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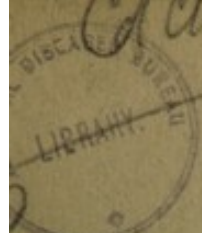
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COLONY OF THE GAMBIA.

THE ANNUAL MEDICAL AND SANITARY REPORT

FOR THE YEAR 1922.

James (Frank A.)

[Medicine Officer & Health Officer]

Price 5/-

Allan (K.B.)
[Senior M.O.]

*All Communications to be addressed
to the Crown Agents for the
Colonies, the following refer-
ence and the date of this
document being quoted:—*



G
Gambia 3924/1

The Tropical Diseases Bureau,
23, Endsleigh Gardens,
N.W.1.

*With the Compliments of the
Crown Agents for the Colonies.*

The Medical & Sanitary Report of the
Gambia for the year 1922

4, MILLBANK,
WESTMINSTER,
LONDON, S.W. 1.
August 192 3

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COLONY OF THE GAMBIA

THE ANNUAL

MEDICAL AND SANITARY REPORT

FOR THE YEAR 1923

PRINTED BY THE GOVERNMENT OF THE GAMBIA
AT THE GOVERNMENT PRESS, BANJUL

THE
ANNUAL MEDICAL AND SANITARY REPORT

1922.

1923.

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 Bathurst for the year 1922, together with the Returns, &c., appended thereto.

I have the honour to be,

Sir,

Your obedient servant,

K. B. ALLAN,

Senior Medical Officer.

THE HONOURABLE

THE COLONIAL SECRETARY.

I have the honor to acknowledge the receipt of the
letter of the 14th inst. and for transmission to the
Honorable the Secretary of State the attached report on the
Health and sanitary condition of Alabama for the year 1877.
Respectfully,
Yours obedient servant,

I have the honor to be

Very respectfully,

R. H. ALLEN

Commissioner of Health

The Honorable

The Governor

THE ANNUAL MEDICAL AND SANITARY REPORT FOR 1922.

I. ADMINISTRATIVE.

(a) STAFF.

The Staff during the year consisted of the following officers :—

| | |
|------------------------|------------------|
| Dr. T. F. G. Mayer | Dr. E. B. Bate. |
| Dr. F. C. V. Thompson. | Dr. G. E. Craig. |
| Dr. R. H. Miller. | |

The following held the position of Senior Medical Officer during the year :—

| | |
|---------------------|------------------------|
| Dr. T. F. G. Mayer. | Dr. F. C. V. Thompson. |
|---------------------|------------------------|

The following acted as Medical Officer of Health :—

| | |
|---------------------|------------------|
| Dr. T. F. G. Mayer. | Dr. F. A. Innes. |
|---------------------|------------------|

Mr. J. Carr, Dental Surgeon, and a mechanic were on duty in this Colony January 26 to March 12, and returned to Sierra Leone.

The Nursing Staff consisted of the following :—

| | |
|--------------------|----------------------|
| Miss M. Thompson. | Miss P. R. di Menna. |
| Miss C. G. Leggat. | Miss P. Stagg. |

The following acted as Senior Nursing Sister :—

| | |
|-------------------|--------------------|
| Miss M. Thompson. | Miss C. G. Leggat. |
|-------------------|--------------------|

SANITARY STAFF.

The Sanitary Staff consisted of the following :—

Dr. T. F. G. Mayer, Chairman, Board of Health.
 Dr. F. A. Innes, Medical Officer of Health.
 Mr. C. