secretary have taken so much interest, will be a very great advance on the old one which, although it has been most useful and served its purpose, is now quite unsatisfactory, both from its character and surroundings.

At Ibadan a site has been decided on but nothing has yet been done as regards construction, either in the form of temporary or permanent erections.

In Calabar, the Infectious Diseases Hospital is away from the town but the absence of a water supply is a very great drawback. In the dry season Prisoners have to carry water there several days a week and all ablutions, washing of clothing etc., have to depend on the amount taken.

Warri possesses a Hospital at the back of the town for Infectious cases, which has buildings made both of brick and of mud, the latter cannot however be disinfected effectively unless they are burnt out and then re-roofed.

At Yaba the Leper Asylum buildings will soon require attention and the question of removal to another site further away is under consideration.

Quarantine.

41. *Quarantine Stations* exist at present at Lagos and Forcados; that at the former place is on the Sea Beach in a very exposed position and consists of a number of galvanized iron erections,—for the accommodation of Natives,—inside which are mosquito cages. One mosquito-proof building is set apart for a Hospital. No special arrangements are made for Europeans. At Forcados, the Station is some distance away up a Creek and has accommodation for Natives and Europeans, but the site is not good.

At Bonny an old Factory has been purchased, in an isolated position on the river bank, a short distance above the Station. This will require considerable expenditure to adapt it to the purpose for which it was bought.

At Calabar a site has been selected lower down the river than the town and on the opposite bank. It is simply Mangrove swamp and, unless the Dredger can be utilized to reclaim, the expense necessary for raising a sufficient area to a suitable height, by manual labour, will be very great.

Sites and Plans.

42. *Sites and Plans.*—A number of Plans of Buildings have been submitted which have been examined and, on which, suggestions have been made.

At a Meeting held at the Secretariat on November 9th, under the Presidency of the Honourable Colonial Secretary at which the Honourable Principal Medical Officer, the Director of Public Works, the Honourable Provincial Commissioner of the Western Province, the Government Architect and myself were present, certain minimum requirements were agreed on in regard to houses.

The main ones were as follows viz:—

(*a*) The verandahs should be ten feet wide in front and eight feet wide at the sides and back.

(*b*) The minimum floor area of a room (living) should be 224 square feet.

(*c*) Each living room should have at least four double doors and not windows.

(*d*) Houses should be raised six feet above the ground. (In reference to this point His Excellency Sir Walter Egerton, when he saw the six foot measurement, immediately ordered it to be increased to ten feet.) The question of building on solid platforms was considered but, although not absolutely condemned, the members were of opinion that a free current of air underneath was strongly advisable.

In reference to sites in Lagos it has been laid down that the Sanitary Officers have no responsibility as His Excellency the Governor selects and decides, but in other places it is usual to refer to the Medical Officer.

At Ebute Metta, the Head Quarters of the Railway, I have been forced to the conclusion that some such arrangement exists as in Lagos.

43. *Sanitary Inspectors.*—During the year an enquiry was held to consider, among other things, the training of men as Sanitary Inspectors but nothing has, as yet, been decided on. Many Inspectors are required at Stations and men have to be engaged who have had no experience nor satisfactory training. It cannot be expected that these men will either know their work or have much influence with the people generally.

44. *Prisons.*—Prisons are Institutions on the sanitation of which there is a good deal of diverse lay opinion, especially in regard to cubic space and ventilation area to be allowed per prisoner.

In very rare instances is the ventilation area provided up to the standard and I have seen it as low as a few square inches per prisoner. Endeavours are however being made to improve the present conditions where they are not satisfactory. Types of Cells (Solitary and Association) have been designed which will provide the requisite cubic capacity and ventilation area and in all future buildings I trust these will be adopted.

The following Table gives a few particulars in reference to some of the chief Prisons, taken from observations and Returns.

	Total Prison area per Prisoner.	Cubic space in Cells per Prisoner.	Ventilation area in Cells per Prisoner.
Male Cells. a ...	50 sq. yds.	425 c. ft.	4½ sq. ft.
b ...	—	475 c. ft.	6 sq. ft.
Female Cells. a ...	—	383 c. ft.	4½ sq. ft.
b ...	—	425 c. ft.	4½ sq. ft.
Debtors Cells. ...	—	567 c. ft.	17 sq. ft.
Condemned Cells. ...	—	680 c. ft.	16 sq. ft.
Europeans Cells. ...	—	648 c. ft.	17 sq. ft.
Abeokuta (Igbein Hill).	36 sq. yds.	324 c. ft.	1 sq. ft. in main building. 4 sq. ft. in the others.
Ibadan	32 sq. yds.	294 c. ft.	1½ sq. ft.
Warri	17 sq. yds.	163 c. ft.	1½ sq. ft.
Sapele	15 sq. yds.	198 c. ft.	3 sq. ft.
Benin City	54 sq. yds.	460 c. ft.	6 sq. ft.
Calabar	28 sq. yds.	304 c. ft.	4½ sq. ft.
Opobo	22 sq. yds.	438 c. ft.	2½ sq. ft.
Degema	46 sq. yds.	266 c. ft.	3½ sq. ft.
Bonny	36 sq. yds.	864 c. ft.	11 sq. ft.
Brass	?	318 c. ft.	4 sq. ft.
Bende	33 sq. yds.	360 c. ft.	5 sq. ft.
Awka	32 sq. yds.	358 c. ft.	4 sq. ft.
Ifon	99 sq. yds.	700 c. ft.	2 sq. ft.
Kwale	29 sq. yds.	350 c. ft	6 sq. ft.
Ubiaja	39 sq. yds.	349 c. ft.	7½ sq. ft.

45. *Slaughter Houses* have been provided in Lagos, Epe, Warri, Onitsha and Calabar.

In Lagos there are three but the main one is on Iddo Island away from the town and all the meat has to be carried by head labour to the markets, which are between one and two miles away, and this method of transport cannot be considered at all satisfactory. The chief Slaughter House was originally intended to be of a larger size but on erection the plan was cut down.

Lagos is the only place in the Colony or Protectorate where any considerable number of animals are slaughtered for food, there being an average of 24 cattle killed daily in addition to Sheep, Pigs and Goats.

At Calabar the Slaughter House is on the river bank in the centre of the town and at Warri it is at the top of the town at the side of the stream.

46. *Cemeteries* do not receive that amount of attention which should be the case.

In some instances, on account of the character of the records kept, the identity of the graves of some of the Europeans has been lost and in the Native Cemetries very few indeed can be identified.

Burial in houses, although forbidden in the capital towns of the Provinces, is common and in fact the usual thing in many places, but until Cemeteries are provided very little can be done to put a stop to this method of interment.

At Ibadan a Cemetery has been made, mainly for the use of the Hospital, but I do not know of one for the town, except in connection with Churches.

47. Lagos is the only place where I have seen extensive arrangements for public washing. This provision is specially necessary in a town of this description and care should be taken to make them large and convenient, as the more they are patronized the less washing will be done in the small private compounds.

During the year the main Laundry in the town has been enlarged by the addition of another shed.

48. Hygiene is taught in the Schools and the Sanitary Officers in their journeys round the country endeavour to instil ideas of and arouse interest in the practical part of the subject. At some of the Stations the Medical Officers often visit Schools and talk to the Pupils for a few minutes on sanitary matters.

Formerly the subject of Hygiene and Sanitation was a special one in the Schools but now it has been made compulsory. Progress is being made and Mr. Hyde Johnson, the Director of Education, informs me the pupils are beginning to take their ideas home and are causing their friends "unnecessary trouble" by their "new notions."

The Teachers themselves are taking a greater interest in the subject and of those who sat at a recent examination 75% were successful.

Building Rules.

49. *Building Rules* for Lagos were drawn up under the Towns (Regulation) Ordinance, in 1910, and came into force in May. In other places the "Local Authority" acts only under the powers already conferred under the Towns Ordinance. At the Stations where there are Government Reservations the Boards are making Rules under the Reservations Ordinance but these only affect the Reservation land.

Segregational.

50. *Segregation* is a matter which will continue to be of great importance to the health of Europeans for many years to come yet. The best example here of this system is to be seen at Calabar. Distinct advance has been made in Lagos of late years on the outskirts of the European Quarters, but there is a spot in the centre which yet remains to be dealt with.

Lagos.

51. *Lagos* as a town is very different from a sanitary point of view to what it was not so very long ago. The making of streets is being pushed along and is rapidly opening up the back parts of the town to general traffic. During the year over five miles of roads have been made. The overcrowded parts of the town require to have wide thoroughfares cut through them and a definite plan of proposed streets should be made and gradually worked out. The construction of drains is progressing and is leading to a very great change for the better, the streets are better kept and the compounds generally receive much more attention than was previously the case, the regular weekly inspection having led to a great change and provided a very necessary stimulus.

In reference to the Prosecutions under the Destruction of Mosquitoes Ordinance it would be a great improvement if a Special Court could be held once a week for the hearing of the cases and if it could be arranged that the Medical Officer of Health be empowered to call on offenders against this Ordinance to attend the weekly Court next following the offence it would be a great advantage and the effect produced by having no delay would, I believe, be much more effective than the present method.

Bonny.

52. *At Bonny* I am glad to be able to record a very distinct improvement in the condition of the town which redounds greatly to the credit of the Medical Officer and the District Commissioner who have been able to get considerable improvements carried out; dustbins have been put up; clearing and reclamation have been carried on: old houses have been pulled down; boundaries have been set back to remove encroachments on public highways; streets have been cut; drains have been made and the Market Place, which was very small indeed and shut in, has been opened up to some extent.

Opobo.

53. *Opobo.* Here considerable advance has been made, clearing has been increased and the whole area maintained in a cleaner condition than formerly, the river bank has been got into a better state, reclamation has been continued and several Mercantile Firms have greatly improved their Compounds by filling in considerable areas and thereby also contributed to the general well-being.

FORCADOS.

54. *At Forcados* much work has been continuously carried on, and it has to be continuous to be of any service whatever. The Native parts are however in a very bad state. Many of the places lived in would be immediately condemned if there were anywhere else for the people to go. A small Mosquito-proof Hospital with two rooms is being erected for Natives for the isolation of any cases which may give rise to the suspicion of Yellow Fever.

55. RECOMMENDATIONS.

A. The recommendations made in the Report for 1910 in reference to Reclamation, Water Supplies, Mosquito-proofing, Drains, Clearing, Streets, etc., still hold good, although much has been done, but with increasing knowledge these matters acquire increased importance. I should like to emphasize the advantage which would accrue if an addition could be made to the number of Dredgers capable of doing reclamation work, which is badly needed in so many places.

B. I wish to suggest the appointment of one, if not two, more Sanitary Officers so that the work may be carried out more efficiently and in support of my suggestion I would mention the following facts viz.:—

(i). A permanent man to act as a relief is very much more satisfactory and carries much more influence with the Medical Officers, Officials generally and other persons than one temporarily seconded from other duties.

(ii). Even yet it has not been found possible to visit all the Stations in the Colony.

(iii). It is considered necessary that one Sanitary Officer should be always in or near Lagos, where also there is much more work to be attended to than was anticipated in the first instance.

C. At Calabar no one of the Officers of the Medical Department has sufficient time, apart from his other duties, to see to the carrying out efficiently of the sanitary work of the town. I would suggest that either a Medical Officer of Health be appointed, who would also be able to supervise sanitary work in places in the neighbourhood, or that an additional Medical Officer be stationed there.

D. At Forcados a portion of ground should be set aside for a Native town and the swamp should be properly reclaimed so as amply to allow for sinking. It should then be laid out and plots let off. There are very few Natives in the town who are not there for work and who could all pay a small rent; the majority would, I am sure, be glad to do so in order to be always sure of a piece of dry ground.

E. In Lagos arrangements should be made for the transport of meat from the Slaughter House to the Markets. This could easily be done by means of the tramway, if special cars were obtained, as the line passes all the Markets and would only have to be extended half a mile to reach the main Slaughter House. Satisfactory and roomy Meat Markets are badly needed. The Reclamation of the area for the proposed Public Market should be undertaken as soon as possible as this question is an urgent one.

F. The Education of men for the posts of Sanitary Inspectors badly requires settling; many places require Inspectors and there is no one to send, the result being that men are engaged who have little, if any, education and no training in sanitary work.

G. I would suggest that all Prison Association Cells be inspected and certified for a certain number of Prisoners and that the Officer in charge be held responsible for that number not being exceeded without a Special Report being sent in stating the fact and explaining the reason for its necessity.

IV.—METEOROLOGY.

The climate of Southern Nigeria is humid and enervating. The rainfall varies considerably at the different stations as shown on Table V. of the Returns.

V.—HOSPITALS AND DISPENSARIES.

During the year 88,539 sick persons received treatment in the whole Colony compared with 85,237 in 1910.

Western Province	38,853
Central Province	25,375
Eastern Province	24,311
	88,539

Table VII of the Returns has been prepared as in previous years and embraces all cases under treatment.

Hospital and Dispensaries.

The European Ward of the Lagos Hospital has been extended by the addition of three new wards with the necessary lavatory accommodation.

At Warri, a modern Native Hospital containing 24 beds has been built allowing of Surgical Work being efficiently performed.

The Asylum buildings at Yaba have been renovated and put in thorough order for the accommodation of male and female patients.

There has been a new Mortuary erected at Onitsha.

WESTERN PROVINCE BY DR. E. H. READ, SENIOR MEDICAL OFFICER.

Public Health.

I. General Diseases.

The health of the inhabitants of the Western Province during the year 1911 has been very good. There have been only a few cases of general diseases. A vast number of patients were treated for abscesses, injuries of various kinds, ulcers and intestinal disorders.

II. Communicable Diseases.

(*a*) *Insect-borne diseases*:—Malaria Fever is very common constituting 8·5% of the total cases treated. Only two cases of trypanosomiasis were reported. There were no cases of Yellow Fever in spite of the fact that stegomyia fasciata is the most common mosquito.

(*b*) *Infectious diseases*:—Small pox occurred in a few sporadic cases but there was no epidemic. A few cases of whooping cough were reported, mostly from Lagos.

(*c*) *Helminthic*:—A large number of patients were treated for round worms. Guinea worm is fairly common but filarial diseases are rare. Only 52 cases of ankylostomiasis were definitely diagnosed. A careful examination of the fæces of Natives shows that a large proportion of them have a few ankylostome eggs but the infection is seldom so great as to cause symptoms of the disease. The mere presence of a few ankylostomes in the intestine does not imply an attack of ankylostomiasis.

European Officials.

There were no special diseases prevalent during the year but practically all Europeans suffer from various minor ailments from time to time during their tour, particularly skin diseases of various kinds. Gastric and intestinal symptoms of a vague nature, to which no definite name can be given but which cause a good deal of trouble, are also fairly common. Rheumatic pains occur during the rainy season. All these conditions exercise a debilitating influence on the patients and often pave the way for more serious diseases. Fortunately officials seldom wait very long before getting advice.

A considerable number of officials are stationed in Lagos and, whilst there is an excellent Club and plenty of amusements for First Class Officers, Second Class Officers have no way of spending the evenings except in their own quarters and in visiting each other. This frequently leads to over indulgence in alcohol. There should be an Institute with plenty of newspapers and magazines and a billiard table. This would be an excellent remedy. There is a large number of junior assistants in the various firms and these might be benefitted by becoming members of such an Institute.

HOSPITALS AND DISPENSARIES, WESTERN PROVINCE.

The number of patients treated during the year 1911 is shown in Tables VI and VII and the figures there speak for themselves. The majority of cases are of minor ailments like worms, skin diseases, ulcers and local injuries. Patients have no hesitation in asking for advice and they are all willing to take medicines but the fear of being operated upon is still well marked although it is being gradually dispelled and the number of operations done is increasing every year.

2. An extension to Lagos Hospital was begun during the year and ought to be ready soon for occupation. Further improvements, such as the mosquito-proofing of the whole hospital both European and Native Wards, are urgently required.

3. The out-patient accommodation in Lagos Hospital is quite inadequate for the number of patients treated. The consulting room is of the most primitive kind and the writing room is much too small. The dressing room is also used as a consulting room for patients from the Southern Nigeria Regiment and in addition vaccinations are done therein. The congestion is intense when out-patients and soldiers, dressings and vaccinations, are all being done at the same time, as is the case every afternoon.

4. Improvements to the European Sisters' quarters were also begun and are slowly approaching completion. At present one of the sister is living in half of the female native ward but when the alterations are finished the whole ward will be available for female patients.

Scientific.

The Medical Research Institute at Yaba is supplied with specimens of various kinds from time to time by the Medical Officers who also send the Director accounts of the cases.

2. It is very difficult to find time to investigate the many interesting cases which are seen here where there is so much work to be done. Much might be done in this way by a Clinical Pathologist attached to Lagos Hospital. At present the Resident Medical Officer has no time for anything but the most urgent microscopic examinations. There is a large variety of skin diseases most of which are at present grouped under "Parasitic Eczema." These would repay a careful investigation.

3. The discovery of an imported case of "Oriental Sore" is of some interest. The patient has never been on the sick list with it. Precautions are being taken to prevent the spread of the disease by keeping it always covered up. There is still much doubt as to which insect carries this disease so it is difficult to say whether it could be spread in this country.

4. Many Medical Officers have attended special courses in Entomology and these have been supplied with outfits. Much valuable material has been sent to the various schools.

5. A certain number of parasitic worms is collected from various domesticated and wild animals. Frequently there is a close connection between the diseases of man and those of animals and important results might follow their more complete investigation.

WESTERN PROVINCE.

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

	1911
Total number of Officials resident including Railway Extension	908
Average number resident	373
Total number on Sick List	157
Total number of days on Sick List	1413
Average daily number on Sick List	3·8

Percentage of Sick to average number resident ...	42·1
Average number of days on Sick List for each Patient	9
Average Sick time to each resident	4·7
Total number Invalided	28
Percentage of Invalidings to total residents... ...	3·08
Total Deaths	7
Percentage of Deaths to total residents	·77
„ „ „ average number resident...	1·8
Number of cases of Sickness contracted away from residence	Not known.

CASES OF MALIGNANT DISEASE OCCURRING IN LAGOS HOSPITAL 1911.

1. *Female, aet*: 28. *Carcinoma Breast*, admitted 24th February 1911, discharged 28th February, 1911. Died two days later. Case was too far advanced for operation.

2. *Male, aet*: 26. Round Celled Sarcoma Ulna, admitted 15th February, 1911. Discharged 11th March, 1911. *Operation* tumour removed—went out well.

3. *Female, aet*: 37. *Pelvic Tumour* probably *malignant ovarian.* Ascites Tapped, blood-stained fluid, admitted 28th February, 1911. Discharged 21st March, 1911. Improved.

4. *Male, aet*: 9. *Spindle-celled Sarcoma superior maxilla*, admitted 9th June, 1911. Discharged 30th June, 1911. Partial removal. Medical Research Institute examined tumour miscroscopically.

5. *Male, aet*: 45. *Sarcoma Tibia*, admitted 10th July, 1911. Discharged 21st August, 1911 Operation. Removal of Tumour with rapid recurrence.

6. *Female, aet*: 13. Sarcoma, slow—growing right superior maxilla, admitted 20th October, 1911. Discharged 24th November, 1911. No operation.

3 Males and 3 Females. One carcinoma, one doubtful and four sarcomata.

CENTRAL PROVINCE BY DR. A. W. S. SMYTHE, ACTING PROVINCIAL MEDICAL OFFICER.

Public Health.

(*a*) General Remarks.

1. *General diseases* are much the same as in Europe—Rheumatism, Diarrhoea, Bronchial and Lung diseases being very common; no cases of Enteric have been reported during the year.

2. *Communicable*—Mosquito or insect borne.

Malaria Fever of a mild type is prevalent over all the Province and does not seem to be influenced by the seasons. Filariasis is also found but is comparatively scarce, only nineteen cases being reported. Yellow Fever has not been reported and apparently does not exist either in an endemic or epidemic form. No cases of Relapsing Fever or Plague have been reported. There were two cases of Sleeping Sickness one of which was imported.

Infectious or Epidemic.

There were two epidemics of Chicken Pox during the year, one in the Onitsha Prison and one in the Warri Prison but in both instances the disease was of a very mild type. In both prisons the disease was at its worst during the last three months of the year. There was a similar outbreak in Warri Prison in 1909 at the same time of the year.

Helminthic.

Cases of infection with Nematode worms are common. Ankylostomiasis is very prevalent but is usually of a chronic character and does not give rise to many symptoms.

(*b*) *European Officials.*

Health, as in other years, neither better nor worse. Malaria of a mild type, stomach troubles and Bronchitis are among the commonest diseases. One official died and one was murdered, and three were invalided.

(*c*) *Native Officials.*

Nothing special to report: they have enjoyed good health as a rule.

SANITATION.

Administrative.

Three Sanitary Inspectors, two headmen and forty five labourers are paid out of money provided in the estimates, but in addition to this a certain amount of prison labour is always available.

The Towns (Regulation) Ordinance applies to most towns in the Province.

Dustbins, latrine pans, etc. are emptied daily by gangs of prisoners or of sanitary labourers.

Preventive Measures.

(*a*) Mosquito and insect borne diseases.

Most of the Government and a few of the Commercial houses are mosquito proof or have a mosquito proof room. Mosquito nets are used by all Europeans and by many natives. Segregation of the Europeans from the Natives is aimed at, with the demolition of Government native quarters. It is becoming more effective every year.

Digging of drains or ditches, filling of holes and pools, kerosening of mosquito breeding places, is carried out where possible. The majority of European officials take quinine regularly for prophylaxis against malaria.

Quinine for prophylaxis is also issued free, the total amount dispensed for this purpose during the year was 229,963 grains cost £37 14s. 8d.

Tsetse flies are very numerous throughout the Province but only two cases of Sleeping Sickness were recorded during the year and one of these was imported from another Colony.

(*b*) *Epidemic Diseases.*

With epidemic diseases the usual precautions are taken, Isolation, Disinfection and the usual routine methods.

Small Pox.

There was a minor outbreak in a small village in the Forcados district at the beginning of the year but, owing to prompt measures taken, it was confined to this village and did not spread any further. Apart from this only thirteen cases were recorded in the whole Province.

Vaccination.

There were twenty two thousand four hundred and thirty one successful vaccinations performed and twelve thousand six hundred and ninety two unsuccessful were recorded. A large percentage of the latter was, no doubt, successful. A number did not return for inspection and so were included in the returns as unsuccessful.

Dysentery.

Dysentery is prevalent, but among Europeans not very common as they take precautions to have their drinking water boiled and filtered. The Natives take no precautions but drink any sort of water from muddy pools, from the river or from creeks. It is an every day occurrence to see Natives in canoes or boats dip a tin pan over the side and drink the water through which they are paddling and, as most of the sewage is thrown into the river, it is easy to realize why Dysentery and other intestinal diseases are so common amongst Natives.

Enteric.

No cases recorded.

Bilharzia.

Very rare—only two cases recorded.

Trichinosis.

No cases recorded. Meat exposed for sale is inspected at Warri and Onitsha only.

Guinea Worm.

Fairly common but in most cases it is imported from other Provinces or Colonies. It is not indigenous.

Ankylostomiasis.

Common, but it is as a rule of a mild type and does not give rise to much constitutional disturbance.

(III) General Measures.

Measures taken to spread knowledge of Hygiene and Sanitation.—Instruction in hygiene is given in the Government Schools and Medical Officers constantly explain sanitation and impress upon the natives the necessity to keep their towns and compounds in a sanitary state. The connexion between mosquitoes and water is also demonstrated to them.

RECOMMENDATIONS FOR FUTURE WORK.

Masonary drains are absolutely necessary and no town will be in a sanitary or tidy condition until a number are built. In the larger towns a proper Destructor of the Horsfall type is required. More Sanitary Inspectors and Sanitary labourers are also wanted.

Hospital and Dispensaries.

In all 25,375 cases were treated at the various hospitals and dispensaries in the Province. The commonest diseases were Bronchitis, Diarrhœa, Malaria, Rheumatism, Injuries and Ulcers. A new Native Hospital was opened in Warri and is much appreciated by the Natives as are the dispensaries and hospitals throughout the Province. The total number of patients who availed themselves of the treatment of the European Staff demonstrates this clearly.

CENTRAL PROVINCE.

Table showing the Sick, Invalidings, and Death Rates of European Officials.

Total number of Officials resident	237
Average number resident	94·4
Total number on Sick List	141
Total number of days on Sick List	807
Average daily number on Sick List	2·2
Percentage of Sick to average number resident ...	149·3
Average number of days on Sick List for each patient	5·7
Average Sick time to each resident...	8·5
Total number invalided	3
Percentage of Invalidings to total residents ...	1.2
Total Deaths	2
Percentage of Deaths to total residents	·8
„ „ „ average number resident ...	2·1
Number of cases of Sickness contracted away from residence	Not known.

EASTERN PROVINCE by Dr. C. R. CHICHESTER, PROVINCIAL MEDICAL OFFICER.

Public Health.

(*a*) General Remarks.

The Tables of Diseases, with the number of cases treated, show the amount of work done in the various District during the year 1911.

The Chief causes of illness were:—

Varicella...	635
Variola	23
Malaria	2,012
Rheumatism	1,090
Alimentary System	3,449
Respiratory „	1,675
Dysentery	129
Nervous System	408
Parasites	419
Skin Diseases	4,854
Cellular Tissue	1,223

On the whole as compared with 1910, there has been a decrease in both General and Communicable Diseases.

Malarial Fever has distinctly decreased since the previous year. This is undoubtedly due to the Anti-Mosquito measures employed and carried out in the various districts by the Medical Officers. The application of the Mosquito Ordinance and its strict enforcement in the larger towns of Calabar, Bonny, Opobo and Degema, has had a marked and decidedly good effect on the prevalence of Mosquitoes and Malarial Fever.

No cases of Yellow Fever, or even suspicious cases of Fever, were recorded.

There is also a marked decrease in the number of cases of Dysentery viz., 129 cases as compared with 312 cases in 1910. This is due to the strict precautions taken and the improved ventilation and sanitation of all the prisons in the Province.

It is very satisfactory to record that only 23 cases of Variola occurred during the year. This is due to the Vaccination work carried out with great success in all the districts.

The following table shows the comparison with the previous year.

	1911.	1910.
Total vaccinations	48,109	47,054
Total successful	38,449	37,663

Beri Beri.—Five cases of this disease are recorded in this Province for the year.

No deaths occurred among the European Officials.

The total number of cases treated in the various hospitals and dispensaries in the Province amounted to 24,311.

EASTERN PROVINCE.

Table showing the Sick, Invalidings and Death Rates of European Officials.

Total number of Official resident	227
Average number resident	127·6
Total number on Sick List	163
Total number of days on Sick List	2305
Average daily number on Sick List	6·3
Percentage of Sick to average number resident ...	127·7
Average number of days on Sick List for each Patient	14·1
Average Sick time to each resident	18
Total number invalided	10
Percentage of invalidings to total residents... ...	4·4
Total Deaths	0
Percentage of Deaths to total residents	0
„ „ „ average number resident...	0
Number of cases of Sickness contracted away from residence	Not known

RETURNS.

TABLE I.

MEDICAL STAFF ON THE 31ST DECEMBER, 1911.

Rank.	Name.
Principal Medical Officer	W. H. Langley, C.M.G.
Deputy Principal Medical Officer	T. Hood.
Senior Sanitary Officer	J. A. Pickels.
Provincial Medical Officer	C. R. Chichester.
" " "	W. H. G. H. Best.
Senior Medical Officer	E. H. Read.
" " "	St. G. Gray.
" " "	W. F. Macfarlane.
Sanitary Officer	R. Laurie.
Medical Officer	A. W. S. Smythe.
" "	A. J. A. Browne.
" "	W. I. Taylor.
" "	F. J. A. Baldwin.
" "	T. B. Adam.
" "	J. B. Bate.
" "	M. E. O'Dea.
" "	G. Hungerford.
" "	D. A. Ashton.
" "	R. W. Gray.
" "	T. F. G. Mayer.
" "	E. H. Tipper.
" "	J. Currie.
" "	J. D. Finlay.
" "	E. E. Maples.
" "	J. C. M. Bailey.
" "	H. R. Ellis.
" "	F. B. Thompson.
" "	J. S. Smith.
" "	D. Mackinnon.
" "	R. C. Hiscock.
" "	H. L. Burgess.
" "	J. J. Moore.
" "	P. H. MacDonald.
" "	J. Cross.
" "	E. J. Tynan, M. O. H., Lagos.
" "	H. M. Newport.
" "	A. H. Wilson.
" "	T. M. R. Leonard.
" "	P. F. Foran.
" "	T. R. Beale-Browne.
" "	G. Beatty
" "	T. L. Craig.
" "	J. H. McKay.
" "	H. R. Morehead.
" "	A. E. Neale.
" "	G. Wilson.
" "	S. L. G. D. MacLaine.
" "	T. H. Suffern.
" "	A. W. H. Grant.
" "	E. M. Franklin.
" "	W. S. Clark.
" "	J. R. P. Allin.
" "	T. Hood-Rankin.
" "	C. W. O'Keeffe.
" "	G. M. Gray
" "	W. H. Sieger.
" "	W. H. Peacock.
" "	R. C. Macpherson.
" "	A. Hutton.
" "	G. H. Galagher.
" "	F. Ross.
" "	C. G. Grey.
" "	J. P. B. Snell.
" "	L. H. Booth.
" "	A. Hipwell.
" "	E. L. Sieger.

TABLE I.—*continued.*

Medical Staff on the 31st December, 1911.

Rank.	Name.
Medical Officer	W. M. Woods.
	R. H. Brierley.
" "	E. C. Braithwaite.
" "	H. R. M. Ferguson.
" "	W. T. Martyn-Clark.
" "	E. J. Wyler.
Native Medical Officer	C. J. Lumpkin.
" " "	O. Sapara.
" " "	W. A. Cole.
" " "	C. C. Adeniyi-Jones.

European Nursing Staff on December 31st, 1911.

Senior Nurse	M. M. Graham.
" "	Jane Grewer.
" "	E. K. Neville.
" "	R. M. Veecock.
" "	F. M. Day.
" "	J. McCotter.
Nurse	E. Briggs.
"	L. M. Single.
"	K. Gordon.
"	L. Harvey.
"	J. Winchester.
"	C. Littlewood.
"	L. M. Borthwick.
"	J. Y. Matthews.
"	A. E. Drew.
"	E. M. Robbinson.
"	E. E. Elliot.

Principal Members of Subordinate Staff.

Principal Medical Office.

First Class Clerk	G. Taylor.
" " "	A. J. Salvador.
Second Class Clerk	G. R. King.
" " "	G. J. Rufino.
Third Class Clerks	Two.
Learner	One.
Messengers	Two.

Vital Statistics Branch.

Registrar of Vital Statistics	E. J. Martins.
Second Class Clerk	R. N. Scott.

WESTERN PROVINCE.

Senior Medical Officer's Office.

Second Class Clerk	J. F. Fakolujo.
Messenger	One.

TABLE I.—*continued.*

WESTERN PROVINCE.

Dispensing Staff.

Rank.	Name.
Chief Dispenser	A. E. Phillips.
First Class Dispenser	R. A. Benjamin.
" " "	T. E. Macaulay.
" " "	S. A. Doherty.
" " "	S. Phillips.
Second Class Dispensers	Seven.
" " "	Two vacancies.
Dispensers-in-training	Eight.

Nursing Staff.

First Class Nurses	Thirteen.
" " "	Four vacancies.
Second Class Nurses	Thirteen.
" " "	Four vacancies.
Nurses-in-training	Six.

Lagos Medical Store.

Storekeeper and Warden	S. O. Ohekeno.
Storeman	One.

Yaba Lunatic Asylum.

Senior Attendants	Two.
Junior "	Ten.

CENTRAL PROVINCE.

Provincial Medical Office.

First Class Clerk	G. S. Blankson.
Third " "	One.
Messenger	One.

Dispensing Staff.

First Class Dispenser	W. Saniez.
" " "	One vacancy.
Second Class Dispensers	Eight.
" " "	Four vacancies.

TABLE I.—*continued.*

CENTRAL PROVINCE.

Nursing Staff.

Rank.	Name.
First Class Nurses	Two.
„ „ „	Two vacancies.
Second Class „	Two.
Nurses-in-training	Three.

Infectious Diseases Hospital.

Attendants	Two.

EASTERN PROVINCE.

Provincial Medical Office.

First Class Clerk	One vacancy.
Second „ „	One.
Third „ „	One.
Messenger	One.

Dispensing Staff.

Senior Dispenser	J. T. C. Robbin.
First Class Dispenser	E. J. Lewis.
„ „ „	A. O. A. Laborunaja.
Second Class Dispensers	Fifteen.
„ „ „	One vacancy.
Storekeepers	Two.

Nursing Staff.

First Class Nurses	Four.
„ „ „	Two vacancies.
Second Class „	Seven.
„ „ „	Three vacancies.
Nurses-in-training	Four.

Lunatic Asylum.

Senior Attendant	B. P. Barkley.
Attendants	Four.

Infectious Diseases Hospital.

Attendants	Two.

TABLE I.—*continued.*

PRINCIPAL CHANGES.

WESTERN PROVINCE.

Clerical Staff.

Mr. Abayomi, Third Class Clerk, Principal Medical Office, promoted to Agricultural Department, Ibadan.

Dispensing Staff.

Mr. Claudius Franklin, Dispenser-in-training, promoted Second Class Dispenser, Eastern Province.

Mr. Alexander Silva, Dispenser-in-training, promoted Second Class Dispenser, Central Province.

Mr. J. A. Ladega, Dispenser-in-training, promoted Second Class Dispenser, Western Province.

Nursing Staff.

Mr. Thomas Romeiro, First Class Nurse, retired on pension.

Mr. George Lawani, First Class Nurse, died.

CENTRAL PROVINCE.

Clerical Staff.

Mr. O. F. Morgans, appointed Third Class Clerk.

Dispensing Staff.

Mr. Alexander Silva, Second Class Dispenser, was transferred from the Western Province.

EASTERN PROVINCE.

Clerical Staff.

Mr. J. B. Aidoo's appointment as Second Class Clerk was terminated.

Mr. A. D. E. Eyo, Third Class Clerk, was transferred to the Forestry Department on promotion.

Mr. P. E. Adam, appointed Third Class Clerk.

Dispensing Staff.

Mr. Claudius Franklin, Second Class Clerk, was transferred from the Western Province.

Nursing Staff.

One Second Class Nurse dismissed.

TABLE II.

STATEMENTS OF EXPENDITURE IN THE YEAR UNDER SUBHEADS AS COMPARED WITH THE ESTIMATES.

	Medical—Head 21.	Estimates 1911.	Actual Expenditure.
		£	£ s. d.
	PERSONAL EMOLUMENTS—HEAD-QUARTERS.	17,954	17,596 5 11
	OTHER CHARGES.		
27	Outfit allowance to European Nurses	96	120 0 0
28	Outfit allowance to Medical Officers	96	120 0 0
29	Medical examination of Officers in England ...	150	182 14 0
30	Expenses of Doctors and Nurses at School of Tropical Medicine and fees on engagement of and reserve of Medical Officers in England	450	851 3 6
31	Contribution to Malarial Committee towards investigation of Malaria	350	350 0 0
	PERSONAL EMOLUMENTS—WESTERN PROVINCE.	15,610	11,074 14 2
	OTHER CHARGES.		
92	Occasional Nurses	10	5 18 0
93	Clothing and Bedding (General)	275	206 12 7
94	Diets, Provisions and Necessaries	2,185	2,026 13 5
95	Fuel, Light and Sundries	130	132 16 1
96	Medicines	1,200	1,151 7 4
97	Instruments	500	448 17 11
98	Electric Lighting	360	301 0 10
99	Vaccination expenses		
100	Fees to Government Medical Officers for successful vaccinations performed	270 200	341 13 7 21 7 2
101	Upkeep of Bacteriological work	25	...
102	Upkeep of Parasitological work	25	...
103	Registers Vital Statistics	100	60 1 0
104	Allowance for Uniform Native Nurses and Asylum Attendants	75	51 16 11
105	Uniform for Labourers and Watchmen	30	26 7 10
106	Uniform for Vaccinators	25	18 17 7
107	Night Duty Allowance to Hospital Labourers ...	14	12 9 9
108	Horse Allowance to Medical Officers	692	677 15 1
109A	Expenses African Medical and Sanitary Committee	—	86 1 1
	Total ... ... £	40,822	35,864 13 9

The Personal emoluments of Headquarters include an amount of £1,900 for the Sanitary Branch which has been transferred to the Sanitary Vote for 1912.

TABLE II.—*continued.*

STATEMENTS OF EXPENDITURE IN THE YEAR 1911 UNDER SUBHEADS AS COMPARED WITH THE ESTIMATES.

	Medical—Head 21.	Estimates 1911.	Actual Expenditure.
		£	£ s. d.
	PERSONAL EMOLUMENTS—CENTRAL PROVINCE.	9,836	10,158 16 2
	OTHER CHARGES.		
143	Extra Medical Assistance	15	5 17 7
144	Medicines	750	680 18 1
145	Surgical Instruments and Appliances	500	449 18 2
146	Medical Comforts	150	113 8 11
147	Bedding Hospital equipment and clothing Sapele Hospital	20	7 19 6
148	Bedding Hospital equipment, etc., Warri European Hospital	50	14 2 0
149	Bedding and Hospital equipment, etc., Onitsha Hospital	25	24 13 9
150	Bedding and equipment for Hospitals at outstations	80	34 16 3
151	Washing European and Native Hospitals	60	76 10 9
152	Native Hospital and Infectious Diseases Hospital, Warri, Diet and Provisions	25	14 8 3
153	European Hospital, Warri, Diet and Provisions ...	200	113 16 8
154	European Hospital, Sapele, Diet and Provisions ...	100	100 0 0
155	European Hospital, Onitsha, Diet and Provisions ...	200	127 10 6
156	Outstations Hospitals, Diet and Provisions... ...	100	56 11 8
457	Laboratory equipment and upkeep	25	10 7 4
158	Vaccination expenses. Cost of lymph, lancets, etc.	300	301 19 3
159	Bonuses to persons vaccinating	25	...
160	Fees for successful vaccinations performed, Government Medical Officers	250	80 9 6
161	Upkeep of Medical Library	10	6 0 6
162	Expense of Leper Settlement, Onitsha	300	305 19 0
163	Hammocks for Medical Stations	15	8 3 3
164	Transport of Stores	50	9 15 4
165	Diets and Provisions, Forcados Sanitary Station ...	50	4 12 0
166	Typewriters	40	31 1 7
231	Bedding and equipment Native Hospital Warri ...	—	86 3 7
	Total ... ... £	13,176	10,074 13 11

TABLE II.—*continued.*

STATEMENTS OF EXPENDITURE IN THE YEAR 1911 UNDER SUBHEADS AS COMPARED WITH THE ESTIMATES.

	Medical—Head 21.	Estimates 1911.	Actual Expenditure.
		£	£ s. d.
	PERSONAL EMOLUMENTS—EASTERN PROVINCE.	16,107	14,694 1 8
	OTHER CHARGES.		
209	Extra Medical Assistance	15	7 9 2
210	Medicines	1,200	1,119 3 4
211	Surgical Instrument and appliances...	600	713 18 1
212	Medical Comforts	170	144 15 11
213	Bedding Hospital Equipment and Clothing Calabar Hospital	120	128 17 4
214	Bedding and equipment for hospitals at outstations	150	119 13 2
215	Washing European and Native Hospitals	80	51 8 0
216	European Hospital Calabar Diets and Provisions...	270	270 0 0
217	Native Hospitals Calabar Diets and Provisions ...	600	585 18 4
218	Lunatic Asylum Calabar Diet...	200	237 5 3
519	Outstation hospitals diet and provisions	60	38 1 9
220	European hospital Opobo diet and provisions ...	100	2 15 6
221	Bedding and equipment for ditto.	25	3 5 6
222	Laboratory Equipment and Upkeep	35	28 3 8
223	Vaccination Expenses	350	239 8 5
224	Fees for successful vaccinations performed by Government Medical Officers	500	641 19 0
225	Bonuses to persons vaccinating	25	11 3 0
226	Upkeep of Medical Library	10	7 5 0
227	Uniforms for Staff	35	23 1 10
228	Fuel contract Calabar	15	24 17 0
230	Transport of stores	30	23 15 6
	Total ... ... £	20,697	19,116 6 5

TABLE II.—*continued.*

STATEMENTS OF EXPENDITURE IN THE YEAR 1911 UNDER SUBHEADS AS COMPARED WITH THE ESTIMATES.

	Head 23—Sanitary	Estimates 1911.	Actual Expenditure.
		£	£ s. d.
	PERSONAL EMOLUMENTS—WESTERN PROVINCE.	—	50 0 0
	OTHER CHARGES.		
7	General Sanitary	1,000	101 1 0
7a	Sanitary measures, Lagos	...	933 13 6
	Total ... ... £	1,000	1,084 14 6
	PERSONAL EMOLUMENTS—CENTRAL PROVINCE.	1,024	1,095 8 4
7	General Sanitary	—	125 17 2
19	Disinfectants	200	156 6 11
20	Tools for labourers	10	9 12 2
21	Uniforms	6	3 10 0
22	Grant in aid for sanitary work European Reservation	250	299 16 8
23	Forcados Sanitary Station	100	98 7 7
24	Upkeep of Clayton Disinfector	50	41 15 10
25	Purchase of Surf Boats	60	21 0 0
	Total ... ... £	1,700	1,851 14 8
	PERSONAL EMOLUMENTS—EASTERN PROVINCE.	656	562 16 7
31	Disinfectants	250	227 6 3
32	Sanitary appliances etc., ...	30	2 7 7
33	Uniforms	17	10 7 11
34	Disposal of Refuse at Government premises and native town	200	194 5 8
35	Grant in aid for sanitary work European reservation	300	300 13 2
36	Conservancy of Latrines Calabar	800	598 4 10
37	Upkeep of Clayton Disinfector	50	46 1 6
38	Purchase of Miller Brothers Factory at Bonny for Quarantine Station	—	500 0 0
	Total ... ... £	2,303	2,442 3 6

TABLE III.

RETURN OF STATISTICS OF POPULATION FOR THE YEAR.

	Europeans and Whites.	Africans.	East Indians.	Chinese and Malays.	Mixed and Coloured.	Remarks
Number of inhabitants in 1910	1,312	*6,700,000	—	—	—	*Estimated.
„ Births during the year 1911 ...	—	—	—	—	—	Not known.
„ Deaths „ „ 1911 ...	—	—	—	—	—	„
„ Immigrants „ „ 1911 ...	—	—	—	—	—	„
„ Emigrants „ „ 1911 ...	—	—	—	—	—	„
Number of inhabitants in 1911	1,648	7,855,749	99	—	487	Census.
Increase of	—	—	—	—	—	—
Decrease	—	—	—	—	—	—

Race or nationality should be specified, as nearly as possible, in accordance with the above model.

Table IV.

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

1. Name of Town:—Lagos Municipal Area.

—	Approximate area.	Number of proclaimed open spaces.
1910	18 Square miles	3
1911	18 Square miles	3
1912	—	—

2. Population.

—	Number of Natives.		Number of Europeans.		Total.
	Males.	Females.	Males.	Females.	
1910	—	—	—	—	—
1911	39,293	33,865	572	36	73,766
1912	—	—	—	—	—

3. Housing.

—	Number occupied by Europeans.	Number occupied by Natives.
Number of Houses:—		
1910	—	—
1911	205	10,742 inclusive
1912	—	— of huts.
Number of Huts:—		
1910		
1911		
1912		

4. Mosquito Protection of Houses.

—	1910.	1911.	1912.
Number of European houses wholly mosquito protected	2	2	—
Number of European houses with mosquito room	33	48	—
Number rendered during the year wholly mosquito protected ...	0	0	—
Number rendered during the year partially mosquito protected ...	6	15	—

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.	—	—	—
Number of houses erected with sanction as to site, construction, and relation to other buildings.	—	—	—
Number of huts erected with sanction as to site, construction, and relation to other buildings.	—	—	—
*Number of houses built without sanction	120	132	—
Number of huts built without sanction	—	—	—

* Building Regulations come into force 1912.

Action taken :—

	Number of Prosecutions.		Number demolished.	
	Huts.	Houses.	Huts.	Houses.
1910	—	—	—	—
1911	—	—	—	136
1912	—	—	—	—

6. Markets.

	Total number.	Number paved and drained.	Number unpaved.
1910	10	4	6
1911	10	4	6
1912	—	—	—

7. Slaughter-houses.

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

8. Latrines.

	For Males.		For Females.	
	Number.	Number of seats.	Number.	Number of seats.
Number of Public Latrines :—				
1910	41	219	41	196
1911 (including Govt. Offices, Barracks &c.	59	318	43	207
1912	—	—	—	—
Number of new Public Latrines erected during the year :—				
1910	10	70	10	70
1911	8	63	5	33
1912	—	—	—	—
Number of Public Latrines repaired during the year :—				
1910	31	149	31	126
1911	40	198	40	190
1912	—	—	—	—
Number of Public Latrines demolished during the year :—				
1910	3	17	3	7
1911	—	—	—	—
1912	—	—	—	—

	1910.	1911.	1912.
Number of Private Latrines	—	—	—
Average number of pails of nightsoil removed daily	800	900	—
Average number of soiled pails removed and clean pails substituted ...	800	900	—
Number of nightsoil men employed to clean latrines and removed excreta	134	150	—
*Number of cesspools	11	0	—
Number of cesspools cleansed	11	0	—
Number of new cesspools constructed during the year	3	0	—
Number of old cesspools abolished	2	0	—
Number of cesspools oiled regularly by Department	0	0	—

* In Returns of 1910 Catchpits have been erroneously termed Cesspools.

9. Removal of Refuse.

	1910.	1911.	1912.
Number of dustbins	55	60	—
Number of carts if employed at work daily to remove refuse from streets	—	20 hand carts.	
Amount of refuse removed daily from streets	130 tons	180 tons	—
Number of carts, if employed at work daily to remove refuse from yards and premises.	—	—	—
Amount of refuse removed daily from yards and premises	—	—	—
Number of men employed for moving refuse	200	250	—

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	—	—	—	—	180 tons	—	—	—	—
Thrown into Sea	800	900	—	—	—	—	—	—	—
*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.
Not known.	Not known.	—

12. Water Supply.

Nature of Water Supply.	1910.	1911.	1912.
Pipe-borne water:—			
Source (spring):—			
Number of linear yards	—	3,817	—
Number of stand pipes along roads	—	—	—
Number of stand pipes in compounds and houses ...	—	19	—
Wells:—			
Public:—			
Number	95	95	—
Number with pumps protected against surface water and mosquito-protected.	18	18	—
Private:—			
Number	—	2,120	—
Number protected against surface water and mosquito-protected.	—	—	—
Tanks:—			
Public:—			
Number underground	—	—	—
Number mosquito-protected and served by pumps ...	—	—	—
Number above ground	—	—	—
Number mosquito-protected	—	—	—
Number of 400 gallons capacity or less	—	—	—
Number above 400 gallons	—	—	—

Nature of Water Supply.	1910.	1911.	1912.
Tanks:—			
Private:—			
Number underground	1	1	—
Number mosquito-protected	1	1	—
Number above ground...	383	561	—
Number mosquito-protected	256	519	—
Number of 400 gallons capacity or less	—	514	—
Number above 400 gallons	—	47	—
Nature of tanks:—			
Wood	0	—	—
Iron	309	475	—
Concrete	74	86	—
Barrels:—			
Number	1,337	1,365	—
Number mosquito-protected	322	365	—

13. Drainage.

Nature of drainage.	Public.	Private.
Masonry drains:—		
Lineal yards of masonry drains:—		
1910	—	—
1911	18,320	—
1912	—	—
Lineal yards reconstructed during the year:		
1910	1,356	—
1911	1,000	—
1912	—	—
Lineal yards repaired during the year:—		
1910	—	—
1911	—	—
1912	—	—
Lineal yards of new drains constructed during the year:—		
1910	1,524	—
1911	1,100	—
1912	—	—
Earth drains or ditches:—		
Number of linear yards of ditches cleaned:—	Not recorded.	—
1910		
1911		
1912		
Number of linear yards of ditches dug and graded:—		
1910		
1911		
1912		
verage frequency of clearing ditches of grass:—	As required regularly.	—
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.	—	—	—
Average frequency of clearance of rank vegetation on same area.	—	—	—

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	44,000 Sq. Yards.	15 acres	—
Number of pools, marshes, streams, &c., fish-stocked	—	—	—
Number of cubic yards of material used for filling up pools and excavations	—	109,998	—
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	—	1,762	—
Number of pools and excavations oiled	—	5,507	—
Number of tanks and barrels oiled	—	*70 tanks	—
Average number of men daily employed for oiling drains, pools, and watertanks or barrels.	10	9	—
			—

* Barrels over-turned—Canoes oiled 750

17. Inspections and Prosecutions.

—	1910.	1911.	1912.
Number of inspectors employed	28	28	—
Number of houses inspected	233,181	466,070	—
Number of houses where larvæ were found	46,646	61,057	—
Number of notices served to remove conditions causing the breeding of larvæ	1,212	—	—
Number of persons fined for having mosquito larvæ on premises	168	728	—
Number of notices served to remove insanitary conditions on premises.	4,510	4,388	—
Number of persons fined for not removing insanitary conditions after notice.	101	94	—
Number of soda and aerated water factories inspected	2	2	—

1. Name of Town:—**Ibadan**—Railway Reservatory and Barracks and Moor Plantations.

—	Approximate area.	Number of proclaimed open spaces.
1910	—	—
1911	2,400 Acres.	—
1912	—	

2. Population.

—	Number of Natives.		Number of Europeans.		Total.
	Males.	Females.	Males.	Females.	
1910	—	—	—	—	—
1911	Approx 3,000	—	58	1	3,059
1912	—	—	—	—	—

3. Housing.

—	Number occupied by Europeans.	Number occupied by Natives.
Number of Houses:—		
1910	—	—
1911	33	26
1912	—	—

Number of Huts:—

1910	
1911	Unknown
1912	

4. Mosquito Protection of Houses.

—	1910.	1911.	1912.
Number of European houses wholly mosquito protected	—	2	—
Number of European houses with mosquito room	—	8	—
Number rendered during the year wholly mosquito protected ...	—	2	—
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	—	—	—
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	—	—	—
*Number of houses built without sanction	—	—	—
Number of huts built without sanction	—	—	—

* Building Regulations come into force 1912.

Action taken :—

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

8. Latrines.

—	For Males.		For Females.	
	Number.	Number of seats.	Number.	Number of seats.
Number of Public Latrines :—				
1910	—	—	—	—
1911 (including Govt. Offices, Barracks &c.	1	6	...	—
1912	—	—	—	—
Number of new Public Latrines erected during the year :—				
1910	—	—	—	—
1911	—	—	—	—
1912	—	—	—	—
Number of Public Latrines repaired during the year :				
1910	—	—	—	—
1911	1	6	—	—
1912	—	—	—	—
Number of Public Latrines demolished during the year :				
1910	—	—	—	—
1911	—	—	—	—
1912	—	—	—	—

—	1910.	1911.	1912.
Number of Private Latrines	—	40	—
Average number of pails of nightsoil removed daily	—	74	—
Average number of soiled pails removed and clean pails substituted ...	—	74	—
Number of nightsoil men employed to clean latrines and removed excreta	—	10	—
*Number of cesspools	—	1	—
Number of cesspools cleansed	—	1	—
Number of new cesspools constructed during the year	—	—	—
Number of old cesspools abolished	—	—	—
Number of cesspools oiled regularly by Department	—	—	—

* In Returns of 1910 Catchpits have been erroneously termed Cesspools.

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	—	3 cwts.	approx.
Number of carts, if employed at work daily to remove refuse from yards and premises	—	1	—
Amount of refuse removed daily from yards and premises	—	5 cwts.	approx.
Number of men employed for moving refuse	—	10	—

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	—	74	—	—	1	—	—	—	—
Burnt	—	—	—	—	1	—	—	—	—
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.
—	1	—

12. Water Supply.

Nature of Water Supply.	1910.	1911.	1912.
Pipe-borne water:—			
Source lake or:—			
Number of linear yards	—	3,200	—
Number of stand pipes along roads	—	—	—
Number of stand pipes in compounds and houses	—	16	—
Wells:—			
Public:—			
Number	—	—	—
Number with pumps protected against surface water and mosquito-protected	—	—	—
Private:—			
Number	—	6	—
Number protected against surface water	—	6	—
Tanks:—			
Public:—			
Number underground	—	—	—
Number mosquito-protected and served by pumps	—	—	—
Number above ground	—	—	—
Number mosquito-protected	—	—	—
Number of 400 gallons capacity or less	—	—	—
Number above 400 gallons	—	—	—

Nature of Water Supply.	1910.	1911.	1912.
Tanks:—			
Private:—			
Number underground ...	—	—	—
Number mosquito-protected ...	—	—	—
Number above ground...	—	58	—
Number mosquito-protected ...	—	56	—
Number of 400 gallons capacity or less	—	54	—
Number above 400 gallons	—	4	—
Nature of tanks:—			
Wood	—	—	—
Iron	—	54	—
Concrete ...	—	4	—
Barrels:—			
Number	—	—	—
Number mosquito-protected ...	—	—	—

13. Drainage.

Nature of drainage.	Public.	Private.
Masonry drains:—		
Lineal yards of masonry drains:—		
1910	—	—
1911	—	200
1912	—	—
Lineal yards reconstructed during the year:		
1910	—	—
1911	—	50
1912	—	—
Lineal yards repaired during the year:—		
1910	—	—
1911	—	—
1912	—	—
Lineal yards of new drains constructed during the year:—		
1910	—	—
1911	—	100
1912	—	—
Earth drains or ditches:—		
Number of linear yards of ditches cleaned:—		
1910	—	—
1911	—	No record.
1912	—	—
Number of linear yards of ditches dug and graded:—		
1910	—	—
1911	—	—
1912	—	—
verage frequency of clearing ditches of grass:—		
1910	—	—
1911	—	About 6 times yearly
1912	—	—

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

	1910.	1911.	1912.
Number of square yards of weeds, grass, and vegetation cut and removed	—	No record.	—
Average frequency of clearance of rank vegetation on same area.	—	About 6 times.	—

15. Excavations and low-lying land.

—	1910.	1911.	1912.
Number of pools and excavations	—	Unknown.	—
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	—	None.	—
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	—	None.	—
Number of houses inspected	—	508	—
Number of houses where larvæ were found	—	18	—
Number of notices served to remove conditions causing the breeding of larvæ	—	None.	—
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	—	„	—
Number of soda and aerated water factories inspected	—	„	—

J. D. FINLAY,
Medical Officer.

1. Name of Town :—**Ibadan.**

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

2. Population.

—	Number of Natives.		Number of Europeans.		Total.
	Males.	Females.	Males.	Females.	
1910	—	—	—	—	—
1911	268,000	—	50	5	55
1912	—	—	—	—	—

3. Housing.

—	Number occupied by Europeans.	Number occupied by Natives.
Number of Houses :—		
1910	—	—
1911	19	60,000
1912	—	—

Number of Huts :—

1910 ... ...

1911 ... ... Unknown

1912 ... ...

4. Mosquito Protection of Houses.

—	1910.	1911.	1912.
Number of European houses wholly mosquito protected	—	5	—
Number of European houses with mosquito room	—	7	—
Number rendered during the year wholly mosquito protected ...	—	0	—
Number rendered during the year partially mosquito protected ...	—	0	—

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	—	2	—
Number of houses erected with sanction as to site, construction, and relation to other buildings	—	0	—
Number of huts erected with sanction as to site, construction, and relation to other buildings	—	0	—
Number of houses build without sanction	—	—	—
Number of huts build without sanction	—	—	—

Action taken :—

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

6. Markets.

	Total number.	Number paved and drained.	Number unpaved.
1910	—	—	—
1911	20	—	20
1912	—	—	—

7. Slaughter-houses.

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

8. Latrines.

	For Males.		For Females.	
	Number.	Number of seats.	Number.	Number of seats.
Number of Public Latrines :—				
1910	—	—	—	—
1911 (including Govt. Offices, Barracks &c.	—	—	—	—
1912	—	—	—	—
Number of new Public Latrines erected during the year :—				
1910	—	—	—	—
1911	—	—	—	—
1912	—	—	—	—
Number of Public Latrines repaired during the year :—				
1910	—	—	—	—
1911	—	—	—	—
1912	—	—	—	—
Number of Public Latrines demolished during the year :—				
1910	—	—	—	—
1911	—	—	—	—
1912	—	—	—	—

	1910.	1911.	1912.
Number of Private Latrines	—	37	—
Average number of pails of nightsoil removed daily	—	37	—
Average number of soiled pails removed and clean pails substituted ...	—	37	—
Number of nightsoil men employed to clean latrines and removed excreta	—	14	—
Number of cesspools	—	unknown	—
Number of cesspools cleansed	—	do.	—
Number of new cesspools constructed during the year	—	do.	—
Number of old cesspools abolished	—	do.	—
Number of cesspools oiled regularly by Department	—	do.	—

9. Removal of Refuse.

	1910.	1911.	1912.
Number of dustbins	—	—	—
Number of carts at work to remove refuse from streets	—	—	
Amount of refuse removed daily	—	*	—
Number of carts at work daily to remove refuse from yards and premises	—	—	—
Amount of refuse removed daily from yards and premises	—	200 lbs.	—
Number of men employed for moving refuse	—	10 prisoners.	—

*Refuse is generally burnt when collected—amount not known.

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	—	30	—	—	—	—	—	—	—
Burnt	—	—	—	—	20	—	—	not known.	
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.
—	—	—

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	—	—	—
Number of stand pipes in compounds and houses	—	—	—
Wells:—			
Public:—			
Number	—	21	—
Number with pumps protected against surface water and mosquito-protected	—	Govt wells	—
Private:—			
Number	—	very many	—
Number protected against surface water and Mosquito-protected	—	None.	—
Tanks.—			
Public:—			
Number underground	—	—	—
Number mosquito-protected and served by pumps	—	—	—
Number above ground	—	—	—
Number mosquito-protected	—	—	—
Number of 400 gallons capacity or less	—	—	—
Number above 400 gallons	—	—	—

Nature of Water Supply.	1910.	1911.	1912.
Tanks:—			
Private:—			
Number underground	—	—	—
Number mosquito-protected	—	—	—
Number above ground...	—	28	—
Number mosquito-protected	—	26	—
Number of 400 gallons capacity or less	—	27	—
Number above 400 gallons	—	1	—
Nature of tanks:—			
Wood	—	—	—
Iron	—	20	—
Concrete	—	8	—
Barrels:—			
Number	—	—	—
Number mosquito-protected	—	—	—

13. Drainage.

Nature of drainage.	Public.	Private.
Masonry drains:—		
Lineal yards of masonry drains:—		
1910	—	—
1911	—	100
1912	—	—
Lineal yards reconstructed during the year:		
1910	—	—
1911	—	—
1912	—	—
Lineal yards repaired during the year:—		
1910	—	—
1911	—	—
1912	—	—
Lineal yards of new drains constructed during the year:—		
1910	—	—
1911	—	100
1912	—	—
Earth drains or ditches:—		
Number of linear yards of ditches cleaned:—		
1910	—	—
1911	176,000	—
1912	—	—
Number of linear yards of ditches dug and graded:—		
1910	—	—
1911	—	—
1912	—	—
verage frequency of clearing ditches of grass:—		
1910	—	—
1911	About once each 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	—	490	—
Average frequency of clearance of rank vegetation on same area.	—	Once a year.	—

15. Excavations and low-lying land.

—	1910.	1911.	1912.
Number of pools and excavations	—	Unknown.	—
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	—	—	—
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	—	2	—
Number of houses inspected	—	372	—
Number of houses where larvæ were found	—	6	—
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	—	—	—
Number of soda and aerated water factories inspected	—	—	—

1. Name of Town :—Epe.

—	Approximate area.	Number of proclaimed open spaces.
1910	1 sq. mile	—
1911	"	—
1912	—	—

2. Population.

—	Number of Natives.		Number of Europeans.		Total.
	Males.	Females.	Males.	Females.	
1910	6,000	approx	3	1	—
1911	4,467	4,263	3	0	8,733
1912	—	—	—	—	—

3. Housing.

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

Number of Huts :—

1910 ... ...

1911 ... ... Unknown

1912 ... ...

4. Mosquito Protection of Houses.

—	1910.	1911.	1912.
Number of European houses wholly mosquito protected	—	—	—
Number of European houses with mosquito room	2	3	—
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	2	0	—
Number of houses erected with sanction as to site, construction, and relation to other buildings	1	3	—
Number of huts erected with sanction as to site, construction, and relation to other buildings	—	—	—
Number of houses build without sanction	Unknown	Unknown	—
Number of huts build without sanction	—	—	—

Action taken :—

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

6. Markets.

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

7. Slaughter-houses.

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

8. Latrines.

	For Males.		For Females.	
	Number.	Number of seats.	Number.	Number of seats.
Number of Public Latrines :—	Same building with partition.			
1910	2	—	2	—
1911 (including Govt. Offices, Barracks &c.	2	—	2	—
1912	—	—	—	—
Number of new Public Latrines erected during the year :—				
1910	—	—	—	—
1911	—	—	—	—
1912	—	—	—	—
Number of Public Latrines repaired during the year :—				
1910	—	—	—	—
1911	—	—	—	—
1912	—	—	—	—
Number of Public Latrines demolished during the year :—				
1910	1	—	1	—
1911	—	—	—	—
1912	—	—	—	—

	1910.	1911.	1912.
Number of Private Latrines	unknown	unknown	—
Average number of pails of nightsoil removed daily	16	8	—
Average number of soiled pails removed and clean pails substituted ...	16	14	—
Number of nightsoil men employed to clean latrines and removed excreta	8	8	—
Number of cesspools	unknown	unknown	—
Number of cesspools cleansed	—	—	—
Number of new cesspools constructed during the year	—	—	—
Number of old cesspools abolished	4	—	—
Number of cesspools oiled regularly by Department	—	—	—

9. Removal of Refuse.

	1910.	1911.	1912.
Number of dustbins	7	11	—
Number of carts if employed at work daily to remove refuse from streets	—	—	—
Amount of refuse removed daily from streets	unknown	unknown	—
Number of carts, if employed at work daily to remove refuse from yards and premises	—	—	—
Amount of refuse removed daily from yards and premises	unknown	unknown	—
Number of men employed for moving refuse	12	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	16	8	—	Unknown	—	—	Unknown	—	—
Burnt	—	—	—	—	1/4	—	—	—	—
Thrown into Sea	Unknown	Unknown	—	—	Unknown	—	—	—	—
*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.
Unknown	Unknown	—

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	—	—	—
Number of stand pipes in compounds and houses ...	—	—	—
Wells:—			
Public:—			
Number	5	5	—
Number with pumps protected against surface water and mosquito-protected	—	—	—
Private:—			
Number	unknown	unknown	—
Number protected against surface water and Mosquito-protected	1	1	—
Tanks.—			
Public:—			
Number underground	—	—	—
Number mosquito-protected and served by pumps ...	—	—	—
Number above ground	—	—	—
Number mosquito-protected...	—	—	—
Number of 400 gallons capacity or less	—	—	—
Number above 400 gallons	—	—	—

Nature of Water Supply.	1910.	1911.	1912.
Tanks:—			
Private:—			
Number underground	Nil.	Nil.	—
Number mosquito-protected	„	„	—
Number above ground...	15	18	—
Number mosquito-protected	15	18	—
Number of 400 gallons capacity or less	15	18	—
Number above 400 gallons	Nil.	Nil.	—
Nature of tanks:—			
Wood	Nil.	Nil.	—
Iron	9	13	—
Concrete	6	5	—
Barrels:—			
Number	Nil.	Nil.	—
Number mosquito-protected	„	„	—

13. Drainage.

Nature of drainage.	Public.	Private.
Masonry drains:—		
Lineal yards of masonry drains:—		
1910	—	10
1911	—	10
1912	—	—
Lineal yards reconstructed during the year:		
1910	—	—
1911	—	—
1912	—	—
Lineal yards repaired during the year:—		
1910	—	—
1911	—	—
1912	—	—
Lineal yards of new drains constructed during the year:—		
1910	—	—
1911	—	—
1912	—	—
Earth drains or ditches:—		
Number of linear yards of ditches cleaned:—		
1910	Unknown.	800
1911	—	—
1912	—	—
Number of linear yards of ditches dug and graded:—		
1910	Unknown.	300
1911	—	—
1912	—	—
Average frequency of clearing ditches of grass:—		
1910	Unknown.	Twice yearly.
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	25,000	100,000	—
Average frequency of clearance of rank vegetation on same area.	Twice yearly.	Almost constant clearing.	—

15. Excavations and low-lying land.

—	1910.	1911.	1912.
Number of pools and excavations	Unknown.	Unknown.	—
Number of excavations filled up	6	„	—
Amount of low-lying and marsh land raised and drained	Nil.	Nil.	—
Number of pools, marshes, streams, &c., fish-stocked	Unknown.	„	—
Number of cubic yards of material used for filling up pools and excavations	3,000	Unknown.	—
Number of persons fined for making new excavations	Nil.	1	—
Average number of men daily employed in filling up pools, &c.	Unknown.	Nil.	—

16. Oiling.

—	1910.	1911.	1912.
Number of drains oiled	Unknown.	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	Nil.	„	—

17. Inspections and Prosecutions.

—	1910.	1911.	1912.
Number of inspectors employed	(1 Irregularly).	Nil.	—
Number of houses inspected	600	No record.	—
Number of houses where larvæ were found	Unknown.	„	—
Number of notices served to remove conditions causing the breeding of larvæ	180	36	—
Number of persons fined for having mosquito larvæ on premises	Nil.	Nil.	—
Number of notices served to remove insanitary conditions on premises	180	76	—
Number of persons fined for not removing insanitary conditions after notice	30	14	—
Number of soda and aerated water factories inspected	Nil.	Nil.	—

N. S. CLARK,
Medical Officer.

Epe, 6th January, 1912.

1. Name of Town:—**Aro.**

—	Approximate area.	Number of proclaimed open spaces.
1910	½ sq. mile	—
1911	"	—
1912	—	—

2. Population.

—	Number of Natives.		Number of Europeans.		Total.
	Males.	Females.	Males.	Females.	
1910	200	120	14	—	334
1911	250	140	18	—	358
1912	—	—	—	—	—

3. Housing.

—	Number occupied by Europeans.	Number occupied by Natives.
Number of Houses:—		
1910	9	51
1911	9	51
1912	—	—
Number of Huts:—		
1910	1	6
1911	1	8
1912	—	—

4. Mosquito Protection of Houses.

—	1910.	1911.	1912.
Number of European houses wholly mosquito protected	—	—	—
Number of European houses with mosquito room	9	9	—
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	—	—	—
Number of houses erected with sanction as to site, construction, and relation to other buildings	—	—	—
Number of huts erected with sanction as to site, construction, and relation to other buildings	—	2	—
Number of houses build without sanction	—	—	—
Number of huts build without sanction	—	—	—

Action taken :—

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

6. Markets.

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

7. Slaughter-houses.

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

8. Latrines.

	For Males.		For Females.	
	Number.	Number of seats.	Number.	Number of seats.
Number of Public Latrines :—				
1910	1	4	—	—
1911 (including Govt. Offices, Barracks &c.	1	4	—	—
1912	—	—	—	—
Number of new Public Latrines erected during the year :—				
1910	—	—	—	—
1911	—	—	—	—
1912	—	—	—	—
Number of Public Latrines repaired during the year :—				
1910	—	—	—	—
1911	—	—	—	—
1912	—	—	—	—
Number of Public Latrines demolished during the year :—				
1910	—	—	—	—
1911	—	—	—	—
1912	—	—	—	—

	1910.	1911.	1912.
Number of Private Latrines	121	121	—
Average number of pails of nightsoil removed daily	20	21	—
Average number of soiled pails removed and clean pails substituted ...	20	21	—
Number of nightsoil men employed to clean latrines and removed excreta	2	2	—
Number of cesspools	—	—	—
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	—	—	—
Number of carts at work daily to remove refuse from streets ...	—	—	—
Amount of refuse removed daily	9 barrels	12 barrels	—
Number of carts, at work daily to remove refuse from yards and premises	—	—	—
Amount of refuse removed daily from yards and premises	9 barrels	12 barrels	—
Number of men employed for moving refuse	2	2	—

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

	Daily average number of pails of excreta.			Daily average number of barrels 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	20	21	—	9	12	—	—	—	—
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.
—	—	—

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	—	—	—
Number of stand pipes in compounds and houses ...	—	—	—
Wells:—			
Public:—			
Number	—	—	—
Number with pumps protected against surface water and mosquito-protected	—	—	—
Private:—			
Number	—	—	—
Number protected against surface water and Mosquito-protected	—	—	—
Tanks.—			
Public:—			
Number underground	—	—	—
Number mosquito-protected and served by pumps ...	—	—	—
Number above ground	—	—	—
Number mosquito-protected	—	—	—
Number of 400 gallons capacity or less	—	—	—
Number above 400 gallons	—	—	—

Nature of Water Supply.	1910.	1911.	1912.
Tanks:—			
Private:—			
Number underground	—	—	—
Number mosquito-protected	—	—	—
Number above ground...	40	40	—
Number mosquito-protected	40	40	—
Number of 400 gallons capacity or less	38	38	—
Number above 400 gallons	2	2	—
Nature of tanks:—			
Wood	—	—	—
Iron	38	38	—
Concrete	2	2	—
Barrels:—			
Number	—	—	—
Number mosquito-protected	—	—	—

13. Drainage.

Nature of drainage.	Public.	Private.
Masonry drains:—		
Lineal yards of masonry drains:—		
1910	—	—
1911	—	—
1912	—	—
Lineal yards reconstructed during the year:		
1910	—	—
1911	—	—
1912	—	—
Lineal yards repaired during the year:—		
1910	—	—
1911	—	—
1912	—	—
Lineal yards of new drains constructed during the year:—		
1910	—	—
1911	—	—
1912	—	—
Earth drains or ditches:—		
Number of linear yards of ditches cleaned:—		
1910	About 2,000 yards.	—
1911	—	—
1912	—	—
Number of linear yards of ditches dug and graded:—		
1910	—	—
1911	—	—
1912	—	—
Average frequency of clearing ditches of grass:—		
1910	Three times yearly.	—
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	½ sq. mile. 4 times annually.	½ sq. mile.	—
Average frequency of clearance of rank vegetation on same area.	—	—	—

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	No record.	23	—
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	—	—	—
Number of houses inspected	No record.	††	—
Number of houses where larvæ were found	No record.	†	—
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	—	—	—
Number of soda and aerated water factories inspected	—	—	—

* Many burrow pits along railway.
† Sanitary gang once a week.
†† 110 houses weekly.
‡ Average of about 55 weekly.

1. Name of Town:—**Abeokuta.**

—	Approximate area.	Number of proclaimed open spaces.
1910	Unknown	Unknown
1911	—	—
1912	—	—

2. Population.

—	Number of Natives.		Number of Europeans.		Total.
	Males.	Females.	Males.	Females.	
1910	—	—	—	—	—
1911	73,000	—	19	5	73,024
1912	—	—	—	—	—

3. Housing.

—	Number occupied by Europeans.	Number occupied by Natives.
Number of Houses:—		
1910	—	—
1911	14	36,275
1912	—	—
Number of Huts:—		
1910	—	—
1911	1,640	—
1912	—	—

4. Mosquito Protection of Houses.

—	1910.	1911.	1912.
Number of European houses wholly mosquito protected	—	—	—
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	Unknown	Unknown	—
Number of houses erected with sanction as to site, construction, and relation to other buildings	—	—	—
Number of huts erected with sanction as to site, construction, and relation to other buildings	—	—	—
Number of houses build without sanction	—	—	—
Number of huts build without sanction	—	—	—

Action taken :—

	Number of Prosecutions.		Number demolished.	
	Huts.	Houses.	Huts.	Houses.
1910	—	5	—	—
1911	—	16	—	125
1912	—	—	—	—

6. Markets.

	Total number.	Number paved and drained.	Number unpaved.
1910	—	—	—
1911	17	—	17
1912	—	—	—

7. Slaughter-houses.

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

8. Latrines.

	For Males.		For Females.	
	Number.	Number of seats.	Number.	Number of seats.
Number of Public Latrines :—				
1910	—	—	—	—
1911 (including Govt. Offices, Barracks &c.	—	—	—	—
1912	—	—	—	—
Number of new Public Latrines erected during the year :—				
1910	—	—	—	—
1911	—	—	—	—
1912	—	—	—	—
Number of Public Latrines repaired during the year :—				
1910	—	—	—	—
1911	—	—	—	—
1912	—	—	—	—
Number of Public Latrines demolished during the year :—				
1910	—	—	—	—
1911	—	—	—	—
1912	—	—	—	—

	1910.	1911.	1912.
Number of Private Latrines	—	—	—
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 removed excreta	—	—	—
Number of cesspools	—	—	—
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	Not known.	Not known.	—
Number of carts if employed at work daily to remove refuse from streets			—
Amount of refuse removed daily from streets			—
Number of carts, if employed at work daily to remove refuse from yards and premises			—
Amount of refuse removed daily from yards and premises			—
Number of men employed for moving refuse			—

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

	Daily average number of pails of excreta.			Daily average number of barrels 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	—	—	—	—	—	—	—	—	—
*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	—	—	—
Number of stand pipes along roads	—	—	—
Number of stand pipes in compounds and houses	—	—	—
Wells:—			
Public:—			
Number	1	1	—
Number with pumps protected against surface water and mosquito-protected	1	1	—
Private:—			
Number	—	2,118	—
Number protected against surface water and Mosquito-protected	—	—	—
Tanks:—			
Public:—			
Number underground	—	—	—
Number mosquito-protected and served by pumps	—	—	—
Number above ground	—	—	—
Number mosquito-protected	—	—	—
Number of 400 gallons capacity or less	—	—	—
Number above 400 gallons	—	—	—

Nature of Water Supply.	1910.	1911.	1912.
Tanks:—			
Private:—			
Number underground		1	—
Number mosquito-protected		—	—
Number above ground...		33	—
Number mosquito-protected		—	—
Number of 400 gallons capacity or less		—	—
Number above 400 gallons		—	—
Nature of tanks:—			
Wood		—	—
Iron		34	—
Concrete		2	—
Barrels:—			
Number		16	—
Number mosquito-protected		—	—

Not known.

13. Drainage.

Nature of drainage.	Public.	Private.
Masonry drains:—		
Lineal yards of masonry drains:—		
1910	600 yards.	—
1911	—	—
1912	—	—
Lineal yards reconstructed during the year:		
1910	—	—
1911	100 yards.	—
1912	—	—
Lineal yards repaired during the year:—		
1910	—	—
1911	—	—
1912	—	—
Lineal yards of new drains constructed during the year:—		
1910	—	—
1911	—	—
1912	—	—
Earth drains or ditches:—		
Number of linear yards of ditches cleaned:—		
1910	7 miles.	—
1911	16¼ miles.	—
1912	—	—
Number of linear yards of ditches dug and graded:—		
1910	7 miles.	—
1911	16¼ miles.	—
1912	—	—
Average frequency of clearing ditches of grass:—		
1910	Monthly.	—
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	—	—	—
Average frequency of clearance of rank vegetation on same area.	—	—	—

15. Excavations and low-lying land.

—	1910.	1911.	1912.
Number of pools and excavations	Not known.	1,512	—
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	—	—	—
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	22	15	—
Number of houses inspected	3,220	5,246	—
Number of houses where larvæ were found	—	—	—
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	1,254	1,376	—
Number of persons fined for not removing insanitary conditions after notice	5	13	—
Number of soda and aerated water factories inspected	—	—	—

A. OYEJOLA,

Medical Officer.

Egba Government.

1. Name of Town :—**Warri.**

—	Approximate area.	Number of proclaimed open spaces.
1910	450 Acres	—
1911	800 „	—
1912	—	—

2. Population.

—	Number of Natives.		Number of Europeans.		Total.
	Males.	Females.	Males.	Females.	
1910	Not known		83	5	—
1911	2,449		80	4	—
1912	—	—	—	—	—

3. Housing.

—	Number occupied by Europeans.	Number occupied by Natives.
Number of Houses :—		
1910	16	Not known
1911	19	55
1912	—	—

Number of Huts :—

1910	See houses above
1911	—
1912	—

4. Mosquito Protection of Houses.

—	1910.	1911.	1912.
Number of European houses wholly mosquito protected	None	None	—
Number of European houses with mosquito room	7	13	—
Number rendered during the year wholly mosquito protected ...	None	None	—
Number rendered during the year partially mosquito protected ...	5	6	—

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	5	7	—
Number of houses erected with sanction as to site, construction, and relation to other buildings	18	24	—
Number of huts erected with sanction as to site, construction, and relation to other buildings	Unknown	Unknown	—
Number of houses build without sanction	—	—	—
Number of huts build without sanction	—	—	—

Action taken :—

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

6. Markets.

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

7. Slaughter-houses.

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

8. Latrines.

	For Males and Females.			
	Number.	Number of seats.		
Number of Public Latrines :—				
1910	5	34	—	—
1911 (including Govt. Offices, Barracks &c.	8	58	—	—
1912	—	—	—	—
Number of new Public Latrines erected during the year :—				
1910	2	16	—	—
1911	3	24	—	—
1912	—	—	—	—
Number of Public Latrines repaired during the year :—				
1910	—	—	—	—
1911	3	24	—	—
1912	—	—	—	—
Number of Public Latrines demolished during the year :—				
1910	—	—	—	—
1911	1	—	—	—
1912	—	—	—	—

	1910.	1911.	1912.
Number of Private Latrines	Unknown.	75	—
Average number of pails of nightsoil removed daily	„	113	—
Average number of soiled pails removed and clean pails substituted ...	„	113	—
Number of nightsoil men employed to clean latrines and remove excreta (only partly thus engaged)	„	34	—
Number of cesspools	None.	None.	—
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	54	54	—
Number of carts at work daily to remove refuse from streets ...	—	—	—
Amount of refuse removed daily	*	*	—
Number of carts, at work daily to remove refuse from yards and premises	— Unknown.	— Unknown.	—
Amount of refuse removed daily from yards and premises	do.	do.	—
Number of men employed for moving refuse (Partly thus engaged) ...	—	24	—

* 4 Surf boats full.

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

	Daily average number of pails of excreta.			Daily average number of barrels 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	—	—	—	—	—	—	—	—	—
*Otherwise dealt with ...	—	—	—	—	—	—	—	—	—
(a) Thrown into tided water ways	not known.	119	—	4	4	—	—	—	—
(b) In water Latrines ditto ...	†	—	—	—	—	—	—	—	—

* State mode of disposal. † Not ascertainable.

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.
Not known.	Not known.	—

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	—	—	—
Number of stand pipes in compounds and houses ...	—	—	—
Wells:—			
Public:—			
Number	6	6	—
Number with pumps protected against surface water and mosquito-protected	6	6	—
Private:—			
Number	33	33	—
Number protected against surface water and Mosquito-protected	13	12	—
Tanks:—			
Public:—			
Number underground	—	—	—
Number mosquito-protected and served by pumps ...	—	—	—
Number above ground	—	—	—
Number mosquito-protected	—	—	—
Number of 400 gallons capacity or less	—	—	—
Number above 400 gallons	—	—	—

Nature of Water Supply.	1910.	1911.	1912.
Tanks:—			
Private:—			
Number underground	7	7	—
Number mosquito-protected	7	7	—
Number above ground...	—	85	—
Number mosquito-protected	Unknown.	85	—
Number of 400 gallons capacity or less	—	6	—
Number above 400 gallons	—	86	—
Nature of tanks:—			
Wood	—	—	—
Iron	Unknown.	74	—
Concrete	—	18	—
Barrels:—			
Number	—	—	—
Number mosquito-protected...	—	—	—

13. Drainage.

Nature of drainage.	Public.	Private.
Masonry drains:—		
Lineal yards of masonry drains:—		
1910	Not known.	—
1911	220	Not known.
1912	—	—
Lineal yards reconstructed during the year:		
1910	—	—
1911	—	—
1912	—	—
Lineal yards repaired during the year:—		
1910	Not known.	—
1911	100	Not known.
1912	—	—
Lineal yards of new drains constructed during the year:—		
1910	—	—
1911	—	—
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	Not known.	Not known.
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	No Record.	No Record.	—
Average frequency of clearance of rank vegetation on same area.			—

15. Excavations and low-lying land.

—	1910.	1911.	1912.
Number of pools and excavations	No record.	No record.	—
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	No record.	No record.	—
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. Inspection and Prosecutions.

—	1910.	1911.	1912.
Number of inspectors employed	1	4	—
Number of houses inspected	Unknown.	67,979	—
Number of houses where larvæ were found	„	922	—
Number of notices served to remove conditions causing the breeding of larvæ	„	9,114	—
Number of persons fined for having mosquito larvæ on premises	„	56	—
Number of notices served to remove insanitary conditions on premises	„	96	—
Number of persons fined for not removing insanitary conditions after notice	„	41	—
Number of soda and aerated water factories inspected	—	—	—

E. E. MAPLES,

Medical Officer, Warri.

4th February, 1912.

1. Name of Town:—**Forcados.**

—	Approximate area.	Number of proclaimed open spaces.
1910	250 Acres	—
1911	250 „	1
1912	—	—

2. Population.

—	Number of Natives.		Number of Europeans.		Total.
	Males.	Females.	Males.	Females.	
1910	1,435	1,900	32	—	3,367
1911	—	—	40	1	—
1912	—	—	—	—	—

3. Housing.

—	Number occupied by Europeans.	Number occupied by Natives.
Number of Houses:—		
1910	11	—
1911	13	102
1912	—	—

Number of Huts:—	
1910	?
1911	66
1912	—

4. Mosquito Protection of Houses.

—	1910.	1911.	1912.
Number of European houses wholly mosquito protected	1	1	—
Number of European houses with mosquito room	4	9	—
Number rendered during the year wholly mosquito protected ...	—	—	—
Number rendered during the year partially mosquito protected ...	1	5	—

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	13	4	—
Number of houses erected with sanction as to site, construction, and relation to other buildings	11	34	—
Number of huts erected with sanction as to site, construction, and relation to other buildings	—	2	—
Number of houses build without sanction	—	?	—
Number of huts build without sanction	—	?	—

Action taken :—

	Number of Prosecutions.		Number demolished.	
	Huts.	Houses.	Huts.	Houses.
1910	—	50	—	—
1911	—	—	?	1
1912	—	—	—	—

6. Markets.

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

7. Slaughter-houses.

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

8. Latrines.

	For Males and Females.			
	Number.	Number of seats.		
Number of Public Latrines :—				
1910	4	22	1	4
1911 (including Govt. Offices, Barracks &c.	7	50	1	4
1912	—	—	—	—
Number of new Public Latrines erected during the year :—				
1910	1	—	—	—
1911	3	18	—	—
1912	—	—	—	—
Number of Public Latrines repaired during the year :—				
1910	1	—	—	—
1911	—	—	—	—
1912	—	—	—	—
Number of Public Latrines demolished during the year :—				
1910	1	—	—	—
1911	—	—	—	—
1912	—	—	—	—

	1910.	1911.	1912.
Number of Private Latrines	42	35	—
Average number of pails of nightsoil removed daily	70	68	—
Average number of soiled pails removed and clean pails substituted ...	70	68	—
Number of nightsoil men employed to clean latrines and remove excreta (only partly thus engaged)	23	13	—
Number of cesspools	—	—	—
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	100	150	—
Number of carts at work daily to remove refuse from streets ...	—	—	—
Amount of refuse removed daily	?	?	—
Number of carts, at work daily to remove refuse from yards and premises	—	—	—
Amount of refuse removed daily from yards and premises	?	150 bins.	—
Number of men employed for moving refuse (Partly thus engaged) ...	23	12	—

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

	Daily average number of pails of excreta.			Daily average number of barrels 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	?	—	—	—	—	—	—	—	—
*Otherwise dealt with ...	—	—	—	—	—	—	—	—	—
Thrown into the river ...	70	68	?	?	—	—	—	—	—

* 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	—	—	—
Number of stand pipes along roads	—	—	—
Number of stand pipes in compounds and houses ...	—	—	—
Wells:—			
Public:—			
Number	6	7	—
Number with pumps protected against surface water and mosquito-protected	—	7	—
Private:—			
Number	2	2	—
Number protected against surface water and Mosquito-protected	—	—	—
Tanks.—			
Public:—			
Number underground	—	—	—
Number mosquito-protected and served by pumps ...	—	—	—
Number above ground	—	—	—
Number mosquito-protected	—	—	—
Number of 400 gallons capacity or less	—	—	—
Number above 400 gallons	—	—	—

Nature of Water Supply.	1910.	1911.	1912.
Tanks:—			
Private:—			
Number underground	—	—	—
Number mosquito-protected	—	—	—
Number above ground...	93	110	—
Number mosquito-protected	93	93	—
Number of 400 gallons capacity or less	34	38	—
Number above 400 gallons	59	72	—
Nature of tanks:—			
Wood	—	—	—
Iron	84	85	—
Concrete	9	25	—
Barrels:—			
Number	—	?	—
Number mosquito-protected...	—	129	—

13. Drainage.

Nature of drainage.	Public.	Private.
Masonry drains:—		
Lineal yards of masonry drains:—		
1910	1,324	—
1911	1,324	347
1912	—	—
Lineal yards reconstructed during the year:		
1910	—	—
1911	—	—
1912	—	—
Lineal yards repaired during the year:—		
1910	—	—
1911	—	—
1912	—	—
Lineal yards of new drains constructed during the year:—		
1910	98	186
1911	—	—
1912	—	—
Earth drains or ditches:—		
Number of linear yards of ditches cleaned:—		
1910	—	—
1911	13,134	—
1912	—	—
Number of linear yards of ditches dug and graded:—		
1910	—	—
1911	1,980	90
1912	—	—
Average frequency of clearing ditches of grass:—		
1910	2 monthly.	—
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	?	?	—
Average frequency of clearance of rank vegetation on same area.	Every 2 Months.	2 monthly.	—

15. Excavations and low-lying land.

—	1910.	1911.	1912.
Number of pools and excavations	24	?	—
Number of excavations filled up	28	?	—
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.	15	?	—

16. Oiling.

—	1910.	1911.	1912.
Number of drains oiled	—	81	—
Number of pools and excavations oiled	48	131	—
Number of tanks and barrels oiled	—	10	—
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	2	2	—
Number of houses inspected	476	13,606	—
Number of houses where larvæ were found...	364	395	—
Number of notices served to remove conditions causing the breeding of larvæ	18	8	—
Number of persons fined for having mosquito larvæ on premises	—	93	—
Number of notices served to remove insanitary conditions on premises	113	4	—
Number of persons fined for not removing insanitary conditions after notice	43	—	—
Number of soda and aerated water factories inspected	—	—	—

1. Name of Town :—**Onitsha. C.P.**

—	Approximate area.	Number of proclaimed open spaces.
1910	1,500 Acres	—
1911	—	—
1912	—	—

2. Population.

—	Number of Natives.		Number of Europeans.		Total.
	Males.	Females.	Males.	Females.	
1910	—	—	—	—	—
1911	5,000	5,000	49	5	10,054
1912	—	—	—	—	—

3. Housing.

—	Number occupied by Europeans.	Number occupied by Natives.
Number of Houses :—		
1910	—	—
1911	32	97
1912	—	—

Number of Huts :—

1910	
1911	1,512
1912	—

4. Mosquito Protection of Houses.

—	1910.	1911.	1912.
Number of European houses wholly mosquito protected	—	8	—
Number of European houses with mosquito room	—	5	—
Number rendered during the year wholly mosquito protected ...	—	4	—
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	—	15	—
Number of huts erected with sanction as to site, construction, and relation to other buildings	—	107	—
Number of houses build without sanction	—	—	—
Number of huts build without sanction	—	—	—

Action taken :—

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

*Not necessary to take legal proceedings.

6. Markets.

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

7. Slaughter-houses.

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

8. Latrines.

	For Males and Females.			
	Number.	Number of seats.		
Number of Public Latrines :—				
1910	—	—	—	—
1911 (including Govt. Offices, Barracks &c.	—	—	—	—
1912	—	—	—	—
Number of new Public Latrines erected during the year :—				
1910	—	—	—	—
1911	—	—	—	—
1912	—	—	—	—
Number of Public Latrines repaired during the year :—				
1910	—	—	—	—
1911	—	—	—	—
1912	—	—	—	—
Number of Public Latrines demolished during the year :—				
1910	—	—	—	—
1911	—	—	—	—
1912	—	—	—	—

	1910.	1911.	1912.
Number of Private Latrines		Not known	
Average number of pails of nightsoil removed daily	—	145	—
Average number of soiled pails removed and clean pails substituted ...	—	145	—
Number of nightsoil men employed to clean latrines and remove excreta (only partly thus engaged)	—	18	—
Number of cesspools	—	—	—
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	—	—	—
Number of carts, if employed at work daily to remove refuse from streets	—	*	—
Amount of refuse removed daily from streets	—	—	—
Number of carts, if employed at work daily to remove refuse from yards and premises	—	—	—
Amount of refuse removed daily from yards and premises	—	—	—
Number of men employed for moving refuse	—	†	—

* Never measured. † Unknown none by Government.

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

	Daily average number of pails of excreta.			Daily average number of barrels 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	—	72	—	—	—	—	—	—	—
Burnt	—	—	—	—	—	—	—	—	—
Thrown into Niger	—	—	—	—	—	—	—	—	—
*Otherwise dealt with ...	—	73	—	—	—	—	—	—	—

* 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	—	—	—
Number of stand pipes along roads	—	—	—
Number of stand pipes in compounds and houses ...	—	—	—
Wells:—			
Public:—			
Number	—	—	—
Number with pumps protected against surface water and mosquito-protected	—	—	—
Private:—			
Number	—	—	—
Number protected against surface water and Mosquito-protected	—	—	—
Tanks:—			
Public:—			
Number underground	—	—	—
Number mosquito-protected and served by pumps ...	—	—	—
Number above ground	—	—	—
Number mosquito-protected	—	—	—
Number of 400 gallons capacity or less	—	—	—
Number above 400 gallons	—	—	—

Nature of Water Supply.	1910.	1911.	1912.
Tanks:—			
Private:—			
Number underground	—	* 37	
Number mosquito-protected	—	* 6 partly	
Number above ground...	—	* 6	
Number mosquito-protected	—	* 31	
Number of 400 gallons capacity or less	—	* 31	
Number above 400 gallons	—	—	
Nature of tanks:—			
Wood	—	* 37	
Iron	—	—	
Concrete	—	* 20	
Barrels:—			
Number	—	*17	
Number mosquito-protected...	—	—	

* All attached to Government buildings or quarters.

13. Drainage.

Nature of drainage.	Public.	Private.
Masonry drains:—		
Lineal yards of masonry drains:—		
1910	1,800	—
1911	—	—
1912	—	—
Lineal yards reconstructed during the year:		
1910	—	—
1911	—	—
1912	—	—
Lineal yards repaired during the year:—		
1910	400	—
1911	—	—
1912	—	—
Lineal yards of new drains constructed during the year:—		
1910	350	—
1911	—	—
1912	—	—
Earth drains or ditches:—		
Number of linear yards of ditches cleaned:—		
1910	17,600	—
1911	—	—
1912	—	—
Number of linear yards of ditches dug and graded:—		
1910	4,600	—
1911	—	—
1912	—	—
Average frequency of clearing ditches of grass:—		
1910	—	—
1911	8 times yearly.	—
1912	—	—

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

—	1910.	1911.	1912.
Number of square yards of weeds, grass, and vegetation cut and removed	—	150000	—
Average frequency of clearance of rank vegetation on same area.	—	4 times a year.	—

15. Excavations and low-lying land.

—	1910.	1911.	1912.
Number of pools and excavations	—	*500	—
Number of excavations filled up	—	†124	—
Amount of low-lying and marsh land raised and drained	—	½ acre	
Number of pools, marshes, streams, &c., fish-stocked	—	—	—
Number of cubic yards of material used for filling up pools and excavations	—	2,000	—
Number of persons fined for making new excavations	—	—	—
Average number of men daily employed in filling up pools, &c.	—	30	—

*Roughly. † Exact number.

16. Oiling.

—	1910.	1911.	1912.
Number of drains oiled	—	*22	—
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		1	—

*Constantly.

17. Inspections and Prosecutions.

—	1910.	1911.	1912.
Number of inspectors employed	—	1	—
Number of houses inspected	—	*609	—
Number of houses where larvæ were found	—	330	—
Number of notices served to remove conditions causing the breeding of larvæ	—	330	—
Number of persons fined for having mosquito larvæ on premises	—	33	—
Number of notices served to remove insanitary conditions on premises	—	425	—
Number of persons fined for not removing insanitary conditions after notice	—	67	—
Number of soda and aerated water factories inspected	—	—	—

*Every month.

H. ELLIS,

Medical Officer.

10th January, 1912.

1. Name of Town:—Sapele.

—	Approximate area.	Number of proclaimed open spaces.
1910	570 Acres	1
1911	570 „	1
1912	—	—

2. Population.

—	Number of Natives.		Number of Europeans.		Total.
	Males.	Females.	Males.	Females.	
1910	500 Approx.	500 Approx.	23	—	1,023
1911	500 „	500 „	23	—	1,023
1912	—	—	—	—	—

3. Housing.

—	Number occupied by Europeans.	Number occupied by Natives.
Number of Houses:—		
1910	9 & 1 hut.	17
1911	11	17
1912	—	—

N.B. Hospital not included.

Number of Huts:—

1910	205
1911	211
1912	—

4. Mosquito Protection of Houses.

—	1910.	1911.	1912.
Number of European houses wholly mosquito protected	3	3	—
Number of European houses with mosquito room	—	—	—
Number rendered during the year wholly mosquito protected ...	2	—	—
Number rendered during the year partially mosquito protected ...	—	—	—

Hospital not included.

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	—	2	—
Number of houses erected with sanction as to site, construction, and relation to other buildings	—	6	—
Number of huts erected with sanction as to site, construction, and relation to other buildings	—	11	—
Number of houses build without sanction	—	—	—
Number of huts build without sanction	—	—	—

Action taken :—

—	Number of Prosecutions.		Number demolished.	
	Huts.	Houses.	Huts.	Houses.
1910	—	—	—	—
1911	27	—	38	—
1912	—	—	—	—

6. Markets.

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

7. Slaughter-houses.

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

8. Latrines.

—	For Males and Females.			
	Number.	Number of seats.		
Number of Public Latrines :—				
1910	1	*	1	*
1911 (including Govt. Offices, Barracks &c.	1	,,	1	,,
1912	—	—	—	—
Number of new Public Latrines erected during the year :—				
1910	—	—	—	—
1911	—	—	—	—
1912	—	—	—	—
Number of Public Latrines repaired during the year :—				
1910	—	—	—	—
1911	1	vide sup.	1	—
1912	—	—	—	—
Number of Public Latrines demolished during the year :—				
1910	—	—	—	—
1911	—	—	—	—
1912	—	—	—	—

—	1910.	1911.	1912.
Number of Private Latrines	45	49	—
Average number of pails of nightsoil removed daily	—	61	—
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	—	—	—
Number of cesspools cleansed	—	—	—
Number of new cesspools constructed during the year	—	—	—
Number of old cesspools abolished	—	—	—
Number of cesspools oiled regularly by Department	—	—	—

*Long bar over water.

9. Removal of Refuse.

	1910.	1911.	1912.
Number of dustbins	—	—	—
Number of carts, at work daily to remove refuse from streets	—	—	—
Amount of refuse removed daily	2 barrels.	10 barrels.	—
Number of carts, at work daily to remove refuse from yards and premises	—	—	—
Amount of refuse removed daily from yards and premises	—	—	—
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 barrels 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	—	61	—	—	—	—	—	—	—
*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.
—	Removed daily with Rubbish.	—

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	—	—	—
Number of stand pipes in compounds and houses	—	—	—
Wells:—			
Public:—			
Number	1	1	—
Number with pumps protected against surface water and mosquito-protected	1	1	—
Private:—			
Number	1	2	—
Number protected against surface water and Mosquito-protected	1	2	—
Tanks.—			
Public:—			
Number underground	—	—	—
Number mosquito-protected and served by pumps	—	—	—
Number above ground	—	—	—
Number mosquito-protected	—	—	—
Number of 400 gallons capacity or less	—	—	—
Number above 400 gallons	—	—	—

Nature of Water Supply.	1910.	1911.	1912.
Tanks:—			
Private:—			
Number underground	—	—	
Number mosquito-protected	—	—	
Number above ground...	42	47	
Number mosquito-protected	39	47	
Number of 400 gallons capacity or less	2	21	
Number above 400 gallons	2	26	
Nature of tanks:—			
Wood	—	—	
Iron	17	38	
Concrete	5	9	
Barrels:—			
Number	—	—	
Number mosquito-protected...	—	—	

13. Drainage.

Nature of drainage.	Public.	Private.
Masonry drains:—		
Lineal yards of masonry drains:—		
1910	750 yards.	—
1911	"	—
1912	—	—
Lineal yards reconstructed during the year:		
1910	—	—
1911	—	—
1912	—	—
Lineal yards repaired during the year:—		
1910	—	—
1911	—	—
1912	—	—
Lineal yards of new drains constructed during the year:—		
1910	—	—
1911	—	—
1912	—	—
Earth drains or ditches:—		
Number of linear yards of ditches cleaned:—		
1910	—	—
1911	1,200 yards approx.	—
1912	—	—
Number of linear yards of ditches dug and graded:—		
1910	—	—
1911	—	—
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	450	500	—
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	120	120	—
Number of excavations filled up	4	12	—
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	—	—	—
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	2	—
Number of houses inspected	—	239	—
Number of houses where larvæ were found	—	—	—
Number of notices served to remove conditions causing the breeding of larvæ	—	—	—
Number of persons fined for having mosquito larvæ on premises	14	15	—
Number of notices served to remove insanitary conditions on premises	19	15	—
Number of persons fined for not removing insanitary conditions after notice	—	—	—
Number of soda and aerated water factories inspected	—	—	—

1. Name of Town:—Benin City.

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

2. Population.

—	Number of Natives.		Number of Europeans.		Total.
	Males.	Females.	Males.	Females.	
1910	Uncertain.	Uncertain.	8	—	—
1911	5,150	5,209	10	—	*10,359
1912	—	—	—	—	—

* Census Return.

3. Housing.

—	Number occupied by Europeans.	Number occupied by Natives.
Number of Houses:—		
1910	5	Uncertain.
1911	5	6
1912	—	—

Number of Huts:—

1910	Uncertain.
1911	1,025 Approx.
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	1	—
Number rendered during the year wholly mosquito protected ...	—	1	—
Number rendered during the year partially mosquito protected ...	1	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	3	—	—
Number of houses erected with sanction as to site, construction, and relation to other buildings	—	—	—
Number of huts erected with sanction as to site, construction, and relation to other buildings	—	25	—
Number of houses build without sanction	Uncertain.	—	—
Number of huts build without sanction	" "	—	—

Action taken :—

—	Number of Prosecutions.		Number demolished.	
	Huts.	Houses.	Huts.	Houses.
1910	—	—	—	—
1911	—	—	45	—
1912	—	—	—	—

6. Markets.

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

7. Slaughter-houses.

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

8. Latrines.

—	For Males.		For Females.	
	Number.	Number of seats.	Number.	Number of seats.
Number of Public Latrines :—				
1910	1	10	—	—
1911	—	—	—	—
1912	—	—	—	—
Number of new Public Latrines erected during the year :—				
1910	1	—	—	—
1911	—	—	—	—
1912	—	—	—	—
Number of Public Latrines repaired during the year :—				
1910	—	—	—	—
1911	—	—	—	—
1912	—	—	—	—
Number of Public Latrines demolished during the year :—				
1910	—	—	—	—
1911	1	10	—	—
1912	—	—	—	—

—	1910.	1911.	1912.
Number of Private Latrines	18	19	—
Average number of pails of nightsoil removed daily	18	19	—
Average number of soiled pails removed and clean pails substituted ...	18	19	—
Number of nightsoil men employed to clean latrines and remove excreta...	4	7	—
Number of cesspools	Many	Many	—
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	18	22	—
Number of carts, at work daily to remove refuse from streets ...	—	1	—
Amount of refuse removed daily	Uncertain	Uncertain	—
Number of carts, at work daily to remove refuse from yards and premises	—	2	—
Amount of refuse removed daily from yards and premises	—	Uncertain	—
Number of men employed for moving refuse	10	10	—

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

	Daily average number of pails of excreta.			Daily average number of barrels 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	18	19	—	—	—	—	—	—	—
Burnt	—	—	—	—	—	—	—	—	—
*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):—	River	River	
Number of linear yards	—	—	—
Number of stand pipes along roads	8	14	—
Number of stand pipes in compounds and houses ...	5	5	—
Wells:—			
Public:—			
Number	—	—	—
Number with pumps protected against surface water and mosquito-protected	—	—	—
Private:—			
Number	—	—	—
Number protected against surface water and Mosquito-protected	—	—	—
Tanks:—			
Public:—			
Number underground	—	—	—
Number mosquito-protected and served by pumps ...	—	—	—
Number above ground	—	—	—
Number mosquito-protected	—	—	—
Number of 400 gallons capacity or less	—	—	—
Number above 400 gallons	—	—	—

Nature of Water Supply.	1910.	1911.	1912.
Tanks:—			
Private:—			
Number underground	7	3	
Number mosquito-protected	7	3	
Number above ground...	—	—	
Number mosquito-protected	—	—	
Number of 400 gallons capacity or less	—	—	
Number above 400 gallons	7	3	
Nature of tanks:—			
Wood	—	—	
Iron	—	—	
Concrete	7	3	
Barrels:—			
Number	Uncertain.	Uncertain.	
Number mosquito-protected...	—	—	

13. Drainage.

Nature of drainage.	Public.	Private.
Masonry drains:—		
Lineal yards of masonry drains:—		
1910	1,300	—
1911	1,300	—
1912	—	—
Lineal yards reconstructed during the year:		
1910	—	—
1911	—	—
1912	—	—
Lineal yards repaired during the year:—		
1910	—	—
1911	—	—
1912	—	—
Lineal yards of new drains constructed during the year:—		
1910	—	—
1911	—	—
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	—	—
1912	—	—
Average frequency of clearing ditches of grass:—		
1910	—	—
1911	Uncertain.	Uncertain.
1912	—	—

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

—	1910.	1911.	1912.
Number of square yards of weeds, grass, and vegetation cut and removed	—	50,000	—
*Average frequency of clearance of rank vegetation on same area.	—	—	—

*The clearing of Bush surrounding the station is being effected now.

15. Excavations and low-lying land.

—	1910.	1911.	1912.
Number of pools and excavations	Many.	Many.	—
Number of excavations filled up	None.	2	—
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	...	Unknown.	—
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	5	2	—
Number of tanks and barrels oiled	7	3	—
Average number of men daily employed for oiling drains, pools, and watertanks or barrels	1	1	—

17. Inspections and Prosecutions.

—	1910.	1911.	1912.
Number of inspectors employed	1	1	—
Number of houses inspected	—	498	—
Number of houses where larvæ were found	—	58	—
Number of notices served to remove conditions causing the breeding of larvæ	—	36	—
Number of persons fined for having mosquito larvæ on premises	—	17	—
Number of notices served to remove insanitary conditions on premises	8	1	—
Number of persons fined for not removing insanitary conditions after notice	2	—	—
Number of soda and aerated water factories inspected	—	—	—

A. H. WILSON,
Medical Officer.

Benin City,
31st December, 1911.

1. Name of Town :—**Calabar.**

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

2. Population.

—	Number of Natives.		Number of Europeans.		Total.
	Males.	Females.	Males.	Females.	
1910	—	—	—	—	—
1911	14,263		130	20	14,413
1912	—	—	—	—	—

3. Housing.

—	Number occupied by Europeans.	Number occupied by Natives.
Number of Houses :—		
1910	61	1,011
1911	—	—
1912	—	—

Number of Huts :—

1910	—
1911	—
1912	—

4. Mosquito Protection of Houses.

—	1910.	1911.	1912.
Number of European houses wholly mosquito protected	—	—	—
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	—	—	—
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	—	—	—
Number of houses build without sanction	—	—	—
Number of huts build without sanction	—	—	—

Action taken :—

	Number of Prosecutions.		Number demolished.	
	Huts.	Houses.	Huts.	Houses.
1910	—	—	—	—
1911	—	—	Aro Lines	—
1912	—	—	—	—

6. Markets.

	Total number.	Number paved and drained.	Number unpaved.
1910	3	—	3
1911	3	—	3
1912	—	—	—

7. Slaughter-houses.

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

8. Latrines.

	For Males.		For Females.	
	Number.	Number of seats.	Number.	Number of seats.
Number of Public Latrines :—				
1910	13	65	13	78
1911	13	65	13	78
1912	—	—	—	—
Number of new Public Latrines erected during the year :—				
1910	—	—	—	—
1911	—	—	—	—
1912	—	—	—	—
Number of Public Latrines repaired during the year :—				
1910	—	—	—	—
1911	2	10	1	7
1912	—	—	—	—
Number of Public Latrines demolished during the year :—				
1910	—	—	—	—
1911	—	—	—	—
1912	—	—	—	—

	1910.	1911.	1912.
Number of Private Latrines	147	147	—
Average number of pails of nightsoil removed daily	435	435	—
Average number of soiled pails removed and clean pails substituted ...	435	435	—
Number of nightsoil men employed to clean latrines and remove excreta...	18	15	—
Number of cesspools	104	102	—
Number of cesspools cleansed	104	102	—
Number of new cesspools constructed during the year	10	—	—
Number of old cesspools abolished	10	2	—
Number of cesspools oiled regularly by Department	—	—	—

9. Removal of Refuse.

	1910.	1911.	1912.
Number of dustbins	47	47	—
Number of carts, at work daily to remove refuse from streets ...	—	—	—
Amount of refuse removed daily	—	—	—
Number of carts, at work daily to remove refuse from yards and premises	—	—	—
Amount of refuse removed daily from yards and premises	—	—	—
Number of men employed for moving refuse	28	34	—

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

	Daily average number of pails of excreta.			Daily average number of barrels 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	435	435	—	—	—	—	—	—	—
*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):—	Spring		
Number of linear yards	—	—	—
Number of stand pipes along roads	3	4	—
Number of stand pipes in compounds and houses ...	48	—	—
Wells:—			
Public:—			
Number	2	2	—
Number with pumps protected against surface water and mosquito-protected	—	—	—
Private:—			
Number	—	—	—
Number protected against surface water and Mosquito-protected	—	—	—
Tanks.—			
Public:—			
Number underground	1	1	—
Number mosquito-protected and served by pumps ...	—	—	—
Number above ground	2	2	—
Number mosquito-protected...	—	—	—
Number of 400 gallons capacity or less	—	—	—
Number above 400 gallons	—	—	—

Nature of Water Supply.	1910.	1911.	1912.
Tanks:—			
Private:—			
Number underground	—	—	
Number mosquito-protected	—	—	
Number above ground...	42	8	
Number mosquito-protected	—	—	
Number of 400 gallons capacity or less	—	—	
Number above 400 gallons	—	—	
Nature of tanks:—			
Wood	—	—	
Iron	44	10	
Concrete	1	1	
Barrels:—			
Number	641	—	
Number mosquito-protected...	—	—	

13. Drainage.

Nature of drainage.	Public.	Private.
Masonry drains:—		
Lineal yards of masonry drains:—		
1910	12,865 yards.	—
1911	—	—
1912	—	—
Lineal yards reconstructed during the year:		
1910	—	—
1911	—	—
1912	—	—
Lineal yards repaired during the year:—		
1910	—	—
1911	—	—
1912	—	—
Lineal yards of new drains constructed during the year:—		
1910	—	—
1911	—	—
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	—	—
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	—	—	—
Average frequency of clearance of rank vegetation on same area.	—	—	—

15. Excavations and low-lying land.

—	1910.	1911.	1912.
Number of pools and excavations	2	—	—
Number of excavations filled up	67	136	—
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	4	—	—
Number of pools and excavations oiled	2	—	—
Number of tanks and barrels oiled	—	—	—
Average number of men daily employed for oiling drains, pools, and watertanks or barrels	6	—	—

17. Inspections and Prosecutions.

—	1910.	1911.	1912.
Number of inspectors employed	1	1	—
Number of houses inspected	1,072	6 883	—
Number of houses where larvæ were found	561	295	—
Number of notices served to remove conditions causing the breeding of larvæ	16	66	—
Number of persons fined for having mosquito larvæ on premises	7	64	—
Number of notices served to remove insanitary conditions on premises	1,263	716	—
Number of persons fined for not removing insanitary conditions after notice	73	100	—
Number of soda and aerated water factories inspected	1	1	—

