

## **Annual report of the Medical Department / Colony of the Gambia.**

### **Contributors**

Gambia. Medical Department.

### **Publication/Creation**

London : printed by Waterlow, [1917]

### **Persistent URL**

<https://wellcomecollection.org/works/f7wuzbts>

### **License and attribution**

This work has been identified as being free of known restrictions under copyright law, including all related and neighbouring rights and is being made available under the Creative Commons, Public Domain Mark.

You can copy, modify, distribute and perform the work, even for commercial purposes, without asking permission.



Wellcome Collection  
183 Euston Road  
London NW1 2BE UK  
T +44 (0)20 7611 8722  
E [library@wellcomecollection.org](mailto:library@wellcomecollection.org)  
<https://wellcomecollection.org>

COLONY OF THE GAMBIA.

---

ANNUAL  
**MEDICAL AND SANITARY REPORT**  
FOR THE YEAR 1917.

---

PRINTED BY  
—WATERLOW & SONS LIMITED, LONDON WALL, LONDON, E.C.—  
1918.



# CONTENTS.

	PAGE.
COVERING LETTER FROM PRINCIPAL MEDICAL OFFICER ...	3
 REPORT : MEDICAL—	
I. ADMINISTRATIVE—	
(A) STAFF ...	5
(B) FINANCIAL ...	6
 II. PUBLIC HEALTH—	
(A) GENERAL REMARKS...	7
(B) EUROPEAN OFFICIALS ...	8
(C) NATIVE OFFICIALS ...	8
(D) GENERAL EUROPEAN POPULATION ...	9
COMPARATIVE STATEMENT OF BIRTHS AND DEATHS FOR THE PAST TEN YEARS IN THE COLONY ...	9
NUMBER OF DEATHS AND DEATH-RATE PER THOUSAND OF THE POPULATION FOR THE LAST TEN YEARS IN THE COLONY (CENSUS OF 1911) ...	9
INFANTILE MORTALITY FOR THE PAST TEN YEARS IN THE COLONY	10
HOSPITAL BUILDINGS—ALTERATIONS ...	10
LAWS AND REGULATIONS ...	10
 REPORT : SANITARY—	
GENERAL REMARKS—STAFF ...	11
OFFICES AND QUARTERS ...	11
STABLES ...	11
SANITARY STATION ...	11
YELLOW FEVER ...	11
PLAGUE ...	12
MALARIA ...	12
MOSQUITOES ...	12
CESSPITS ...	13
CLOSING OF WELLS ...	13
BUSH CLEARING AND MANGROVE CUTTING ...	13
PROSECUTIONS ...	14
PUBLIC LATRINES...	14
MARKET ...	14



CONTENTS—*continued.*REPORT: SANITARY—*continued.*

PAGE

CATTLE DISEASE ... ..	15
BAKEHOUSES ... ..	15
STREETS ... ..	15
CEMETERIES ... ..	16
SLUICE GATES ... ..	16
LIGHTING ... ..	16
DISPOSAL OF RUBBISH ... ..	16
PLANTING OF SHRUBS AND TREES ... ..	17
SAND FILLING ... ..	17
"DUTTON SCHEME" ... ..	17
GOVERNMENT QUARTERS ... ..	18
RAT DESTRUCTION ... ..	19
EXTENSION OF BATHURST ... ..	19
PRISON ... ..	19
SANITARY LABOURERS' COMPOUND, ETC. ... ..	19
LEGISLATION ... ..	20
RECOMMENDATIONS ... ..	20
MACCARTHY ISLAND AND CAPE ST. MARY ... ..	20
 DENTIST'S REPORT ... ..	 21
H.M. NAVAL WIRELESS TELEGRAPH STATION, CAPE ST. MARY... ..	22
DEPARTMENTAL CHANGES ... ..	23
VACCINATIONS—RETURN ... ..	24
HOME FOR DESTITUTES—RETURN ... ..	24
INFECTIOUS DISEASES HOSPITAL ... ..	24
TABLE VI.—RETURN OF DISEASES AND DEATHS (IN-PATIENTS) ... ..	25
TABLE VII.—OUT-PATIENTS ... ..	26

MEDICAL OFFICE,

BATHURST,

GAMBIA,

30th May, 1918.

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 and Sanitary Report for the year 1917, together with Returns appended thereto.

I have the honour to be,

Sir,

Your most obedient Servant,

E. C. ADAMS,

*Senior Medical Officer.*

THE HONOURABLE

THE COLONIAL SECRETARY,

BATHURST, R. GAMBIA.

1000000000

1000000000

1000000000

1000000000

1000000000

1000000000

1000000000

1000000000

1000000000

1000000000

1000000000

1000000000

1000000000

1000000000

1000000000

1000000000

1000000000

1000000000

1000000000



# Annual Medical and Sanitary Report

FOR THE

YEAR ENDING 31ST DECEMBER, 1917.

## I. ADMINISTRATIVE.

### (a) STAFF.

Dr. E. C. Adams, Senior Medical Officer, transferred from the Gold Coast, arrived March 27th, to replace Dr. Horn, transferred to Nigeria.

Dr. R. W. Orpen, Medical Officer of Health, acted as Senior Medical Officer until 27th March *vice* Dr. Horn absent on leave.

Dr. F. C. V. Thompson, Medical Officer, was absent from the Colony on active service as Lieutenant R.A.M.C. till November 27th, when he arrived, and was appointed Acting Medical Officer of Health *vice* Dr. Orpen.

Dr. R. H. Miller, Medical Officer, is still on active service outside the Colony.

Dr. T. Ryan, Medical Officer, proceeding on leave by s.s. "Abosso" 14th April, was lost at sea by enemy action on the 24th April.

Dr. J. C. Watt, Medical Officer, is still on active service outside the Colony.

Dr. E. B. Bate, Medical Officer, resumed duty August 16th, 1916; owing to shortage of staff, he continued his tour of service to the end of the year.

### Nursing Staff:—

Miss M. M. Hall, Acting Nursing Sister-in-charge, served in this capacity throughout the year.

Miss M. Thompson, Nursing Sister, proceeded on leave to Buenos Aires on the 6th July, with approval of Secretary of State (travelling to Liverpool being dangerous). She returned and resumed duty December 23rd.

Miss H. R. Wakefield, Nursing Sister, proceeded on leave September 9th, and at the end of the period of her leave terminated her services in the Colony.

Miss M. C. Parsons, Nursing Sister, arrived in the Colony on July 28th and assumed duty.

At the end of the year the Medical Staff was reduced to the Senior Medical Officer and two Medical Officers, one of whom was acting as Medical Officer of Health; and the Nursing Staff three Nursing Sisters.



## (b) FINANCIAL.

The total revenue raised for the year was £182 1s. 9d., and the expenditure £6,606 19s. 8d.; from the following Financial Statements it will be seen that several excesses have been made on approved votes; these were unavoidable, as the prices for articles have exceeded our original estimates.

## RECEIPTS.

Details.	Estimated.	Actual.
	£ s. d.	£ s. d.
Maintenance of Sick and Sale of Medicines ... ..	100 0 0	182 1 9

## MEDICAL DEPARTMENT.

## EXPENDITURE.

Details.	Estimated.	Actual.
	£ s. d.	£ s. d.
Personal emoluments ... ..	5,164 0 0	3,811 3 7
OTHER CHARGES.		
Bush Allowance to Medical Officer, MacCarthy Island, at 2s. 6d. a day ... ..	35 0 0	—
Horse and Bicycle Allowance ... ..	140 0 0	85 12 7
Fees for Course of Instruction to Medical Officers in England ... ..	100 0 0	—
Outfit Allowances to Medical Officers ... ..	24 0 0	—
Do. for Nursing Sisters ... ..	36 0 0	24 0 0
Fees for Selection and Medical Examination of Officers and Nurses ... ..	20 0 0	3 3 0
Sea Passages ... ..	350 0 0	208 2 6
Travelling Expenses for Nursing Sisters in England ...	12 0 0	2 19 10
Uniforms for Attendants ... ..	33 0 0	34 12 2
Maintenance of Sick (Dietary, &c.) ... ..	550 0 0	435 8 9
Furniture and Appliances ... ..	125 0 0	101 13 8
Bedding and Clothing ... ..	170 0 0	101 0 3
Medicines and Vaccines... ..	330 0 0	380 11 0
Dressings... ..	180 0 0	134 19 2
Medical Comforts ... ..	40 0 0	34 11 10
Instruments ... ..	40 0 0	11 7 11
Washing, Disinfectants and Soap ... ..	100 0 0	91 15 6
Fuel and Lighting ... ..	75 0 0	71 12 9
Laboratory Equipment ... ..	20 0 0	5 15 7
Medical Library ... ..	10 0 0	6 17 6
Infectious Diseases Prevention ... ..	80 0 0	11 10
Infectious Diseases Hospital ... ..	10 0 0	3 1 2
Vaccinations ... ..	600 0 0	546 1 2
Maintenance of Home for Destitutes ... ..	164 0 0	108 12 5
Expenses of Burials ... ..	30 0 0	26 15 3
Maintenance of Lunatics at Sierra Leone ... ..	342 0 0	282 17 11
Microscopes ... ..	80 0 0	74 11 5
Sundries ... ..	30 0 0	19 0 11
TOTAL ... ..	£8,890 0 0	£6,606 19 8

## BOARD OF HEALTH AND MACCARTHY SQUARE.

Details.							Estimated.			Actual.		
							£	s.	d.	£	s.	d.
Personal Emoluments	...	...	...	...	...	...	1,643	0	0	1,376	9	0
OTHER CHARGES.												
Horse and Bicycle Allowance	...	...	...	...	...	...	68	0	0	57	5	2
Sea Passages for Officers	...	...	...	...	...	...	155	0	0	81	8	0
Rent of Quarters	...	...	...	...	...	...	100	0	0	69	13	4
Uniforms	...	...	...	...	...	...	60	0	0	58	12	0
Anti-mosquito Measures, etc.	...	...	...	...	...	...	360	0	0	349	11	11
Upkeep of Horses and Carts	...	...	...	...	...	...	350	0	0	275	13	9
Upkeep of Street Lights	...	...	...	...	...	...	260	0	0	237	17	3
Cleaning of Streets and Drains	...	...	...	...	...	...	840	0	0	838	0	5
Emptying Latrines	...	...	...	...	...	...	400	0	0	398	6	8
Cleaning of Market and Slaughter Houses	...	...	...	...	...	...	50	0	0	50	0	0
Cleaning of Cemeteries	...	...	...	...	...	...	100	0	0	100	0	0
Cleaning of Government Compounds	...	...	...	...	...	...	100	0	0	99	19	9
Repair and Working of Sluice Gates	...	...	...	...	...	...	150	0	0	148	18	6
Tools	...	...	...	...	...	...	120	0	0	67	0	4
Purchase of New Dust Bins	...	...	...	...	...	...	300	0	0	148	4	4
Purchase of New Latrine Pans	...	...	...	...	...	...	350	0	0	78	6	6
Typewriter	...	...	...	...	...	...	25	0	0	18	6	7
Sundries	...	...	...	...	...	...	35	0	0	15	13	4
Clearing Bush	...	...	...	...	...	...	—			705	4	11
MACCARTHY SQUARE BOARD.												
Personal Emoluments	...	...	...	...	...	...	94	0	0	81	14	6
OTHER CHARGES.												
Tools	...	...	...	...	...	...	6	0	0	0	0	8
Painting and Upkeep of Railings and Seats	...	...	...	...	...	...	20	0	0	7	5	6
Sundries	...	...	...	...	...	...	5	0	0	0	3	3
TOTAL							£5,591	0	0	£5,263	15	8

## II. PUBLIC HEALTH.

In Bathurst, one death occurred from Yellow Fever, a Native; but there was no epidemic. Small Pox was reported in the Protectorate in April, and a Medical Officer visited various places, reporting that before his arrival active precautions had been taken to segregate infected persons, and a large number of vaccinations had been performed by the Commissioner; thus establishing "a ring fence" of vaccination round the infected area, in consequence of which the epidemic was checked. The total number of cases seen was 50; the death rate 4 per cent.

During the rains, there was an epidemic, probably pleuro pneumonia, amongst the cattle from which many animals died; unfortunately there is no Veterinary Surgeon in the Colony or Protectorate.

I should call attention to the increased number of births and decrease in deaths in Bathurst, especially in the case of infantile mortality in children of 1 to 5 years. This, I think, is largely due to improved sanitary conditions.

With regard to vaccinations, I think the high rate of failures in Bathurst is probably due to cases of re-vaccination.



I think also that many, probably the majority, of those not seen were successful, the parents not coming again on that account. It appears impossible to compel them to do so, as the floating population is very large in proportion to the population permanently resident in Bathurst.

(b) EUROPEAN OFFICIALS.

The health of the European Officials remained good.

There were no deaths and only one was invalided for Atony of bladder.

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

	1916.	1917.
Total number of officials resident ... ..	52	41
Average number resident ... ..	27	28
Total number on sick list ... ..	28	19
Total number of days on sick list ... ..	235	192
Average daily number on sick list ... ..	0.64	0.53
Percentage of sick to average number resident ... ..	103.70	67.85
Average number of days on sick list for each patient ... ..	8.39	10.10
Average sick time to each resident ... ..	8.7	7
Total number invalided ... ..	3	1
Percentage of invalidings to total residents ... ..	5.77	2.43
Total deaths ... ..	—	—
Percentage of deaths to total residents ... ..	—	—
Percentage of deaths to average number residents ... ..	—	—
Number of cases of sickness contracted away from residence ... ..	—	—

(c) NATIVE OFFICIALS.

The Native Officials kept good health during the year.

There were no deaths and one was invalided for Tuberculosis.

TABLE SHOWING SICK, INVALIDING, AND DEATH RATES OF NATIVE  
OFFICIALS.

	1916.	1917.
Total number of officials resident ... ..	143	141
Average number resident ... ..	130	129
Total number on sick list ... ..	137	126
Total number of days on sick list ... ..	559	468
Average daily number on sick list ... ..	1.52	1.28
Percentage of sick to average number resident ... ..	105.38	97.67
Average number of days on sick list for each patient ... ..	4.08	3.71
Average sick time to each resident ... ..	4	3.62
Total number invalided ... ..	—	1
Percentage of invalidings to total residents ... ..	—	0.70
Total deaths ... ..	—	—
Percentage of deaths to total residents ... ..	—	—
Percentage of deaths to average number resident ... ..	—	—
Number of cases of sickness contracted away from residence ... ..	—	—

## (d) GENERAL EUROPEAN POPULATION.

TABLE SHOWING SICK, INVALIDING, AND DEATHS OF NON-OFFICIAL EUROPEANS.

	1916.	1917.
Total number resident ... ..	95	101
Total number on sick list ... ..	45	30
Total number invalided ... ..	2	3
Total deaths of residents ... ..	—	—
Total deaths from passing ships ... ..	—	1

*Causes of invaliding:* Malarial fever, pyrexia and dysentery.

*Cause of death:* Colitis.

COMPARATIVE STATEMENT OF BIRTHS AND DEATHS FOR THE PAST TEN YEARS IN THE COLONY.

Years.	Births.	Deaths	Births in Excess.	Deaths in Excess.	Remarks.
1908 ... ..	351	387	—	36	
1909 ... ..	339	330	9	—	
1910 ... ..	363	385	—	22	
1911 ... ..	306	318	—	12	
1912 ... ..	303	336	—	33	
1913 ... ..	292	335	—	43	
1914 ... ..	306	342	—	36	
1915 ... ..	279	296	—	17	
1916 ... ..	314	306	8	—	Bathurst only.
1917 ... ..	337	262	75	—	do.

NUMBER OF DEATHS AND DEATH-RATE PER THOUSAND OF THE POPULATION FOR THE LAST TEN YEARS IN THE COLONY (*VIDE* CENSUS 1911).

Years.	Estimated Population.	Total Deaths.	Death-rate per 1,000.	Remarks.
1908 ... ..	13,157	387	29.41	
1909 ... ..	13,157	330	25.08	
1910 ... ..	13,157	385	29.26	
1911 ... ..	13,157	318	24.16	
1912 ... ..	13,157	336	25.53	
1913 ... ..	13,157	335	25.46	
1914 ... ..	13,157	342	25.99	
1915 ... ..	13,157	296	22.49	
1916 ... ..	7,700	272	35.03	Bathurst only.
1917 ... ..	8,474	262	30.09	do.



## INFANTILE MORTALITY FOR THE PAST TEN YEARS IN THE COLONY.

Years.	Total Births.	Deaths over 1 year and under 5 years.	Deaths over 1 week and under 1 year.	Deaths over 1 day and under 1 week.	Deaths under 24 hours.	Still Births.	Remarks.
1908 ... ..	351	55	77	23	—	32	
1909 ... ..	339	23	50	11	17	24	
1910 ... ..	363	40	68	34	11	27	
1911 ... ..	306	29	43	15	1	28	
1912 ... ..	203	42	66	6	—	26	
1913 ... ..	254	20	50	22	3	29	
1914 ... ..	304	27	59	16	5	27	
1915 ... ..	279	40	58	18	1	30	
1916 ... ..	314	46	61	10	3	22	Bathurst only.
1917 ... ..	337	22	59	9	—	30	do.

The annual birth rate 1917 = 39·7 per 1,000.

## HOSPITAL BUILDINGS.

The undermentioned alterations, erections and repairs have been effected.

## GENERAL.

## VICTORIA HOSPITAL.

Cleaning and painting of Hospital buildings and quarters of the staff.

Renewal of Mosquito-proof doors, windows, etc.

New Mortuary erected with an apartment for postmortem examination.

Operating Theatre improved by additional ventilations and the wooden floor replaced by glazed tiles.

The front verandah (main Hospital) of worn-out brick floor changed for cement concrete.

## INFECTIOUS DISEASES HOSPITAL.

The buildings have been repaired and colour washed. The walls of buildings are principally cane, and are not very permanent structures—a more substantial material is recommended.

## HOME FOR DESTITUTES AND AFFLICTED PERSONS.

This Hospital was also cleaned, repaired and colour-washed.

## THE GENERAL CEMETERY.

A new small Mortuary has been erected in the General Cemetery for bodies in advanced stages of decomposition.

## THE MACCARTHY ISLAND GENERAL HOSPITAL.

Minor repairs were undertaken in this Hospital. It is the only Hospital in the Protectorate of the Gambia.

## LAWS AND REGULATIONS.

The following laws were enacted :—

Rules relating to the European Nursing Sisters, published in Gazette No. 13, 1917.

Rules for Hospitals and Dispensaries, published in Gazette No. 20 of 1917.



# Annual Sanitary Report

FOR THE

YEAR ENDED 31ST DECEMBER, 1917.

During the past year the work carried on by the Board of Health has been similar in every way to that of previous years.

It is unfortunate that during the rains the staff was shorthanded owing to the post of Assistant Sanitary Inspector remaining vacant ; this necessitated a considerable amount of extra work falling on the shoulders of the Sanitary Inspector.

Dr. Adams, S.M.O. and Chairman, arrived in the month of March and assumed duty.

The subordinate staff remained the same throughout the year.

## OFFICES AND QUARTERS.

These remain the same, but as the lease will be up in the month of May, 1918, it has been proposed that the Government should acquire these premises as permanent offices for the Board of Health, and correspondence has been entered upon on this subject. Should this take place very considerable alterations will have to be undertaken, as the buildings are in a somewhat dilapidated state, and require a very thorough overhauling.

## STABLES.

Although it was proposed to erect new stables this year, the matter was postponed in view of what has already been stated in the preceding paragraph. The question of stables is a real necessity, and it is to be hoped that the coming year will see their completion.

## SANITARY STATION.

After many years the Sanitary Station has become an accomplished fact ; it is now complete as regards construction, and there only remains the question of equipping it, and provision has been made in the Estimates for 1918.

The fact that this Station is now a reality gives a very greater sense of security, when one recalls the outbreak of Plague at Dakar in the year 1914.

## YELLOW FEVER.

During the month of March there was a single case of Yellow Fever, in Bathurst, a native ; the case proved to be fatal. There were six contacts, but none of them developed any further symptoms. The usual precautions were taken—fumigation, segregation.

Notifications were received from time to time from other Colonies notifying sporadic outbreaks, from Gold Coast, Senegal, Sierra Leone and Lagos.



## PLAGUE.

No case of Plague appeared in the Gambia, but notifications were received from the Gold Coast, Senegal and South Africa.

## MALARIA.

The amount of Malaria seen appears to be much the same as in former years, and the remarks made in last year's report hold good, *i.e.*, the vast majority of infection is acquired in the Protectorate.

## MOSQUITOES.

Without doubt there has been a considerable improvement in this direction, and there has been a steady diminution in the numbers of these pests, both seen and captured.

## SPECIMENS OF LARVÆ FROM ALL SOURCES.

1912.	1913.	1914.	1915.	1916.	1917.
622	957	1,036	622	265	238

## INDICES.

1914.	1915.	1916.	1917.
—	January ... 2%	—	January ... 4%
—	February ... 2%	—	February ... 2.6%
—	March ... —	—	March ... 2.2%
—	April ... 12%	—	April ... 0.6%
—	May ... 10%	—	May ... 0.6%
June ... 53%	June ... 10%	—	June ... 3.3%
—	July ... 15½%	July ... 8.6%	July ... 3.3%
—	August ... 14.2%	August ... 6.7%	August ... 2%
—	September ... 7.3%	September ... 3.3%	September ... 4%
October ... 64%	October ... 6.6%	October ... 4.2%	October ... 1%
—	November ... 6.6%	November ... 6.6%	November ... 5.3%
—	December ... 1.3%	December ... —	December ... 1.3%

By the above it will be seen that the improvement has been a gradual one, and I consider that there are several factors which are contributing causes, which may be placed in the following order:—

- (1) Increased number of inspections and re-inspections.
- (2) Continual prosecutions; this will be referred to later.
- (3) Fish stocking; this was referred to in last year's report.
- (4) Closing of water-logged Cesspits.
- (5) Closing of Wells, and
- (6) Bush clearing and mangrove cutting, and, finally,
- (7) The introduction of a pipe-borne water supply.

This latter has had a very decided influence in the amount of water kept stored in inside compounds, whereas, before the water supply was introduced, it was the habit to find many water-bearing articles hidden away, full of water, and larvæ present, whilst now these articles have either been disposed of, or one finds them piled away and turned upside down. The people knowing that the water can be obtained at any time from the public stand-pipes have completely altered their domestic habits in this respect.

In connection with this subject approval is frequently expressed as to the softness of the water as compared with the brackish water which is



obtained from the street pumps and shallow wells, thus causing a great economy in soap to the very large number of people, who apparently spend their lives washing clothes.

#### CESSPITS.

As referred to in the Report for 1916 on page 16, the Cesspits still proved to be suitable breeding places for the stegomyia, especially those which became waterlogged in the rainy season, and these were taken in hand, with the result that in the past year 97 of them have been closed. The closing was carried out as follows. The pit was first emptied of its contents, which were thrown into the sea, and then the empty pit was filled in with clean sand. There are still some more of these pits that will have to be attended to, but there is a distinct improvement in certain areas, and complaints as to these nuisances are becoming distinctly less.

#### CLOSING OF WELLS.

Since the introduction of the water supply (pipe-borne), the superficial wells, of which there are an enormous number in Bathurst, have had attention drawn to them, and these wells in the vicinity of the public stand-pipes have been closed; in all 76; there are still some others that will have to be closed later. The fact that these wells have been closed must be of benefit, because when one remembers that the soil of Bathurst is sand and in a large number of cases the cesspit was placed within a few yards of the very superficial well, it is only too obvious that the well was most probably contaminated, and this water was drunk and used for washing various utensils, and in a place where dysentery is common and where cholera has appeared, it is surprising that epidemics of water-borne nature have not been more common.

#### BUSH CLEARING AND MANGROVE CUTTING.

The amount of clearing done during the past year is considerably in advance of that done in former years. Early in the year the cutting of mangrove was commenced, in view of what has been stated in the Annual Report for 1916, under the head, "Trypanosomiasis." Many acres of mangroves have been cut down on the island on the further side of Malfa Creek, and also a gradual extension of clearing of the ground lying to the south of the Cape Road. During the year a large gang of men have been employed in further extending this area, and now all the mangroves which covered the ground between the boundary (west) of Bathurst and the second mile post have been cleared. It is in these dense mangrove swamps that the dense clouds of culex mosquitoes lurk, and it is only by eliminating these areas that a real reduction of mosquitoes will take place. Another large area has been cleared in the vicinity of the new Sanitary Station, and this area has been joined up with the area mentioned above, with the result that there is now a belt of some two miles outside the town, which is freed from mangroves. Some of the larger trees are permitted to remain, but they are trimmed so that there is a clear space of some fourteen feet at the base.

Further clearing has also been undertaken beyond the Mohamedan Cemetery lying between the Cape Road and the sea; this also makes a clearing, denuded of bush but with trees standing, outside Bathurst for about two miles. Incidentally some more small lagoons were laid bare, and will in the coming rains require attention.



## PROSECUTIONS.

The details are as follows :—

## PUBLIC HEALTH ORDINANCE, 1912.

Mosquito larvæ. Sec. 35.	Obstruction. Sec. 94.	Throwing dirt in the street. Sec. 25.	Not complying with a notice. Sec. 27.
211	2	29	11

## PUBLIC HEALTH REGULATIONS, 1917.

Mosquito larvæ. Sec. 4.	Noxious Trades. Sec. 14.	Digging up grass. Sec. 22.
5	2	11

Total Prosecutions ... 281.      Total Fines ... £96 1 0

## PUBLIC LATRINES.

The new latrine at Victoria Embankment is in course of construction, and is expected to be completed early in the coming year, when the old one will be demolished. Considerable amount of trouble has arisen from the various public conveniences, especially those situated at Box Bar and at the back of the Market. They are old wooden structures, which should be pulled down and entirely reconstructed with the minimum amount of wood. That one situated at the back of the Market, having been originally over the river, is now a land latrine, owing to silting up of sand, and its position is such that it gives rise to a decided nuisance. This latrine should be pulled down and a new one made, *which will be over the river*. The very objectionable nuisance which this place, combined with the slaughter house, to be referred to later, gives rise to, makes the beach opposite the European quarters on the Marine Parade a place where at times it is impossible to walk. During the past year it has become the routine to have all of the public latrines washed down, both inside and outside, once a quarter, with lime wash, and this has to a certain degree helped to mitigate a nuisance arising.

## MARKET.

The Albert Market still performs its useful function, and the revenue derived from it is on the increase. During the year some slight improvements were made, and the whole of the buildings were painted. There is a necessity for the further extension of covered in stalls, and this has been represented, but it will be necessary to wait until the end of the war before this can be undertaken, and there is no doubt that if it is done it will mean increased revenue, because, in the rains, many of the people who rent these open lots do not come because their goods are spoilt by the rain. Again from time to time a considerable amount of fish is spoilt and goes bad, because it is laid on stalls which are exposed to the full strength of the sun. In the future the whole of the centre of the Market should be covered in. During the year the price paid by the butchers for their stalls was raised, and at the same time they now hold these stalls under a yearly licence; this has proved to be a very good move, in that these persons, who were in the habit of giving trouble, are now under very much better discipline.

During the month of December two stand-pipes were fixed in the Market and proved of considerable advantage to the stall holders.

In the coming year it is intended to improve the condition of the pig slaughter house; at present the least said about it the better.

The large slaughter house, which is in a good position, and serves its purpose well, requires attention; in that owing to the silting up of sand it is



no longer over the river except at extreme high tide, with the result, as already mentioned above (Public Latrines), the beach becomes contaminated, and also, owing to the difficulty of getting water, very often it is cleaned out in a most inadequate manner. The whole of this very necessary building requires to be taken down and placed well over the river.

The records of slaughterings are as follows :—

	1914.	1915.	1916.	1917.
Bullocks ...	1,314	1,399	1,531	1,666
Sheep ...	187	253	202	120
Swine ...	62	149	223	402
Goats ...	Nil	Nil	40	16
Totals ...	<u>1,563</u>	<u>1,801</u>	<u>1,996</u>	<u>2,204</u>

By the above figures one cannot but notice the marked increase in the consumption of pork during the past few years.

During the year three bullocks and two pigs were seized and condemned, the cause in the pigs being cysticercus, and in the bullocks cattle disease, to be afterwards referred to. On the whole, the meat is of very good quality.

#### CATTLE DISEASE.

In the month of July a disease broke out amongst the cattle of the Protectorate, and rapidly spread, the cattle dying in enormous numbers. The first cases seen both before and after death did not present any definite symptoms, slight congestion of the internal organs being the chief, with slight congestion of the lungs, *vide* my Report No. H.11/3/17, of 30th July, 1917, but later on the symptoms appeared to approach more closely to those of rinderpest. Owing to the great mortality, this outbreak will have very considerable influence on the cattle trade and hide trade in the future. Arising out of this, a new form of nuisance arose in Bathurst, *i.e.* :—

*Hide Curing.*—In consequence of the enormous number of hides submitted for sale, the merchants in Bathurst who cure hides, of which there are seven, commenced to buy great quantities. This occurring in the rains gave rise to many complaints by various persons, on account of the abominable smell. A prolonged correspondence then took place with the local Chamber of Commerce on the subject, and it has been finally settled that in the future this trade will have to be carried on outside the town, and it is to be hoped that it will be possible to find a place at Oyster Creek, where the noxious trade can be carried out without interfering with the comfort of the public. During the time when this nuisance was at its height it was found necessary to bring to court two of the mercantile firms, who were convicted, *vide* prosecutions above.

#### BAKEHOUSES.

Of these there are fourteen, of which twelve have permits. During the year it was found necessary to revoke the permits of three, until such a time as they were able to show that their premises had been put into a fit state of repair.

#### STREETS.

The streets have been improved by having the name plates fixed, and a few more of the back streets have been levelled, as also have some in Half Die. Two streets were closed, Griffith and Chamberlain, but as the health authorities were not consulted it was apparently for some other reason.



## CEMETERIES.

An improvement has taken place in the general cemetery; the wire railing has been repaired and properly adjusted. The boundary nearest Bathurst has been removed about 150 yards further away, so that there is now an open space, which was formerly included within the cemetery fence.

The Public Works Department have undertaken the renovation of tombs and memorials, and any grave or tomb, which was in a badly dilapidated condition, if not claimed within a certain given time, by public notice, has been demolished. The result is that the whole of this cemetery is now completely changed in appearance. In the future it will be necessary for the public, if they wish to erect memorials, to obtain a permit. During the past year an arrangement was made with the Mohamedan people as regards their own cemetery, and it has been arranged that they shall be responsible for the thorough cleaning up of their cemetery twice a year, in the months of May and October; this has been done this year after a certain amount of persuasion, and the result has justified the trouble.

## SLUICE GATES.

The condition of the sluice gates is most unsatisfactory; the condition is such that they do not prevent a large amount of water entering the town, and the deplorable condition of that portion of the town known as Half Die is to a very great extent due to this cause. The above refers especially to the sluice gates at Box Bar and Half Die. Certain repairs were carried out by the Public Works Department, but they were quite inadequate. It is proposed in the coming dry season to completely block up the entrances of the sluice gates, and to have the whole of these gates removed from their frames, and completely reconstructed. The amount of water seen in both Box Bar and Half Die areas, in the rains, is not altogether due to rainfall, but a large percentage is due to sea water, and if these gates can be made to be watertight I have no doubt that there will be a very considerable improvement in the general condition of the town. In the future it is proposed that the Public Works Department will have the control of the upkeep of all the sluice gates, and provision has been made for this in the Estimates for 1918.

## LIGHTING.

The lighting of the town is still unsatisfactory, as the number of lamps is insufficient. A few more lamps have been erected on the Marine Parade, five in number, but the remainder of the town is in comparative darkness, and in some portions of the town there are no lamps. It is proposed in the coming year to erect 24 more standard lamps, and also to try the effect of Kitson lamps, one of which is ordered, and if it proves to be a success others can be obtained and placed in suitable positions.

## DISPOSAL OF RUBBISH.

The proper disposal of household refuse, &c., has been performed in a fair manner; one of the chief causes of the difficulty of getting rid of it is due to insufficient horses and carts, of which the Board of Health has only seven. It is hoped in the coming year to obtain two more. The dust bins, which are placed in a number of compounds, are rapidly wearing out, and in certain cases have fallen to pieces. The want of these accessories is very badly needed, and an Indent was sent to England ordering about 300 more; the order has been placed, but the Indent has been reduced to half. However, 110 have arrived, and are being distributed in various compounds. Touching the matter of the incombustible material, a change has been made this year, in that it is no longer placed in a barge and dumped in deep water,



but it is carted to a spot situated at Victoria Embankment, where the wall runs at right angles to the Embankment, and there dumped on the northern side of this wall. By this means very considerable time is gained, and the material has only to be handled once. When dumped, all combustible material from practically half the town is piled on top of it, and set on fire, with the result that already quite an appreciable amount of ground has commenced to be reclaimed. The depth of this reclamation is something between three and four feet, and in the future, when it has all settled down, and got rid of its noxious gases, will become quite a suitable place to build upon. The incinerators in the other portions of the town have been kept burning to their utmost capacity, and the material obtained from them has been used for filling in of compounds and roads.

#### PLANTING OF SHRUBS AND TREES.

An effort was made to improve the appearance of the sandy waste of the Marine Parade, by dividing up the area into definite compounds, and a large number of young plants were obtained (*Parkinsonia*) and planted; in the future each compound will be separated from its neighbourhood by a hedge.

A large number of flowering plants and shrubs were sent from the Botanical Station at Han, Dakar, and have been distributed between Government House and the various other compounds. The side of the Marine nearest the sea has also been planted with young trees. If all these trees grow it will completely change the appearance of this portion of the residential quarter. It is suggested that in the coming year that a further supply of shade trees be obtained and planted in suitable positions. There are certain portions of the town where there are no trees whatsoever.

#### SAND FILLING.

During the year the filling in of depressions in various places has been carried on. The Hospital compound has now been completed and has, during the rainy season, been much more satisfactory, as has been the compound of No. 1 Bungalow; this latter compound, which was always prior to last rain a breeding place for mosquitoes, gave no trouble, and now can be regarded as safe. Further filling with sand has been carried on in Rankin Place, and the ground so treated has been built upon and occupied. In this open space two more areas are in the process of being raised, and it is anticipated that by the end of the year the ground will be occupied.

#### "DUTTON SCHEME."

Under this head some progress has been made.

The ground which was raised last year, and is mentioned on page 18 of the Annual Report, has, on the whole, justified expectations. Throughout the rains in this portion of land (Annual Report, page 18, "Dutton Scheme," paragraph 2 (2)), but few mosquito larvæ have been found breeding in the streets and compounds, which is a very great change from former rains. Although a few places have sunk and water can be found from time to time here and there, on the whole the general condition of this portion of Bathurst, which was very bad, has decidedly improved, and without doubt shows the full value of filling in. Certain of the streets will have to be again attended to before the onset of the coming rains.