1. Name of Town :—**Bonny.**

—	Approximate area.	Number of proclaimed open spaces.
1910	1½ Square miles.	—
1911	1½ Square miles.	3
1912	—	—

2. Population.

—	Number of Natives.		Number of Europeans.		Total.
	Males.	Females.	Males.	Females.	
1910	—	—	—	—	—
1911	1,200	1,800	28	—	3,028
1912	—	—	—	—	—

3. Housing.

—	Number occupied by Europeans.	Number occupied by Natives.
Number of Houses :—		
1910	6	300
1911	8	326
1912	—	—

Number of Huts :—	
1910	—
1911	74
1912	—

4. Mosquito Protection of Houses.

—	1910.	1911.	1912.
Number of European houses wholly mosquito protected	—	—	—
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	—	1	—
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	—	5	—
Number of houses build without sanction	—	—	—
Number of huts build without sanction	—	—	—

Action taken :—

	Number of Prosecutions.		Number demolished.	
	Huts.	Houses.	Huts.	Houses.
1910	—	—	—	—
1911	—	—	6	—
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	—	—	—
1912	—	—	—

8. Latrines.

	For Males.		For Females.	
	Number.	Number of seats.	Number.	Number of seats.
Number of Public Latrines :—				
1910	3	26	2	23
1911	3	26	2	23
1912	—	—	—	—
Number of new Public Latrines erected during the year :—				
1910	—	—	—	—
1911	—	—	—	—
1912	—	—	—	—
Number of Public Latrines repaired during the year :—				
1910	—	—	—	—
1911	3	26	2	23
1912	—	—	—	—
Number of Public Latrines demolished during the year :—				
1910	—	—	—	—
1911	—	—	—	—
1912	—	—	—	—

	1910.	1911.	1912.
Number of Private Latrines	31	31	—
Average number of pails of nightsoil removed daily	47	47	—
Average number of soiled pails removed and clean pails substituted ...	47	47	—
Number of nightsoil men employed to clean latrines and remove excreta...	—	7	—
Number of cesspools	—	1	—
Number of cesspools cleansed	—	—	—
Number of new cesspools constructed during the year	—	—	—
Number of old cesspools abolished	—	1	—
Number of cesspools oiled regularly by Department	—	—	—

9. Removal of Refuse.

	1910.	1911.	1912.
Number of dustbins	—	5	—
Number of drums, at work daily to remove refuse from streets ...	—	10	—
Amount of refuse removed daily	—	165 drums.	
Number of carts, at work daily to remove refuse from yards and premises	—	—	—
Amount of refuse removed daily from yards and premises	—	—	—
Number of men employed for moving refuse	—	10	—

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

	Daily average number of pails of excreta.			Daily average number of barrels 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	47	47	—	—	165 drums.		—	—	—
*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.
—	Removed in drums as above.	—

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	—	—	—
Number of stand pipes in compounds and houses ...	—	—	—
Wells:—			
Public:—			
Number	—	13	—
Number with pumps protected against surface water and mosquito-protected	—	10	—
Private:—			
Number	—	3	—
Number protected against surface water and Mosquito-protected	—	—	—
Tanks:—			
Public:—			
Number underground	—	—	—
Number mosquito-protected and served by pumps ...	—	—	—
Number above ground	—	—	—
Number mosquito-protected	—	—	—
Number of 400 gallons capacity or less	—	—	—
Number above 400 gallons	—	—	—

Nature of Water Supply.	1910.	1911.	1912.
Tanks:—			
Private:—			
Number underground	—	—	
Number mosquito-protected	—	—	
Number above ground...	—	96	
Number mosquito-protected	—	96	
Number of 400 gallons capacity or less	—	79	
Number above 400 gallons	—	17	
Nature of tanks:—			
Wood	—	—	
Iron	—	88	
Concrete	—	8	
Barrels:—			
Number	—	8	
Number mosquito-protected...	—	8	

13. Drainage.

Nature of drainage.	Public.	Private.
Masonry drains:—		
Lineal yards of masonry drains:—		
1910	—	—
1911	—	1,266
1912	—	—
Lineal yards reconstructed during the year:		
1910	—	—
1911	—	—
1912	—	—
Lineal yards repaired during the year:—		
1910	—	—
1911	—	—
1912	—	—
Lineal yards of new drains constructed during the year:—		
1910	—	—
1911	14 yards.	10 yards.
1912	—	—
Earth drains or ditches:—		
Number of linear yards of ditches cleaned:—		
1910	2,124	—
1911	2,410 yards.	—
1912	—	—
Number of linear yards of ditches dug and graded:—		
1910	—	—
1911	286 yards.	—
1912	—	—
Average frequency of clearing ditches of grass:—		
1910	Every 14 days.	—
1911	Every 14 days.	—
1912	—	—

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

—	1910.	1911.	1912.
Number of square yards of weeds, grass, and vegetation cut and removed	271,629	271,629	—
Average frequency of clearance of rank vegetation on same area.	14 days.	14 days.	—

15. Excavations and low-lying land.

—	1910.	1911.	1912.
Number of pools and excavations	—	—	—
Number of excavations filled up	—	2	—
Amount of low-lying and marsh land raised and drained	—	1 acre.	—
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.	—	10	—

16. Oiling.

—	1910.	1911.	1912.
Number of drains oiled	—	3	—
Number of pools and excavations oiled	—	10	—
Number of tanks and barrels oiled	—	2	—
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	—	408	—
Number of houses where larvæ were found	—	320	—
Number of notices served to remove conditions causing the breeding of larvæ	—	460	—
Number of persons fined for having mosquito larvæ on premises	—	69	—
Number of notices served to remove insanitary conditions on premises	—	40	—
Number of persons fined for not removing insanitary conditions after notice	—	2	—
Number of soda and aerated water factories inspected	—	—	—

1. Name of Town:—Opobo.

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

2. Population.

—	Number of Natives.		Number of Europeans.		Total.
	Males.	Females.	Males.	Females.	
1910	961	100	48	—	1,109
1911	943	121	57	1	1,122
1912	—	—	—	—	—

3. Housing.

—	Number occupied by Europeans.	Number occupied by Natives.
Number of Houses:—		
1910	—	—
1911	12	21
1912	—	—

Number of Huts:—

1910	—
1911	96
1912	—

4. Mosquito Protection of Houses.

—	1910.	1911.	1912.
Number of European houses wholly mosquito protected	—	1	—
Number of European houses with mosquito room	—	3	—
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	4	5	—
Number of houses erected with sanction as to site, construction, and relation to other buildings	—	12	—
Number of huts erected with sanction as to site, construction, and relation to other buildings	4	35	—
Number of houses build without sanction	—	—	—
Number of huts build without sanction	—	—	—

Action taken :—

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

6. Markets.

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

7. Slaughter-houses.

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

8. Latrines.

	For Males.		For Females.	
	Number.	Number of seats.	Number.	Number of seats.
Number of Public Latrines :—				
1910	13	—	—	—
1911	18	46	—	—
1912	—	—	—	—
Number of new Public Latrines erected during the year :—				
1910	—	—	—	—
1911	3	9	—	—
1912	—	—	—	—
Number of Public Latrines repaired during the year :—				
1910	—	—	—	—
1911	—	—	—	—
1912	—	—	—	—
Number of Public Latrines demolished during the year :—				
1910	—	—	—	—
1911	—	—	—	—
1912	—	—	—	—

	1910.	1911.	1912.
Number of Private Latrines	15	23	—
Average number of pails of nightsoil removed daily	31	43	—
Average number of soiled pails removed and clean pails substituted ...	—	43	
Number of nightsoil men employed to clean latrines and remove excreta...	9	10	—
Number of cesspools	—	—	—
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	26	26	—
Number of carts, at work daily to remove refuse from streets ...	—	—	—
Amount of refuse removed daily	—	40 c.f.	—
Number of carts, at work daily to remove refuse from yards and premises	—	—	—
Amount of refuse removed daily from yards and premises	25 barrels.	40 c.f.	—
Number of men employed for moving refuse	9	10	—

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

	Daily average number of pails of excreta.			Daily average number of barrels 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 River	31	—	—	26	40 c.f.	—	—	—	—
*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.
—	68,228 bottles. 21,860 tins.	—

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	—	—	—
Number of stand pipes in compounds and houses ...	—	—	—
Wells:—			
Public:—			
Number	2	2	—
Number with pumps protected against surface water and mosquito-protected	—	—	—
Private:—			
Number	—	—	—
Number protected against surface water and Mosquito-protected	1	1	—
Tanks.—			
Public:—			
Number underground	—	—	—
Number mosquito-protected and served by pumps ...	—	—	—
Number above ground	29	37	—
Number mosquito-protected	29	37	—
Number of 400 gallons capacity or less	27	35	—
Number above 400 gallons	2	2	—

Nature of Water Supply.	1910.	1911.	1912.
Tanks:—			
Private:—			
Number underground	—	—	
Number mosquito-protected	—	70	
Number above ground...	—	70	
Number mosquito-protected	—	—	
Number of 400 gallons capacity or less	—	—	
Number above 400 gallons	—	—	
Nature of tanks:—			
Wood	—	—	
Iron	—	107	
Concrete	—	—	
Barrels:—			
Number	—	—	
Number mosquito-protected...	—	—	

13. Drainage.

Nature of drainage.	Public.	Private.
Masonry drains:—		
Lineal yards of masonry drains:—		
1910	—	—
1911	1,748	3,447
1912	—	—
Lineal yards reconstructed during the year:		
1910	—	—
1911	—	—
1912	—	—
Lineal yards repaired during the year:—		
1910	—	—
1911	—	—
1912	—	—
Lineal yards of new drains constructed during the year:—		
1910	—	—
1911	190	70
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	200	—
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	—	75 acres monthly	—
Average frequency of clearance of rank vegetation on same area.	—	—	—

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 sq. yds....	—	4,000	—
Number of pools, marshes, streams, &c., fish-stocked	—	—	—
Number of cubic yards of material used for filling up pools and excavations	—	3,500	—
Number of persons fined for making new excavations	—	—	—
Average number of men daily employed in filling up pools, &c.	—	50	—

16. Oiling.

—	1910.	1911.	1912.
Number of drains oiled	—	—	—
Number of pools and excavations oiled	—	3	—
Number of tanks and barrels oiled	—	37	—
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	—	3,359	—
Number of houses where larvæ were found	—	17	—
Number of notices served to remove conditions causing the breeding of larvæ	—	4	—
Number of persons fined for having mosquito larvæ on premises	—	4	—
Number of notices served to remove insanitary conditions on premises	—	—	—
Number of persons fined for not removing insanitary conditions after notice	—	—	—
Number of soda and aerated water factories inspected	—	—	—

ROBERT W. GRAY.

Medical Officer.

1. Name of Town:—**Degema, Abonnema, Bakana, Buguma.**

—	Approximate area.	Number of proclaimed open spaces.
1910	2,024 Square miles.	—
1911	—	This is one complete area.
1912	—	—

2. Population.

—	Number of Natives.		Number of Europeans.		Total.
	Males.	Females.	Males.	Females.	
1910	65,000	55,000	6	—	—
1911	65,000	55,000	40	—	—
1912	—	—	—	—	—

3. Housing.

—	Number occupied by Europeans.	Number occupied by Natives.
Number of Houses:—		
1910	4	2
1911	15	12
1912	—	—

Number of Huts:—	
1910	22,000
1911	22,000
1912	—

4. Mosquito Protection of Houses.

—	1910.	1911.	1912.
Number of European houses wholly mosquito protected	—	—	—
Number of European houses with mosquito room	—	3	—
Number rendered during the year wholly mosquito protected ...	—	—	—
Number rendered during the year partially mosquito protected ...	1	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	—	5	1
Number of houses erected with sanction as to site, construction, and relation to other buildings	1	12	—
Number of huts erected with sanction as to site, construction, and relation to other buildings	—	35	—
Number of houses build without sanction	—	—	—
Number of huts build without sanction	—	—	—

Action taken :—

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

8. Latrines.

	For Males.		For Females.	
	Number.	Number of seats.	Number.	Number of seats.
Number of Public Latrines :—				
1910	—	—	—	—
1911	1	5	1	2
1912	—	—	—	—
Number of new Public Latrines erected during the year :—				
1910	—	—	—	—
1911	—	—	—	—
1912	—	—	—	—
Number of Public Latrines repaired during the year :—				
1910	—	—	—	—
1911	—	—	—	—
1912	—	—	—	—
Number of Public Latrines demolished during the year :—				
1910	—	—	—	—
1911	—	—	—	—
1912	—	—	—	—

	1910.	1911.	1912.
Number of Private Latrines	—	10	—
Average number of pails of nightsoil removed daily	—	16	—
Average number of soiled pails removed and clean pails substituted ...	—	16	—
Number of nightsoil men employed to clean latrines and remove excreta...	—	8	—
Number of cesspools	—	—	—
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	—	91	—
Number of carts, at work daily to remove refuse from streets ...	—	—	—
Amount of refuse removed daily	—	182	—
Number of carts, at work daily to remove refuse from yards and premises	—	—	—
Amount of refuse removed daily from yards and premises	—	*150	—
Number of men employed for moving refuse	—	—	—

*Drums.

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

	Daily average number of pails of excreta.			Daily average number of barrels 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 River	—	16	—	—	—	—	—	—	—
*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	—	—	—
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	—	3	—
Private :—			
Number	—	1	—
Number protected against surface water and Mosquito-protected	—	1	—
Tanks :—			
Public :—			
Number underground	—	—	—
Number mosquito-protected and served by pumps ...	—	—	—
Number above ground	—	—	—
Number mosquito-protected	—	—	—
Number of 400 gallons capacity or less	—	—	—
Number above 400 gallons	—	—	—

Nature of Water Supply.	1910.	1911.	1912.
Tanks:—			
Private:—			
Number underground	—	—	
Number mosquito-protected	—	—	
Number above ground...	—	46	
Number mosquito-protected	—	46	
Number of 400 gallons capacity or less	—	38	
Number above 400 gallons	—	8	
Nature of tanks:—			
Wood	—	—	
Iron	—	Iron	
Concrete	—	—	
Barrels:—			
Number	—	—	
Number mosquito-protected...	—	—	

13. Drainage.

Nature of drainage.	Public.	Private.
Masonry drains:—		
Lineal yards of masonry drains:—		
1910	—	—
1911	1,688	1,014
1912	—	—
Lineal yards reconstructed during the year:		
1910	—	—
1911	—	100
1912	—	—
Lineal yards repaired during the year:—		
1910	—	—
1911	—	—
1912	—	—
Lineal yards of new drains constructed during the year:—		
1910	—	—
1911	—	—
1912	—	—
Earth drains or ditches:—		
Number of linear yards of ditches cleaned:—		
1910	—	—
1911	980	100
1912	—	—
Number of linear yards of ditches dug and graded:—		
1910	—	—
1911	980	—
1912	—	—
Average frequency of clearing ditches of grass:—		
1910	—	—
1911	Monthly.	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	—	5,000	—
Average frequency of clearance of rank vegetation on same area.	—	—	—

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 sq. yds....	—	—	—
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	—	—	—
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	—	7,269	—
Number of houses where larvæ were found...	—	214	—
Number of notices served to remove conditions causing the breeding of larvæ	—	18	—
Number of persons fined for having mosquito larvæ on premises	—	7	—
Number of notices served to remove insanitary conditions on premises	—	22	—
Number of persons fined for not removing insanitary conditions after notice	—	13	—
Number of soda and aerated water factories inspected	—	—	—

E. H. TIPPER,

1. Name of Town :—**Brass.**

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

2. Population.

—	Number of Natives.		Number of Europeans.		Total.
	Males.	Females.	Males.	Females.	
1910	—	—	16	—	—
1911	—	—	17	—	—
1912	—	—	—	—	—

3. Housing.

—	Number occupied by Europeans.	Number occupied by Natives.
Number of Houses :—		
1910	6	—
1911	7	—
1912	—	—

Number of Huts :—

1910	—
1911	—
1912	—

4. Mosquito Protection of Houses.

—	1910.	1911.	1912.
Number of European houses wholly mosquito protected	—	—	—
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	0	0	—
Number of houses erected with sanction as to site, construction, and relation to other buildings	—	1	—
Number of huts erected with sanction as to site, construction, and relation to other buildings	0	0	—
Number of houses build without sanction	3	2	—
Number of huts build without sanction	?	?	—

Action taken :—

	Number of Prosecutions.		Number demolished.	
	Huts.	Houses.	Huts.	Houses.
1910	—	—	6	—
1911	—	—	3	—
1912	—	—	—	—

6. Markets.

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

7. Slaughter-houses.

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

8. Latrines.

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

	1910.	1911.	1912.
Number of Private Latrines	27	28	—
Average number of pails of nightsoil removed daily	28	28	—
Average number of soiled pails removed and clean pails substituted ...	28	—	—
Number of nightsoil men employed to clean latrines and remove excreta...	—	—	—
Number of cesspools	—	—	—
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	50	58	—
Number of carts, at work daily to remove refuse from streets ...	Not used	—	—
Amount of refuse removed daily	—	—	—
Number of carts, at work daily to remove refuse from yards and premises	Not used.	—	—
Amount of refuse removed daily from yards and premises	1 ton.	1 ton.	—
Number of men employed for moving refuse	—	*	—

*Varies with No. of prisoners.

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

	Daily average number of pails of excreta.			Daily average number of barrels 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 River	27	27	—	23	31	—	—	—	—
*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.
No record.	39,029 bottles, tins &c.	—

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	—	—	—
Number of stand pipes in compounds and houses ...	—	—	—
Wells:—			
Public:—			
Number	5	5	—
Number with pumps protected against surface water and mosquito-protected	3	3	—
Private:—			
Number	5	5	—
Number protected against surface water and Mosquito-protected	—	—	—
Tanks.—			
Public:—			
Number underground	—	—	—
Number mosquito-protected and served by pumps ...	—	—	—
Number above ground	—	—	—
Number mosquito-protected	—	—	—
Number of 400 gallons capacity or less	—	—	—
Number above 400 gallons	—	—	—

Nature of Water Supply.	1910.	1911.	1912.
Tanks:—			
Private:—			
Number underground	—	—	
Number mosquito-protected	—	—	
Number above ground...	45	41	
Number mosquito-protected	40	39	
Number of 400 gallons capacity or less	—	—	
Number above 400 gallons	—	—	
Nature of tanks:—			
Wood	1	1	
Iron	44	40	
Concrete	—	—	
Barrels:—			
Number	—	—	
Number mosquito-protected...	—	—	

13. Drainage.

Nature of drainage.	Public.	Private.
Masonry drains:—		
Lineal yards of masonry drains:—		
1910	—	—
1911	200	—
1912	—	—
Lineal yards reconstructed during the year:		
1910	—	—
1911	—	—
1912	—	—
Lineal yards repaired during the year:—		
1910	—	—
1911	—	—
1912	—	—
Lineal yards of new drains constructed during the year:—		
1910	—	—
1911	—	—
1912	—	—
Earth drains or ditches:—		
Number of linear yards of ditches cleaned:—		
1910	—	—
1911	1,500	—
1912	—	—
Number of linear yards of ditches dug and graded:—		
1910	—	—
1911	—	—
1912	—	—
Average frequency of clearing ditches of grass:—		
1910	As required.	—
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	10 acres.	—	—
Average frequency of clearance of rank vegetation on same area.	Continuous.	—	—

15. Excavations and low-lying land.

—	1910.	1911.	1912.
Number of pools and excavations	—	—	—
Number of excavations filled up	1	—	—
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	—	—	—
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	—	2	—
Number of houses inspected	—	17,682	—
Number of houses where larvæ were found...	—	3,957	—
Number of notices served to remove conditions causing the breeding of larvæ	—	73	—
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	—	2	—
Number of soda and aerated water factories inspected	—	—	—

TABLE V.

Meteorological Returns for the Year 1911.

LAGOS.	Temperature.				Rainfall.				Winds.		Remarks.
	Solar Maximum.	Minimum on Grass.	Shade Maximum.	Shade Minimum.	Range.	Mean.	Amount in Inches.	Degree of Humidity.	General Direction.	Average Force.	
January ...	141°	62°	89°	65°	22°	76°·3	4·57	72·4%			
February ...	149°	71°	92°	74°	15°·5	82°·5	0·29	71·6%			
March ...	151°	67°·2	92°	69°·9	18°	81°·6	11·26	73·8%			
April ...	157°	68°	92°	70°	16°·3	80°·8	7·87	73·1%			
May ...	151°	68°·3	89°	71°	16°	79°·4	21·12	79·4%			
June ...	150°	66°	89°	70°	18°	78°·5	25·35	82·3%			
July	150°	67°	93°·3	70°	19°·9	79°·5	1·39	78·3%			
August ...	149°	66°	87°·2	69°	18°	78.°3	0·30	76·9%			
September ...	155°	66°	89°	71°	16°·6	79°·1	2·94	77·6%			
October ...	157°	65°	89°	69°	16°	79°·4	7·98	75·1%			
November ...	154°	70°	89°	72°	14°·8	81°·0	0·32	72·8%			
December ...	149°	67°	88°	69°	17°·2	79°·8	3·69	76·8%			
Total ...	...	...	...	...	...	...	87·08	...			
ABEOKUTA.											
January ...	*	*	*	*	*	*	*	*			
February ...	*	*	*	*	*	*	*	*			
March ...	*	*	*	*	*	*	7·80	*			
April ...	*	*	95°	68°	24°	81°·0	8·65	94%			
May	*	*	93°	69°	20°	79°·5	9·13	89%			
June ...	*	*	89°	68°	19°	77°·8	8·94	89%			
July	*	*	87°	69°	14°	76°·9	3·64	89%			
August ...	*	*	82°	68°	14°	74°·8	1·04	84%			
September ...	*	*	89°	70°	17°	77°·5	4·33	84%			
October ...	*	*	89°	70°	19°	79°·8	4·09	89%			
November ...	*	*	90°	69°	17°	81°·2	0·37	90%			
December ...	*	*	99°	63°	23°	80°·2	2·15	94%			
Total ...	...	...	...	...	...	...	50·14	...			
IBADAN.											
January ...	*	*	*	*	*	*	*	*			
February ...	*	*	99°	59°	37°	79°·1	0·74	89%			
March ...	*	*	99°	60°	34°	78°·2	7·18	79%			
April ...	*	*	96°	58°	36°	77°·6	7·67	89%			
May	*	*	92°	59°	31°	75°·3	4·85	89%			
June... ...	*	*	96°	58°	33°	73°·5	3·48	94%			
July	*	*	95°	58°	33°	73°·7	3·61	94%			
August ..	*	*	89°	56°	31°	69°·8	0·70	88%			
September ...	*	*	95°	58°	32°	72°·3	5·25	89%			
October ...	*	*	89°	58°	30°	73°·4	5·35	89%			
November ...	*	*	92°	59°	29°	76°·0	0·10	94%			
December ...	*	*	93°	54°	36°	73°·9	0·56	89%			
Total ...	...	...	...	...	...	...	39·49	...			

* No records available.

TABLE V.—*continued.*

METEOROLOGICAL RETURN FOR THE YEAR 1911.

WARRI.	TEMPERATURE.				RAINFALL.				WINDS.		Remarks.
	Solar Maximum.	Minimum on Grass.	Shade Maximum.	Shade Minimum.	Range.	Mean.	Amount in Inches.	Degree of Humidity.	General Direction.	Average Force.	
January ...	*	*	90°	65°	24°	78°·7	15·45	89%			
February ...	*	*	95°	68°	35°	80°·5	0·46	85%			
March ...	*	*	95°	69°	24°	81°·0	8·52	85%			
April ...	*	*	94°	69°	25°	78°·0	15·32	90%			
May	*	*	94°	69°	23°	80°·2	14·07	85%			
June... ...	*	*	90°	69°	20°	77°·8	12·92	83%			
July	*	*	87°	69°	18°	76°·3	20·50	89%			
August ...	*	*	85°	67°	16°	79°·0	4·89	89%			
September ...	○	*	88°	68°	15°	77°·8	17·52	90%			
October ...	*	*	92°	69°	20	79°·0	16·75	85%			
November ...	*	*	98°	70°	24°	81°·1	4·00	85%			
December ...	*	*	95°	62°	32°	79°·7	Nil.	80%			
Total ...	...	...	...	...	.	...	130·40	...			
BENIN CITY.											
January ...	*	*	88°	54°	29°	73°·2	4·15	94%			
February ...	*	*	92°	58°	33°	75°·8	1·14	94%			
March ...	*	*	93°	58°	32°	75°·2	3·28	79%			
April ...	*	*	90°	58°	30°	78°·4	16·45	94%			
May	*	*	90°	60°	28°	73°·7	15·68	94%			
June... ...	*	*	88°	58°	28°	72°·7	10·59	94%			
July	*	*	86°	58°	25°	71°·1	10·28	94%			
August ...	*	*	85°	56°	24°	69°·9	2·69	94%			
September ...	*	*	88°	59°	26°	71°·5	12·80	94%			
October ...	*	*	88°	58°	28°	73°·2	8·53	94%			
November ...	*	*	86°	59°	26°	71°·5	12·80	94%			
December ...	*	*	88°	55°	29°	72°·3	0·93	94%			
Total .	...	...	...	...	...	...	99·32	...			
BRASS.											
January ...	*	*	89°	65°	24°	79°·7	4·86	76%			
February ...	*	*	92°	71°	18°	82°·7	1·18	72%			
March ...	*	*	91°	69°	20°	81°·7	5·34	76%			
April ...	*	*	92°	67°	24°	81°·9	9·14	72%			
May	*	*	90°	70°	18°	79°·7	44·16	85%			
June... ...	*	*	87°	68°	16°	78°·3	23·04	80%			
July	*	*	87°	70°	15°	76°·6	29·18	89%			
August ...	*	*	86°	70°	16°	77°·9	8·28	84%			
September ...	*	*	86°	70°	13°	77°·5	22·65	84%			
October ...	*	*	89°	70°	18°	78°·8	17·68	85%			
November ...	*	*	90°	71°	19°	75°·3	10·27	76%			
December ...	*	*	91°	65°	24°	79°·1	3·39	76%			
Total ...	...	...	...	...	...	...	179·17	...			

TABLE V.—*continued.*

Meteorological Return for the Year 1911.

CALABAR.	Temperature.				Rainfall.				Winds.		Remarks.
	Solar Maximum.	Minimum on Grass.	Shade Maximum.	Shade Minimum.	Range.	Mean.	Amount in Inches.	Degree of Humidity.	General Direction.	Average Force.	
January ...	*	*	90°	70°	19°	80°·2	1·26	90%			
February ...	*	*	94°	70°	22°	82°·7	1·38	85%			
March ...	*	*	92°	73°	19°	81°·1	3·28	80%			
April ...	*	*	92°	69°	23°	82°·0	7·10	76%			
May	*	*	92°	64°	23°	78°·7	15·96	80%			
June... ...	*	*	88°	62°	23°	75°·8	18·47	84%			
July	*	*	87°	68°	17°	77°·2	18·68	84%			
August ...	*	*	87°	67°	17°	76°·5	25·79	84%			
September ...	*	*	89°	67°	19°	77°·9	14·30	94%			
October ...	*	*	89°	69°	19°	79°·2	14·41	89%			
November ...	*	*	94°	69°	23°	79°·5	3·69	85%			
December ...	*	*	94°	70°	23	82°·3	0·55	84%			
Total ...	...	...	...	...	...	...	124·87	...			

* No records available.

TABLE VI.

Return of Diseases and Deaths (In-Patients) for the year 1911.

WESTERN PROVINCE.

Diseases.	Remaining in Hospital at end of 1910.	Yearly Total: Admissions.	Yearly Total: Deaths.	Total cases treated.	Remaining in Hospital at end of 1911.
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

TABLE VI—continued.

Return of Diseases and Deaths (In-Patients) for the year 1911.

CENTRAL PROVINCE.

DISEASES.	Remaining in Hospital at end of 1910.							Yearly Total.																			Total cases treated.							Remaining in Hospital at end of 1911.						
								Admissions.							Deaths.																								
	Work.	Females.	Pupils.	Boys City.	Ages.	Children.	Total.	Work.	Females.	Pupils.	Boys City.	Ages.	Children.	Total.	Work.	Females.	Pupils.	Boys City.	Ages.	Children.	Total.	Work.	Females.	Pupils.	Boys City.	Ages.	Children.	Total.	Work.	Females.	Pupils.	Boys City.	Ages.	Children.	Total.	Work.	Females.	Pupils.	Boys City.	Ages.	Children.	Total.
Infective Diseases:—																																						
Small Pox																																						
Cerebro-Spinal Fever																																						
Chicken Pox																																						
Cholera								172	4					176								172	4					176											
Dengue																																						
Diphtheria																																						
Dysentery																																						
Endemic Hæmaturia																																						
Enteric																																						
Erysipelas																																						
Hæmorrhagic																																						
Influenza																																						
Kala Azar																																						
Leprosy (a) Nodular																																						
(b) Anæsthetic																																						
Malaria																																						
(a) Chronic Malaria																																						
(c) Black-water																																						
Measles																																						
Malta Fever																																						
Plague																																						
Pneumonia																																						
Rabies																																						
Relapsing Fever																																						
Rheumatic Fever																																						
Septicæmia																																						
Streptococcal (Sleeping Sickness)																																						
Small-Pox																																						
Syphilis (a) Primary																																						
(b) Secondary																																						
(c) Inherited																																						
Tetanus																																						
Tuberculosis																																						
Whooping Cough																																						
Yaws																																						
Yellow Fever (suspicious)																																						
Unknown Measles																																						
Other Diseases																																						
Intoxications:—																																						
Alcoholism																																						
Morphinism																																						
Others																																						
General Diseases:—																																						
Anæmia																																						
Anæmia—Pernicious																																						
Diabetes																																						
Goitre																																						
Gout																																						
Leucocythæmia																																						
Malignant Disease																																						
Myxœdema																																						
Pyæmia																																						
Rickets																																						
Scurvy																																						
Starvation																																						
Stercoræmia Chronic																																						
Local Diseases:—																																						
Diseases of the Nervous System:—																																						
Sub-section 1.																																						
Anæmia																																						
Meningitis																																						
Myelitis																																						
Hydrocephalus																																						
Neuralgia																																						
Abscess of Brain																																						
Congestion of Brain																																						
Sub-section 2.																																						
Apoplexy																																						
Paralysis																																						
Chorea																																						
Epilepsy																																						
Insanity																																						
Hysteria																																						
Mental Diseases:—																																						
Sub-section 1.																																						
Idiocy																																						
Mania																																						
Melancholia																																						
Dementia																																						
Hereditary Insanity																																						
Alcoholic Insanity																																						
General Paralysis of the Insane																																						
Local Diseases:—																																						
Diseases of the Eye:—																																						
Conjunctivitis																																						
Keratitis																																						
Ulceration of Cornea																																						
Iritis																																						
Optic Neuritis																																						
Cataract																																						
Diseases of the Ear:—																																						
Inflammation																																						
Other Diseases																																						
Diseases of the Nose																																						
Diseases of the Circulatory System:—																																						
Pericarditis																																						
Endocarditis																																						
Valvular Mitral																																						
Aortic																																						
Tricuspid																																						
Pulmonary																																						
Arterial Sclerosis																																						
Aneurism																																						
Diseases of the Veins:—																																						
Diseases of the Respiratory System:—																																						
Laryngitis																																						
Bronchitis																																						
Broncho-pneumonia																																						
Abscess of Lung																																						
Congestion of Lung																																						
Emphysema																																						
Pleurisy																																						
Empyema																																						
Diseases of the Digestive System:—																																						
Stomatitis																																						
Caries of Teeth																																						
Glossitis																																						
Sore Throat																																						
Inflammation of Tonsils																																						
Gastritis																																						
Ulceration of Stomach																																						
Hæmatemesis																																						
Dilation of Stomach																																						
Stricture of Stomach																																						
Dyspepsia																																						
Enteritis																																						
Appendicitis																																						
Colitis																																						
Ulceration of Intestines																																						
Ileus																																						
Hernia																																						
Diarrhœa																																						
Constipation																																						
Colic																																						
Hæmorrhoids																																						
Local Diseases:—																																						
Pancreatitis																																						
Hæmatoma—Acute																																						
Adenoma																																						
Cirrhosis																																						
Jaundice																																						
Peritonitis																																						
Ascites																																						
Diseases of the Lymphatic System:—																																						
Splenitis																																						
Inflammation of Lymphatic Gland																																						
Suppuration of Lymphatic Gland																																						
Lymphangitis																																						
Elephantiasis																																						
Diseases of the Urinary System:—																																						
Acute Nephritis																																						
Bright's Disease																																						
Uræmia																																						
Calculus																																						
Renal Colic																																						
Cystitis																																						
Vesical Calculus																																						
Suppression																																						
Retention																																						
Diabetes																																						
Diseases of the Generative System:—																																						
Male Organs:—																																						
Orchitis																																						
Ulcer																																						
Abscess																																						
Hæmatocele																																						
Anti-Septic																																						
Gangrene																																						
Inflammation of Scrotum																																						
Hydrocele																																						
Ulcers																																						
Epididymitis																																						
Abscess of Scrotum																																						
Female Organs:—																																						
Ovaritis																																						
Ovarian Cyst																																						
Salpingitis																																						
Displacement of Uterus																																						
Vaginitis																																						
Leucorrhœa																																						
Metrorrhagia																																						
Menorrhagia																																						
Amenorrhœa																																						
Metritis																																						
Cervical Laceration																																						
Parturition Hæmorrhage																																						
Retained Placenta																																						
Premature Birth																																						
Puerperal Septicæmia																																						
Sterility																																						
Abscess of Breast																																						
Leucorrhœa Vaginæ																																						
Other Diseases																																						
Diseases of Organs of Locomotion:—																																						
Caries																																						
Arthritis																																						
Synovitis																																						
Bursitis																																						
Myositis																																						
Diseases of Connective Tissue:—																																						
Cellulitis																																						
Abscess																																						
Elephantiasis																																						
Diseases of Skin:—																																						
Cutaneous																																						
Eczema																																						
Boil																																						
Carbuncle																																						
Herpes																																						
Pruritis																																						
Venereal Sore																																						
Ulcer																																						
Scabies																																						
Acne																																						
Pediculi Head																																						
Tinea																																						
Pemphigus Contagiosus																																						
Papillomata																																						
Leprosy—Lepromatous																																						
Tuberculosis																																						
Sun Traumata																																						
Lupus																																						
Surgical Operations																																						
Fractures																																						
Dislocations																																						
Poisons																																						
Parasites—Animal																																						
Protozoa																																						
Parasites (Fishes)																																						
Schistosoma Hæmatobium																																						
Cerebro-Spinal—																																						
Tetany Rabies																																						
Tetany Syphilis																																						
Parasitic—																																						
Leucæmia																																						
Hæmoglobin Disease																																						
Diabetes																																						
Pneumonia																																						
Phthisis																																						
Meningitis																																						
Anthrax																																						
Hydrocephaloid																																						
Cerebro-Spinal																																						
Insects—																																						
Scabies																																						
Filaria																																						
Total (Excluding Operations)	1	1	—	—	—	41	44	422	251	108	6	103	408	1,301	10	1	1	1	—	17	30	405	234	108	6	101	364	1,268	10	1	1	1	—	17	30							

Dioxide gas (from burning Sulphur, called the *Clayton* gas) on the weevil and on the maize. A report on these experiments up to the time I went on leave was submitted and while on leave at the request of His Excellency I endeavoured to find out if anything was known as to the effects of insectisides on the germinating power of maize. I found a pamphlet and a report by Dr. Wade to the Local Government Board to give me the best information though the available information was not much as to the germination of the maize, and a report of what was found has been submitted.

8 *General Work and Assistance:*—In addition to analytical work proper the general supervision of the Laboratory and clerical work occupied a good deal of time. The ordinary clerical work consists of the preparation of the monthly vouchers, registration of correspondence and samples as they are received and issued, preparation of reports, indent with copies, and generally keeping all books entered up to date.

One of the two native assistants qualified by examination as a dispenser was appointed to the Badagry Hospital on 21st March and I was left with only one assistant till I went on leave in June, when he was promoted as a Treasury Clerk. On my return in November two new assistants were required, and one vacancy was filled on the 1st December, the second at the end of the year. As these natives are not of a very high grade educationally, this fact in addition to so much changing throws so much of the more rudimentary work on to me that the utility of the Laboratory to the Colony is much diminished, the examination of many of the samples having to be delayed for some considerable time and certain special examinations which I have been instructed to do having to remain undone, until a suitable opportunity occurs. It is hoped, however, that conditions will soon be improved so that more work may be done by the Laboratory.

W. RALSTON.
Government Chemist.

Laboratory,
Lagos, 13th February, 1911.

TABLE VI—continued.

Return of Diseases and Deaths (In-Patients) for the year 1911.

EASTERN PROVINCE.

DISEASES.	Remaining in Hospital at end of 1910.									Yearly Total.															Total cases treated.									Remaining in Hospital at end of 1911.								
										Admissions.											Deaths.																						
	European.	Asiatic(b).	Arab.	Somali.	Swahili.	Somali-Mullahs.	Negro(c).	Native.	Total.	European.	Asiatic(b).	Arab.	Somali.	Swahili.	Somali-Mullahs.	Negro(c).	Native.	Total.	European.	Asiatic(b).	Arab.	Somali.	Swahili.	Somali-Mullahs.	Negro(c).	Native.	Total.	European.	Asiatic(b).	Arab.	Somali.	Swahili.	Somali-Mullahs.	Negro(c).	Native.	Total.	European.	Asiatic(b).	Arab.	Somali.	Swahili.	Somali-Mullahs.	Negro(c).	Native.	Total.
Infective Diseases—																																									
Bilharzia																																									
Cerebro-Spinal Fever																																									
Chicken Pox																																									
Cholera																																									
Dengue																																									
Diphtheria																																									
Dysentery																																									
Endemic Jaundice																																									
Enteric																																									
Erysipelas																																									
Exanthema																																									
Influenza																																									
Kala Azar																																									
Leprosy (a) Tubular																																									
(b) Anæsthetic																																									
Malaria																																									
(a) Chronic Malaria																																									
(b) Black water																																									
Measles																																									
Mild Fever																																									
Plague																																									
Pneumonia																																									
Relapsing Fever																																									
Rheumatic Fever																																									
Septicæmia																																									
Septicæmia (Streptog. Pyrexia)																																									
Small Pox																																									
Syphilis (a) Primary																																									
(b) Secondary																																									
(c) Inherited																																									
Tetanus																																									
Tuberculosis																																									
Whooping Cough																																									
Yaws																																									
Yellow Fever (suspicious																																									
Various Insects																																									
Other Diseases																																									
Intoxications—																																									
Alcoholism																																									
Morphinism																																									
Opium																																									
General Diseases—																																									
Anæmia																																									
Anæmia, Pernicious																																									
Diabetes																																									
Gout																																									
Gout																																									
Leucocythæmia																																									
Hospital's Disease																																									
Myxœdema																																									
Purpura																																									
Rickets																																									
Scurvy																																									
Starvation																																									
Starvation Cholera																																									
Local Diseases—																																									
Diseases of the Nervous System—																																									
Meningitis, C.																																									
Neuritis																																									
Myelitis																																									
Hydrocephalus																																									
Encephalitis																																									
Chronic Brain																																									
Congestion of Brain																																									
Neuralgia, L.																																									
Apoplexy																																									
Paralysis																																									
Chorea																																									
Epilepsy																																									
Meningitis																																									
Myelitis																																									
Mental Diseases—																																									
Melancholia																																									
Mania																																									
Dementia																																									
Delusional Insanity																																									
Alcoholic Insanity																																									
General Paralysis of the Insane																																									
Local Diseases—																																									
Diseases of the Eye—																																									
Conjunctivitis																																									
Keratitis																																									
Ulceration of Cornea																																									
Iritis																																									
Optic Neuritis																																									
Cataract																																									
Diseases of the Ear—																																									
Inflammation																																									
Other Diseases																																									
Diseases of the Nose																																									
Diseases of the Circulatory System—																																									
Pericarditis																																									
Endocarditis																																									
Valvular Mitral																																									
Aortic																																									
Tricuspid																																									
Pulmonary																																									
Arterial Sclerosis																																									
Aneurism																																									
Diseases of the Veins—																																									
Diseases of the Respiratory System—																																									
Laryngitis																																									
Bronchitis																																									
Pneumonia																																									
Abscess of Lung																																									
Gangrene of Lung																																									
Emphysema																																									
Pleurisy																																									
Empyema																																									
Diseases of the Digestive System—																																									
Stomatitis																																									
Ulcers of Teeth																																									
Gastritis																																									
Sore Throat																																									
Tuberculosis of Mouth																																									
Dysentery																																									
Ulceration of Stomach																																									
Obstruction of Stomach																																									
Dyspepsia																																									
Enteritis																																									
Appendicitis																																									
Ulceration of Intestines																																									
Ascites																																									
Worms																																									
Colitis																																									
Constipation																																									
Hæmorrhoids																																									
Local Diseases—																																									
Hæmaturia																																									
Nephritis—Acute																																									
Chronic																																									
Cirrhosis																																									
Paralysis																																									
Pyelitis																																									
Diseases of the Lymphatic System—																																									
Glandular																																									
Inflammation of Lymphatic Gland																																									
Suppuration of Lymphatic Gland																																									
Lymphangitis																																									
Elephantiasis																																									
Diseases of the Urinary System—																																									
Acute Cystitis																																									
Bright's Disease																																									
Calculus																																									
Chronic																																									
Cystitis																																									
Fatty Casts																																									
Hæmaturia																																									
Nephritis																																									
Pyelitis																																									
Diseases of the Genital System—																																									
Male Organs—																																									
Carbuncle																																									
Ulcer																																									
Hydrocele																																									
Phagedæna																																									
Soft Chancre																																									
Condyloma																																									
Inflammation of Scrotum																																									
Balanitis																																									
Orchitis																																									
Spermatocele																																									
Gleet of Penis																																									
Phymosis																																									
Female Organs—																																									
Cystitis																																									
Ovarian Cyst																																									
Inflammation of Uterus																																									
Leucorrhœa																																									
Metritis																																									
Prolapsus																																									
Retroversion of Uterus																																									
Ulcers																																									
Epithelioma																																									
Gleet of Vulva																																									
Vaginitis																																									
Diseases of Organs of Lactation—																																									
Abscess																																									
Mastitis																																									
Ulcer																																									
Diseases of Pregnancy—																																									
Abortion																																									
Ante Partum																																									
Hæmorrhage																																									
Post Partum																																									
Diseases of Infancy—																																									
Convulsions																																									
Debility																																									
Marasmus																																									
Thrush																																									
Diseases of Locomotive Tissue—																																									
Arthritis																																									
Fibroma																																									
Rheumatism																																									
Diseases of Joints—																																									
Abscess																																									
Caries																																									
Ulcers																																									
Diseases of Connective Tissue—																																									
Abscess																																									
Cellulitis																																									
Elephantiasis																																									
Gangrene																																									
Gleet Cavity																																									
Diseases of Skin—																																									
Abscess																																									
Acne																																									
Boils																																									
Bullæ																																									
Carbuncle																																									
Eczema																																									
Erysipelas																																									
Furunculosis																																									
Herpes																																									
Impetigo																																									
Pemphigus																																									
Pruritus																																									
Ringworm																																									
Scabies																																									
Scleroderma																																									
Sebaceous Cyst																																									
Wounds—																																									
Accidental																																									
Gunshot																																									
Operation																																									
Poisoned																																									
Septic																																									
Snake Bite																																									
Sunstroke																																									
Various Causes																																									
Total (Excluding Operations)	10	3	—	13	—	—	4	17	47	1,141	55	11	112	117	65	135	76	1,712	61	28	1	9	11	1	24	14	149	1,151	58	11	125	130	65	139	90	1,759	36	—	—	7	8	—	7	8	66

TABLE VII.