As regards the expropriation of the inhabitants of Clifton Road, nothing has been done, with the exception of a few odd lots, but the main bulk of houses remain the same and are just as much an eyesore as ever, and the lives of those living in the Marine Parade are made vexatious by the beating of koos,



barking of dogs, and crying of children. In the coming year it is hoped to have the whole of the lots expropriated. There is at present plenty of room in Bathurst for this purpose, either in Clifton Road, where the filling in was undertaken for this purpose in 1915, or in that area lying to the South of the main drain, between the main drain and the frontier lines, or even a few lots in Peel Street. When this has been done it will be then possible to undertake the filling in at the back of the bungalows at Marine Parade, and to raise the ground to the level of Clifton Road, because this area is one which requires very careful watching, in respect to larvæ, as has already been mentioned in a previous report, and will always be a place liable to give trouble until it is properly filled in. The majority of filling in has been done in the Half Die area, and has been steadily carried throughout the year. Up to date of writing altogether 31,789 cubic yards have been deposited, the sand being taken from the sandbank at the junction of Wellington and Wilberforce Streets. When filling this area, which has not been completed this year, it was found necessary to have a wall made, so as to prevent the sand escaping out of Half Die sluice gate. This wall is now completed, and the result will be that this end of the town will be well raised about the former floods. It was possible to observe the result during the past rains, and it was most satisfactory. The extra amount of land included in this filling in, and which was formerly only mud, has already been applied for, so that in the coming year this former swamp on the South of Cotton Street will cease to exist. As has been mentioned above, both Forster Street and Chamberlain Street have been closed; they are all now occupied by compounds, except where Goddard, Brake and Dobson Street crosses them, and all these lots had to be raised in order to conform with the level of the general filling in. In some places the filling in has been extremely heavy; in one portion of Chamberlain Street the depth was almost four feet. It is proposed to carry on the filling in in the coming year, and eventually the wall above mentioned will become one side of a drain, which will have its outfall at Half Die sluice gate.

In connection with the proposed filling in at the back of the Marine Parade, groynes are now being erected so as to obtain sand in sufficient quantities.

#### GOVERNMENT QUARTERS.

A number of the official quarters and offices have been painted and overhauled, but there is one point that deserves to be specially mentioned, and that is the condition of the mosquito proofing, which is not what it should be—in many places windows are quite destitute of it. There is no doubt that the wire perishes rapidly owing to sea breezes and moisture, and there is now the difficulty of obtaining the material. In some of the bungalows I consider that the total proofing of the house is not required, and it would be quite sufficient to have the bedroom alone proofed or, as an alternative, large cage. Owing to the construction of the bungalows, and character of the windows and jalousies, the bungalows are really not mosquito proof no matter how much mosquito gauze is used.

Attention is drawn to No. 11 Wellington Street, where three officials live. These are the quarters at the back of which the horses of the Board of Health are stabled, and the windows of one quarter are exactly over the stable, whilst in front the other quarter is placed over a shop occupied by some Syrians. I do not consider that officials should be asked to live under the above conditions, and complaints have reached me on this subject, so I now take the opportunity of putting this matter forward. The question of housing will in the future have to be again considered, as there are not sufficient bungalows for the full staff, and after the war there will once more be congestion, unless more bungalows are erected.



### RAT DESTRUCTION.

An endeavour was made to induce the public to bring any rats that were caught to the Board of Health, by offering a reward of one penny per rat, and this was made public by means of a public notice. The result has been most disappointing, as the grand total received and paid for was 185 rats, although one frequently sees dead rats thrown into the street or on the foreshore, which have to be removed by the scavenging carts.

### EXTENSION OF BATHURST.

This is a point that will have to be considered in the near future, as there is no doubt that a great portion of the town is overcrowded, and a single glance at the ordnance map will verify this. From figures given by the Land Officer, there are apparently only 152 acres available for building purposes and the population is slowly increasing, at present slightly over 8,000, this works out at 52 persons per acre.

Owing to the great increase in commercial activity, and the immigration of new firms (it is rumoured that more are coming), lots have been bought out in considerable quantities, with the result that these people have to go elsewhere, and as there is no vacant land this means division and sub-division of other lots. When the people in Clifton Road are expropriated, and there is sufficient land for them available, there will be no other sites available inside Bathurst. An example can be given. When the filling in under the Dutton Scheme was being carried on in Cotton Street (work still being carried out) eight new lots were formed, and before some of these lots were even completed applications were many times in excess of the number of lots. Applications are frequently made for land, and any lot that is offered for sale promptly commands a high price. The only direction in which the town can expand is to the west of the Victoria Embankment towards Malfa Creek; in this direction there is a considerable amount of land that could be converted into an excellent site for further building purposes. This would entail the consideration of a proper scheme of filling in and would have to be done by means of a suction dredger.

By extending the existing wall which runs out to the latrine just north of the Half Die sluice to a point where Malfa Creek joins the harbour, a large area would be enclosed, and by means of the dredger the harbour could be deepened and the material deposited on the north side of this wall, thus reclaiming many acres of land which is at present only mud at low water. This area would be a healthy one, as almost at any time there is a good breeze found to be blowing, and it is open. There would be another advantage in that it would give a good frontage, if this wall was built, for boats, &c., and the same would apply to Malfa Creek if it was deepened. At any rate in a few years the question of the overcrowded state of Bathurst will have to be considered, and something will have to be done to relieve it, and the above proposal appears to be the obvious solution. The filling in would not require to be more than a couple of feet in depth over practically the whole of this area.

### PRISON.

What has already been stated in former reports applies again this year. The prison is too small for its requirements and at times is overcrowded. Such as it is, it is extremely well kept.

### SANITARY LABOURERS' COMPOUND, &c.

This compound has been kept in good order, and has been attended to by the Public Works Department. The whole of the buildings now have concrete floors, and the exterior walls have been plastered. This compound serves a



most useful purpose in that a gang of men can be kept permanently, with the result that work can be carried on regularly.

During the month of July, in consequence of the difficulty of obtaining labour, the amount of work fell to a minimum, and it was necessary to raise the scale of pay from 1s. 3d. to 1s. 6d. per diem, as a strike took place. It is to be feared that this scale of pay will now become permanent.

#### LEGISLATION.

The following were passed during the year :—

- (1) Market (Amendment) Rules, 1917.
- (2) Protectorate (Public Health) Ordinance, 1917.
- (3) The Public Health Regulations, 1917.
- (4) Diseases of Animals Regulations, 1917.
- (5) Town of Bathurst (Amendment) Regulations, 1917.
- (6) MacCarthy Square Ordinance, 1917.

#### RECOMMENDATIONS FOR FUTURE WORK.

- (1) Improved lighting of the town.
- (2) New Stables for Board of Health.
- (3) Continuation of filling in under Dutton Scheme (Half Die).
- (4) Expropriation of Clifton Road, and filling in back of bungalows.
- (5) Extension of macadamising of the streets.
- (6) Extension of the town of Bathurst.

(Sgd.) R. W. ORPEN,  
*Medical Officer of Health.*

#### MACCARTHY ISLAND AND CAPE ST. MARY.

Previous to the War, MacCarthy Island was a recognised Medical Station, having a Hospital and Dispensary, and a Medical Officer in charge.

Owing to the absence of so many of the Medical Staff on war service, no Medical Officer has been quartered at MacCarthy Island during 1917, the Hospital and Dispensary being in charge of a Dispenser.

During the year 1918 certain sections of the Public Health Ordinance will be applied to both MacCarthy Island and to Cape St. Mary, with a view to extending the Ordinance further in the future.

2. Cape House, which has been considerably improved, is a rest home for European Officials. In addition, several of the Trading Firms and Missions are building houses along the front.

3. It is proposed to begin by employment of a gang of scavengers under an Acting Inspector of Nuisances at each place to remove rubbish, fill in holes, dig trenches, and do such minor improvements as are actually necessary now; a sum of money has been voted for this purpose, and the work will be under the direction of the Senior Medical Officer.

At Cape St. Mary is the training camp for the W.A.F.F., also a temporary camp for the "A" Company of the West African Regiment.

The Senior Medical Officer will visit MacCarthy Island as frequently as is feasible; it is hoped that a considerable improvement may be effected during 1918.

(Sd.) E. C. ADAMS,  
*Senior Medical Officer.*



BATHURST,

GAMBIA,

March 26th, 1917.

SIR,

I have pleasure in submitting to you my Report of the Dental Work done in the Colony from February 11th to March 25th, 1917.

The following conditions were treated :—

Caries Simplex	...	...	...	...	...	52
Pulpitis	...	...	...	...	...	17
Dento-Alveolar Abscess	...	...	...	...	...	4
Neuralgia...	...	...	...	...	...	5
Pyorrhœa Alveolaris	...	...	...	...	...	3
Periostitis	...	...	...	...	...	7
Gingivitis Acuta	...	...	...	...	...	1
Erosion	...	...	...	...	...	3
Gangrene Afpulp	...	...	...	...	...	1

93

## TREATMENTS.

Extractions	...	...	...	...	...	27
Conservative :—						
Synthetic Porcelain	...	...	...	...	...	6
Amalgam Ag.	...	...	...	...	...	10
Amalgam Cu.	...	...	...	...	...	7
P. G. P.	...	...	...	...	...	5
T. G. P.	...	...	...	...	...	3
Root fillings and dressings	...	...	...	...	...	16
Cleaning, scaling, &c.	...	...	...	...	...	8

82

## PROSTHETIC WORK.

Artificial dentures and repairs thereto	...	...	...	6
---	-----	-----	-----	---

## NUMBER OF OFFICIALS TREATED.

European Officials	...	...	...	...	15
Native Officials	...	...	...	...	81
Others	...	...	...	...	8

104

I arrived in Bathurst from Sierra Leone on February 11th, and during my stay in the Colony a large amount of useful work has been done, and my visit has, in every way, been justified. Indeed, many patients, both European and Native, had given up hope of my coming and I received a most cordial welcome on my arrival.

2. As will be seen from the figures a large amount of conservative work was done. Most of this involved root treatments and this entails the expenditure of a great deal of time. There are not many European Officials resident in Bathurst, but almost all required some treatment, and I have every reason for believing that my services to them and to the Native



Officials were appreciated. Little prosthetic work was attempted, as the loss of my European Assistant and the short time at my disposal did not permit of this. My first visit to the Gambia has given me great pleasure, and to the Medical Staff I am indebted for much kindness and help which was ungrudgingly given.

I have the honour to be,

Sir,

Your obedient Servant,

(Sgd.) H. F. HARDIE.

THE HONOURABLE  
THE SENIOR MEDICAL OFFICER,  
Bathurst.

# H.M. NAVAL W/T STATION, CAPE ST. MARY, BATHURST, GAMBIA.

## REPORT ON THE ILLNESSES OCCURRING DURING 1917.

### *Complement 14.*

*Malaria.*—There were eight cases of this amongst four men—one man four attacks; one man two attacks; one man one attack; one man one attack.

None were serious. Subtertian (?) parasites were found in the third man.

The first two had had several attacks before.

The third was a fresh case, moderately severe, and was sick nine days altogether.

The fourth case was a slight relapse (probably) in an officer who had had malaria previously.

*Gastritis.*—One case occurred, probably due to unsuitable diet. The man was sick three days, with slight rise in temperature; he was of a neurotic type, and was distinctly inclined to vomiting.

*Enteritis.*—One case of simple diarrhoea; on the sick list one day, and probably due to carelessness in diet.

*Heat-stroke.*—A very slight case in an officer who was rather debilitated; he was off duty two days.

*Catarrh.*—One case; on the sick list three days.

### SUMMARY.

		Entries.		Patients.		Days Sickness.	
Malaria	...	8	...	4	...	34	(*Seven days in Hospital).
Gastritis	...	1	...	1	...	3	
Enteritis	...	1	...	1	...	1	
Heat-stroke	...	1	...	1	...	2	
Catarrh	...	1	...	1	...	3	
		—		—		—	
		12	...	8	...	43	
		==		==		==	

(Sgd.) H. A. BROWNING,

Staff-Surgeon, R.N.,

*Officer-in-Charge.*

To the SENIOR MEDICAL OFFICER,  
Bathurst,  
Gambia.

## DEPARTMENTAL CHANGES.

## EUROPEAN STAFF.

Names.	Office.	Remarks.
A. E. Horn ... ..	Senior Medical Officer ...	Transferred to Nigeria (N.P.), January 10th.
E. C. Adams ... ..	Senior Medical Officer ...	Transferred from Gold Coast, March 10th.
T. Ryan ... ..	Medical Officer ... ..	On leave April 14th. Died April 24th.
E. B. Bate... ..	Medical Officer ... ..	Confirmed.
F. C. V. Thompson ...	Medical Officer ... ..	From leave, resumed duty November 27th.
H. F. Hardie ... ..	Dentist ... ..	Assumed duty (from Sierra Leone) from February 11th to March 29th.
Tom Bishop (Native) ...	Temporary Medical Officer	Appointed from December 6th, 1916, to February 13th, 1917.
M. Thompson ... ..	Nursing Sister ... ..	On leave July 6th to December 22nd.
M. C. Parsons ... ..	Nursing Sister ... ..	Appointed July 28th.
H. R. Wakefield ... ..	Nursing Sister ... ..	Leave September 9th.

## NATIVE STAFF.

Names.	Office.	Remarks.
H. A. Williams ... ..	Fourth Grade Clerk ...	Leave October 1st to 14th.
J. J. Thomas ... ..	Dispenser ... ..	From leave and resumed duty March 6th.
E. W. Johns ... ..	Dispenser ... ..	Leave October 1st to 31st.
S. B. Palmer ... ..	Assistant Dispenser and Dresser.	On leave from April 2nd to 15th.
M. Jobe ... ..	Ward Attendant ... ..	On leave June 1st to 14th.
P. E. Umayya ... ..	Ward Attendant ... ..	On leave April 16th to 29th.
J. T. Williams ... ..	Pupil (Apprentice) ...	Appointed Ward Attendant April 1st. Leave December 17th.
L. H. C. Lewis ... ..	Female Attendant ... ..	Resigned June 1st.
E. C. Bruce ... ..	Female Attendant ... ..	Dismissed December 1st.
J. Wilson ... ..	Female Attendant ... ..	Appointed July 1st.
E. N'Jie ... ..	Cook ... ..	Confirmed.



## RETURN OF VACCINATIONS FOR 1917.

Result.	Bathurst.	Protectorate.	Remarks.
Successes ... ..	350	3,401	
Failures ... ..	123	187	
Not seen ... ..	191	4,532	
Total ... ..	664	8,120	

## RETURN OF INMATES AT THE HOME FOR DESTITUTES AND AFFLICTED PERSONS FOR THE YEAR 1917.

Sex.	Remained 31.12.16.	Admitted 1917.	Total.	Discharged.	Died.	Remaining 31.12.17.
Male ... ..	4	7	11	2	2	7
Female ... ..	5	3	8	1	5	2
Total ... ..	9	10	19	3	7	9

*Causes of deaths:* Senile decay, Hemiplegia, Exhaustion due to ulceration process of leg, Exhaustion due to burns, Leprosy, Post pyrexia, Asthenia, and epilepsy.

## INFECTIOUS DISEASES HOSPITAL.

The following cases were treated in the Infectious Diseases Hospital during the year 1917 :—Chicken-pox, three males.