Shewing details of Diseases treated with the number of Cases in each Medical District.

DISEASES	WESTERN PROVINCE																CENTRAL PROVINCE									EASTERN PROVINCE												
	Lagos	Ebute	Ikorodu	Epe	Badagry	Abeokuta	Ibadan I.	Ibadan II.	Ogbomoshi	Oyo	Iwo	Ilesa	Ondo	Benin	Warri	Sapele	Forcados	Asaba	Onitsha	Awka	Udi	Owerri	Calabar	Calabar Prov.	Ogoja	Bonny	Opobo	Brass	Degama	Abakaliki	Ikom	Obubura	Ogoja Prov.	Opobo	Bonny	Brass Prov.	Other	Total
Infective Diseases:																																					
Cholera																																					
Cerebro-Spinal Fever																																					
Cerebro Fever																																					
Cholera																																					
Dengue																																					
Diphtheria																																					
Dysentery																																					
Enteric Fever																																					
Erysipelas—Infective																																					
Filaria																																					
Hydrophobia																																					
Influenza																																					
Leprosy																																					
Lues Acq.																																					
Leprosy (in Malabar)																																					
(in Amsterdam)																																					
Malaria																																					
(a) Chronic Malaria																																					
(b) Black-water																																					
(c) Pernicious																																					
Measles																																					
Malta Fever																																					
Plague																																					
Pneumonia																																					
Rabies																																					
Relapsing Fever																																					
Rheumatic Fever																																					
Rheumatism, Chronic																																					
Septicæmia																																					
Trypanosomiasis (Sleeping Sickness)																																					
Smallpox																																					
Syphilis—Primary																																					
Secondary																																					
Tertiary																																					
Tetanus																																					
Thrombosis																																					
Whooping Cough																																					
Yaws																																					
Yellow Fever (Suspected)																																					
Human Bites																																					
Tuberculous:																																					
Abdominal																																					
Meningeal																																					
Others																																					
General Diseases:																																					
Anæmia																																					
Anæmia-Pernicious																																					
Cachexia																																					
Gout																																					
Hæmorrhagic																																					
Hodgkin Disease																																					
Hyperidrosis																																					
Leprosy																																					
Lipoma																																					
Scabies																																					
Scurvy																																					
Local Diseases:																																					
Diseases of the Nervous System—																																					
Anæsthesia I.—																																					
Anæmia																																					
Anxiety																																					
Apoplexy																																					
Aphasia																																					
Cerebro-Spinal Meningitis																																					
Chorea																																					
Concussion of Brain																																					
Contusion of Brain																																					
Hemiplegia																																					
Insanity																																					
Lethargy																																					
Mental Diseases—																																					
Delusions I.—																																					
Mania																																					
Melancholia																																					
Neurasthenia																																					
Nocturnal Insanity																																					
Subacute Insanity																																					
Mental Troubles of the Native																																					
Diseases of the Eye—																																					
Conjunctivitis																																					
Keratitis																																					
Ulceration of Cornea																																					
Iritis																																					
Optic Neuritis																																					
Glaucoma																																					
Glioma																																					
Staphyloma																																					
Retinitis																																					
Cellulitis Ocular																																					
Diseases of the Ear—																																					
Inflammation																																					
Otitis Purulenta																																					
Diseases of the Nose—																																					
Rhinitis																																					
Polypus																																					
Epistaxis																																					
Diseases of the Circulatory System—																																					
Pericarditis																																					
Endocarditis																																					
Cirrhosis—Portal																																					
Ascites																																					
Hydrothorax																																					
Arterial Embolism																																					
Aneurism																																					
Disease of the Valve																																					
Diseases of the Respiratory System—																																					
Asthma																																					
Bronchitis																																					
Broncho-Pneumonia																																					
Cancer of Lung																																					
Congestion of Lung																																					
Pleurisy																																					
Pneumonia																																					
Phthisis																																					
Diseases of the Digestive System—																																					
Anæmia																																					
Cancer of Tongue																																					
Cirrhosis																																					
Ante Partum																																					
Inflammation of Mouth																																					
Stomatitis																																					
Ulceration of Stomach																																					
Dyspepsia																																					
Dilatation of Stomach																																					
Perforation of Stomach																																					
Hæmatemesis																																					
Gastritis																																					
Appendicitis																																					
Colic																																					
Ulceration of Intestines																																					
Ileitis																																					
Diarrhœa																																					
Constipation																																					
Colic																																					
Hæmorrhoids																																					
Dysentery—Acute																																					
Chronic																																					
Jaundice																																					
Peritonitis																																					
Ascites																																					
Diseases of the Lymphatic System—																																					
Synovitis																																					
Inflammation of Lymphatic Gland																																					
Suppuration of																																					
Lymphangitis																																					
Elephantiasis																																					
Diseases of the Urinary System—																																					
Ascites, Syphilitic																																					
Bright Disease																																					
Cystitis																																					
Calculus																																					
Renal Colic																																					
Cystitis																																					
Urinal Calculus																																					
Suppression																																					
Retention																																					
Diseases of the Generative System—																																					
Male Organs—																																					
Abscess																																					
Anus																																					
Balanitis																																					
Chancroid																																					
Self-Abuse																																					
Condyloma																																					
Inflammation of Scrotum																																					
Gummata																																					
Orchitis																																					
Epididymitis																																					
Abscess of Breasts																																					
Varicocele																																					
Prolapsus																																					
Stricture																																					
Impotence																																					
Female Organs—																																					
Cirrhosis																																					
Ovarian Cyst																																					
Endometritis																																					
Displacement of Uterus																																					
Fistula																																					
Abortion																																					
Hæmatocele																																					
Leucorrhœa																																					
Uterine Polypus																																					
Uterine Tumour																																					
Vaginismus																																					
Vulvitis																																					
Vulvo Vaginitis																																					
Diseases of Organs of Locomotion—																																					
Arthritis																																					
Ankylosis																																					
Bursitis																																					
Fistula																																					
Synovitis																																					
Talipes Valgus																																					
Diseases of Connective Tissue—																																					
Cellulitis																																					
Œdema																																					
Elephantiasis																																					
Diseases of the Skin—																																					
Abscess																																					
Acne																																					
Boils																																					
Carbuncle																																					
Chancroid																																					
Chloasma																																					
Chronic Ulcer																																					
Eczema																																					
Elephantiasis																																					
Erythema Nodosum																																					
Herpes Circinatus																																					
Leprosy																																					
Lupus																																					
Original Operation (including Excision of Ulcer)																																					
Pemphigus																																					
Pruritus																																					
Ringworm																																					
Scabies																																					
Ulceration (Chronic)																																					
Unhealthy Granulations																																					
Wounds and Injuries—																																					
Contusions																																					
Fractures																																					
Gunshot Wounds																																					
Injuries (Minor)																																					
Poisoning																																					
Snake Bites																																					
Sprains																																					
Wounds																																					
Various Diseases																																					
Total including Operations	8,000	3,000	3,027	1,000	90	1,000	3,000	2,000	2,000	800	1,000	1,000	1,000	1,000	1,000	1,000	6,000	3,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	6,000	800	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
	Western Province. Total 24,833.																Central Province. Total 29,272.									Eastern Province. Total 24,811.												

Note.—One divergent Blackwater in the Delagbe District and one Cerebro-Spinal Meningitis in Lagos Hospital and one case transferred from Epe to Lagos Hospital. Total number of discharges from Patients in the Ondo and Benin towns not actually ill.

TABLE VIII.

ANNUAL MOSQUITO RETURNS.

Results of Work during the Four Quarters of the Year.

	Houses Inspected.	Number of Houses with Larvæ.	Number of Receptacles with Larvæ.	Average number of Receptacles with Larvæ per House Inspected.	Average number of Receptacles with Larvæ per House where Larvæ are found.	Mosquito Index.	Rainfall.
WESTERN PROVINCE.							
Lagos & Ebute Metta.							
1st Quarter	101,303	12,240	14,564	0·1	1·2	12·0	16·12
2nd „	116,853	17,320	22,890	0·1	1·6	14·8	54·34
3rd „	130,417	17,358	22,578	0·1	1·2	13·3	4·63
4th „	117,497	14,139	17,842	0·1	1·2	12·0	11·99
Total	466,070	61,057	77,874	0·1	1·2	13·1	87·08
Badagry.							
1st Quarter			No Returns.				13·46
2nd „	281	173	657	2·8	3·6	61·5	91·02
3rd „	246	30	65	0·2	2·1	12·2	5·92
4th „	1,851	70	117	·06	1·6	3·7	8·06
Total	2,378	273	839	·3	3·0	11·0	118·46
Aro.							
1st Quarter			No Returns				6·66*
2nd „	990	742	933	0·9	1·25	74·9	26·72
3rd „	1,430	571	1,033	0·8	1·7	39·9	9·01
4th „	1,430	537	797	0·5	1·5	37·5	6·61
Total	3,850	1,850	2,763	0·7	1·4	48·0	49·00
Ibadan.							
1st Quarter			No Returns.				7·92
2nd „							16·00
3rd „							9·56
4th „	508	48	48	0·09	1·0	9·4	6·01
Total	—	—	—	—	—	—	39·49
Epe.							
1st Quarter			No Returns.				11·59
2nd „							29·99
3rd „							12·90
4th „	21	13	30	1·4	2·3	61·6	8·9
Total	—	—	—	—	—	—	62·48

*Incomplete.

TABLE VIII.—continued.

ANNUAL MOSQUITO RETURNS.

Results of Work during the Four Quarters of the Year.

	Houses Inspected.	Number of Houses with Larvæ.	Number of Receptacles with Larvæ.	Average number of Receptacles with Larvæ per House Inspected.	Average number of Receptacles with Larvæ per House where Larvæ are found.	Mosquito Index.	Rainfall.
CENTRAL PROVINCE.							
Warri.							
1st Quarter			No Returns.				24.43
2nd „	32,557	160	480	0·01	3·0	0·5	42·31
3rd „	22,516	150	497	0·02	3·3	0·6	42·91
4th „	11,140	154	205	0·01	1·3	1·3	20·75
Total	66,213	464	1,182	0·01	2·3	0·7	130·40
Forcados.							
1st Quarter			No Returns.				19·85
2nd „	1,620	145	184	0·8	1·2	8·9	39·8
3rd „	1,560	47	54	0·03	1·1	2·0	34·5
4th „	6,003	56	47	0·006	1·02	0·6	34·1
Total	9,183	228	285	0·03	1·2	2·4	128·25
Sapele.							
1st Quarter			No Returns.				11·83
2nd „	4,319	45	56	0·01	1·24	1·04	41·99
3rd „	5,195	43	47	0·009	1·07	1·92	41·58
4th „	2,285	80	104	0·04	1·3	3·5	23·05
Total	11,799	168	207	0·01	1·2	1.4	118·45
Benin-City.							
1st Quarter			No Returns.				8·57
2nd „	100	7	7	0·07	1·0	7·0	42·72
3rd „	169	7	7	0·04	1·0	4·1	25·77
4th „	140	29	55	0·4	1·9	20.7	22·26
Total	409	43	69	0·1	1·5	10·7	99·32
Agbor.							
1st Quarter			No Returns.				No Returns.
2nd „	221	139	225	1·0	1·6	61·0	
3rd „	903	232	464	0·5	2·0	25·6	
4th „	74	63	117	1·5	1·8	85·1	
Total	1,198	434	806	0·6	1·8	36·2	

TABLE VIII.—continued.

ANNUAL MOSQUITO RETURNS.

RESULTS OF WORK DURING THE FOUR QUARTERS OF THE YEAR.

	Houses Inspected.	Number of Houses with Larvae.	Number of Receptacles with Larvae.	Average Number of Receptacles with Larvae per House Inspected	Average number of Receptacles with Larvae per House where Larvae are found.	Mosquito Index.	Rainfall.
CENTRAL PROVINCE.—*contd.*							
ONITSHA.							
1st Quarter			No Returns.				7·01
2nd „	1,022	705	1,644	1·6	2·33	68·9	27.79
3rd „	4,443	479	959	0·2	2·0	10·7	27·78
4th „	3,193	34	34	0·01	2·0	1·0	15·35
Total	8,658	1,218	2,637	0·3	2·1	14·0	77·93
ABOH.							
1st Quarter			No Returns.				3·41
2nd „	257	144	444	1·7	3·0	56·0	25 87
3rd „	123	28	60	0·4	2·1	22·7	29·47
4th „	294	58	70	0·2	1·2	19·7	9·03
Total	674	230	574	0·8	2·5	34·1	67·78
EASTERN PROVINCE.							
CALABAR.							
1st Quarter	1,192	112	112	0·09	1·0	9·3	5·92
2nd „	3,068	169	169	0·05	1·0	5·5	41·53
3rd „	2,881	73	73	0·02	1·0	2·5	58·77
4th „	3,033	35	35	0·01	1·0	1·1	18·65
Total	11,174	389	389	0·03	1·0	3·8	124·87
OPOBO.							
1st Quarter			No Returns.				16·61
2nd „	1,980	126	138	0·06	1·0	6·3	58·96
3rd „	226	5	6	0·02	1·2	2·2	40·57
4th „	3,359	17	28	0·008	1·5	0·5	21·35
Total	5,565	146	160	0·02	1·0	2·6	136·89
BONNY.							
1st Quarter	2,008	148	176	0·07	1·2	7·3	15·96
2nd „	2,266	259	310	0·1	1·2	11·4	97·01
3rd „	782	62	74	0·09	1·2	0·9	59·90
4th „	2,569	130	147	0·05	1·1	5·0	30·6
Total	7,625	599	707	0·09	1·1	7·8	203·47

TABLE VIII.—continued.

ANNUAL MOSQUITO RETURNS.

RESULTS OF WORK DURING THE FOUR QUARTERS OF THE YEAR.

	Houses Inspected.	Number of Houses with Larvæ.	Number of Receptacles with Larvæ.	Average number of Receptacles with Larvæ per House Inspected.	Average number of Receptacles with Larvæ per House where Larvæ are found.	Mosquito Index.	Rainfall.
EASTERN PROVINCE—*contd.*							
DEGEMA.							
1st Quarter			No Returns.				9·34
2nd „	1,733	93	144	0·08	1·5	5·3	40·24
3rd „	1,198	128	250	0·1	1·9	10·6	37·75
4th „	2,100	74	87	0·04	1·1	3·5	18.98
Total	5,021	295	481	0·09	1·6	5·8	106·31
AKASSA.							
1st Quarter			No Returns.				24·65
2nd „	2,149	302	483	0·2	1·5	14·0	76·76
3rd „	1,235	20	38	0·03	1·9	1·61	60·11
4th „			No Returns.				33·51
Total	3,484	322	521	0·1	1·6	9·2	196·93
BRASS.							
1st Quarter			No Returns.				11·38
2nd „	2,204	248	299	0·1	1·2	11·2	76·34
3rd „	1,387	3	3	0.0	1·0	0·2	60·11
4th „			No Returns.				51·34
Total	3,591	251	302	0·08	1·2	6·4	179·17
OWERRI.							
1st Quarter			No Returns.				6·12
2nd „	1,443	112	329	0·2	2.9	7·7	26·34
3rd „			No Returns.				34·74
4th „	1,913	37	164	0·08	4·4	1·9	11·75
Total	3,356	149	493	0·14	3·3	4·4	78·95
OKIGWI.							
1st Quarter			No Returns.				No Rainfall Returns.
2nd „	1,836	42	48	2·6	1·1	2·2	
3rd „	750	6	6	0·008	1·0	0·8	
4th „	1,898	6	6	0·003	1·0	0·32	
Total	4,484	54	60	0·01	1.1	1·2	
ITU.							
1st Quarter	221	53	53	0·2	1·0	23·9	No Rainfall Returns.
2nd „	222	54	57	0·2	1·0	24·3	
3rd & 4th Qrs.			No Returns.				
Total	443	107	110	0·2	1·0	24·1	
ABAKALIKI.							
1st, 3rd & 4th Qrs.			No Returns.				
2nd Quarter	697	3	7	0·01	2·3	0·4	

TABLE VIII.—continued.

ANNUAL MOSQUITO RETURNS.

RESULTS OF WORK DURING THE FOUR QUARTERS OF THE YEAR.

	Houses Inspected.	Number of Houses with Larvæ.	Houses of Receptacles with Larvæ.	Average number of Receptacles with Larvæ per House inspected.	Average number of Receptacles with Larvæ per House where Larvæ are found.	Mosquito Index.	Rainfall.
EASTERN PROVINCE—*contd.*							
IKOM-OBUBRA.							
1st Quarter	83	14	44	0·5	3·1	16·8	14·7
2nd „	592	95	120	0·2	1·2	15·8	31·57
3rd & 4th Quarters			No Returns.				31·57
							12·35
Total	675	109	164	0·2	1·5	16·1	89·74

ANNUAL RETURNS OF ANTI-MOSQUITO WORK.

Lagos and Ebute Metta	466,070	61,057	77,874	0· 1	1·2	13·1	87·08
Badagry	2,378	273	839	0· 3	3·0	11·0	118·46
Aro	3,850	1,850	2,763	0· 7	1·4	48·0	49·00
Ibadan	508	48	48	0·09	1·0	9·4	39·49
Epe	21	13	30	1· 4	2·3	61·6	62·48
Warri	66,213	464	1,182	0·01	2·3	0·7	130·49
Forcados	9,183	228	285	0·03	1·2	2·4	128·25
Sapele	11,799	168	207	0·01	1·2	1·4	118·45
Benin City	409	43	69	0· 1	1·5	10·7	91·93
Agbor	1,198	434	806	0· 6	1·8	36·2	—
Onitsha	8,658	1,218	2,637	0· 3	2·1	14·0	77·93
Aboh	674	230	574	0· 8	2·5	34·1	67·78
Calabar	10,174	389	389	0·03	1·0	3·8	121·87
Opobo	5,565	146	160	0·02	1 0	2·6	136·89
Bonny	7,625	599	707	0·09	1·1	7·8	203·47
Degema	5,021	295	481	0·09	1·6	5·8	106·31
Akassa	3,484	322	521	0· 1	1·6	9·2	196·93
Brass	3,591	251	502	0·08	1·2	6·4	179·17
Owerri	3,356	149	493	0·14	3·3	4·4	78·95
Okigwi	4,484	54	60	0·01	1·1	1·2	—
Itu	443	107	110	0· 2	1·0	24·1	—
Abakaliki	697	3	7	0·01	2·3	0·4	—
Ikom-Obubra	675	109	164	0· 2	1·5	16·1	89·74

PROVINCIAL ANNUAL RETURNS OF ANTI-MOSQUITO WORK.

WESTERN PROVINCE	472,827	63,241	81,554	1·7	1·2	13·3	—
„ „ (Excluding Lagos.	6,757	2,184	3,680	0·5	1·6	32·3	—
CENTRAL PROVINCE	98,134	2,785	5,760	0,05	2·0	2·8	—
EASTERN PROVINCE	45,115	2,424	3,394	0·07	1·4	5·3	—
GRAND TOTAL ...	616,076	68,450	90,708	0·1	1·3	11·1	—

ARTHUR PICKELS,

Senior Sanitary Officer,

Southern Nigeria.

20th May, 1912.

TABLE IX.

TABLES OF CASES OF MALARIAL FEVER.

EUROPEANS.

	Cases.			Deaths.		
	1909.	1910.	1911.	1909.	1910.	1911.
Western Province	370	347	287	3	3	1
Central Province	149	174	198	2	1	—
Eastern Province	244	296	211	—	3	—
Total	763	817	696	5	7	1

NATIVES

Western Province	2,393	2,876	3,042	8	—	10
Central Province...	1,028	1,285	1,572	7	4	—
Eastern Province	1,983	1,971	1,834	4	6	7
Total	5,404	6,132	6,448	19	10	17

TOTAL CASES OF MALARIA TREATED.

(EUROPEAN AND NATIVE.)

Western Province	2,763	3,223	3,329	11	3	11
Central Province...	1,177	1,459	1,770	9	5	—
Eastern Province	2,227	2,267	2,045	4	9	7
Total	6,167	6,949	7,144	24	17	18

TABLES OF CASES MALARIAL FEVER.

EUROPEANS.

Lagos	175	199	172	—	3	1
Warri	40	73	51	—	—	—
Calabar	94	124	76	—	1	—

NATIVES.

Lagos	1,728	2,150	2,410	5	—	9
Warri	226	325	424	1	—	—
Calabar	574	904	859	—	1	1

TOTAL CASES OF MALARIAL FEVER.

(EUROPEAN AND NATIVES.)

Lagos	1,903	2,349	2,582	5	3	10
Warri	266	398	475	1	—	—
Calabar	668	1,028	935	—	2	1

TABLES OF BLACKWATER FEVER CASES.

	Cases.			Deaths.		
	1909.	1910.	1911.	1909.	1210.	1911.
Western Province	14*	17	17	4	3	6
Central Province...	13	11	2	4	3	—
Eastern Province	4	6	7	2	1	2
Total	31	34	26	10	7	8

*Includes 1 Hindu and 1 Syrian.

Lagos	7	11	9	—	1	5
Warri	2	2	—	1	—	—
Calabar	—	—	1 (Syrian)	—	—	1 (Syrian)

POPULATION ACCORDING TO THE CENSUS RETURNS.

	Residents.	Europeans Local Steamers.	Ocean Steamers.	Asiatics.	West African and other coloured Races.
Western Procince	707	83	72	63	2,151,923
Central Province	429	1	476	3	2,407,685
Eastern Province	428	—	158	33	3,296,628
Lagos	453	83	72	43	73,115
Warri	66	1	49	—	2,451
Colabar	148	2	—	27	14,086

ARTHUR PICKELS,

Senior Sanitary Officer.

Southern Nigeria.

20th May, 1912.