TABLE VI.

## RETURN OF DISEASES AND DEATHS (IN-PATIENTS), 1917.

Disease.	Remaining end of 1916.				Admissions, yearly total.				Deaths, yearly total.				Total cases treated.				Remaining end of 1917.				Remarks.	
	Bathurst.	Prison.	Infirmary.	MacCarthy Island.	Total.	Bathurst.	Prison.	Infirmary.	MacCarthy Island.	Total.	Bathurst.	Prison.	Infirmary.	MacCarthy Island.	Total.	Bathurst.	Prison.	Infirmary.	MacCarthy Island.	Total.		
Malarial fevers ...	1	—	—	—	1	147	2	1	1	150	13	—	—	—	13	148	2	1	—	1	151	3
Yellow fever ...	—	—	—	—	—	5	1	—	—	6	1	—	—	—	1	5	—	—	—	—	6	—
Dysentery ...	—	—	—	—	—	1	—	—	—	1	—	—	—	—	—	1	—	—	—	—	1	—
Sleeping sickness ...	—	—	—	—	—	3	—	—	—	4	—	—	—	—	—	3	—	—	—	—	4	—
Gonorrhoea ...	—	—	—	—	—	1	—	—	—	2	—	—	—	—	—	1	—	—	—	—	2	—
Parasitic disease...	—	—	—	—	—	3	—	—	—	3	2	—	—	—	2	3	—	—	—	—	3	—
Tetanus ...	—	—	—	—	—	9	—	—	—	9	—	—	—	—	—	9	—	—	—	—	9	—
Rheumatism ...	—	—	—	—	—	1	—	—	—	1	—	—	—	—	—	1	—	—	—	—	1	—
Debility ...	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	1	—
Syphilis ...	—	—	—	—	—	2	—	—	—	2	—	—	—	—	—	2	—	—	—	—	2	—
Appendicitis ...	—	—	—	—	—	1	—	—	—	1	—	—	—	—	—	1	—	—	—	—	1	—
Anæmia ...	—	—	—	—	—	1	—	—	—	1	—	—	—	—	—	1	—	—	—	—	1	—
Elephantiasis ...	—	—	—	—	—	2	—	—	—	2	—	—	—	—	—	2	—	—	—	—	2	—
Septicæmia ...	—	—	—	—	—	1	—	—	—	1	—	—	—	—	—	1	—	—	—	—	1	—
Tuberculosis (Phthisis) ...	1	—	—	—	1	3	—	—	—	3	1	—	—	—	1	2	—	—	—	—	2	—
Diseases of the nervous system ...	—	—	—	—	—	7	—	—	—	7	—	—	—	—	—	7	—	—	—	—	7	—
" " eye ...	—	—	—	—	—	3	—	—	—	3	—	—	—	—	—	3	—	—	—	—	3	—
" " ear ...	—	—	—	—	—	16	—	—	—	16	8	—	—	—	8	17	—	—	—	—	17	—
" " circulatory system ...	1	—	—	—	1	40	—	—	—	42	7	—	—	—	7	40	—	—	—	—	42	—
" " respiratory system ...	—	—	—	—	—	80	3	—	—	85	7	—	—	—	7	80	3	—	—	—	85	—
" " digestive system ...	—	—	—	—	—	2	—	—	—	2	—	—	—	—	—	3	—	—	—	—	3	—
" " lymphatic system ...	1	—	—	—	1	15	—	—	—	16	1	—	—	—	1	15	—	—	—	—	16	—
" " urinary system ...	—	—	—	—	—	12	—	—	—	12	—	—	—	—	—	12	—	—	—	—	12	—
" " generative system ...	3	—	—	—	3	28	—	—	—	28	2	—	—	—	2	31	—	—	—	—	31	—
Pregnancy and parturition ...	—	—	—	—	—	3	—	—	—	3	—	—	—	—	—	3	—	—	—	—	3	—
Female breast ...	—	—	—	—	—	3	—	—	—	3	—	—	—	—	—	4	—	—	—	—	4	—
Organs of locomotion ...	1	—	—	—	1	23	—	—	—	23	—	—	—	—	—	23	—	—	—	—	23	—
Connective tissue ...	3	—	—	—	3	18	—	—	—	18	—	—	—	—	—	21	—	—	—	—	21	—
Cellular tissue ...	—	—	—	—	—	12	—	—	—	12	—	—	—	—	—	15	—	—	—	—	15	—
Skin ...	3	—	—	—	3	23	—	—	—	23	1	—	—	—	1	23	—	—	—	—	23	—
Injuries ...	—	—	—	—	—	(25)	—	—	—	(25)	—	—	—	—	—	(25)	—	—	—	—	(25)	—
Surgical operations ...	—	—	—	—	—	1	—	—	—	1	—	—	—	—	—	1	—	—	—	—	1	—
No appreciable disease ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
TOTAL ...	14	—	—	—	14	468	6	19	493	45	3	48	6	19	507	8	—	—	—	—	3	11
										</												

Surgical operations included under respective diseases.



## TABLE VII.

## OUT-PATIENTS.

SHOWING DETAILS OF CASES IN 1917.

Diseases.	Bathurst.	Prison Infirmary.	MacCarthy Island.	Total.
Malarial fevers ... ..	1,061	24	43	1,128
Blackwater Fever ... ..	—	—	1	1
Anæmia ... ..	23	—	6	29
Gonorrhœa ... ..	52	8	23	83
Debility ... ..	41	3	11	55
Dysentery ... ..	4	4	7	15
Rheumatism ... ..	232	28	104	364
Parasitic disease ... ..	188	5	48	241
Marasmus ... ..	—	—	3	3
Tuberculosis ... ..	2	—	—	2
Tetanus ... ..	3	—	—	3
Syphilis ... ..	16	2	5	23
Chicken-pox ... ..	1	—	—	1
Leprosy ... ..	—	—	2	2
Goitre ... ..	—	—	10	10
Varicocele ... ..	—	3	—	3
Appendicitis ... ..	2	—	—	2
Diseases of the nervous system ...	165	7	26	198
"  "  "  eye ... ..	257	5	29	291
"  "  "  ear ... ..	122	4	17	143
"  "  "  nose ... ..	66	—	—	66
"  "  "  circulatory system ...	65	3	2	70
"  "  "  respiratory system ...	1,158	28	144	1,330
"  "  "  digestive system ...	1,308	77	473	1,858
"  "  "  lymphatic system ...	20	6	1	27
"  "  "  urinary system ...	59	3	3	65
"  "  "  generative system ...	48	—	18	66
Affections connected with pregnancy ...	10	—	—	10
"  "  "  parturition ...	5	—	—	5
Diseases of female breast ... ..	8	—	—	8
"  "  organs of locomotion ...	127	—	—	127
"  "  connective tissues ... ..	215	—	25	240
"  "  cellular tissue ... ..	63	—	—	63
"  "  skin ... ..	789	19	136	944
Injuries ... ..	419	13	72	504
Undefined ... ..	71	26	14	111
<b>TOTAL ... ..</b>	<b>6,600</b>	<b>258</b>	<b>1,223</b>	<b>8,081</b>

	Bathurst.	MacCarthy Island.
Old cases ... ..	6,624	327

(Sgd.) E. C. ADAMS,  
*Senior Medical Officer.*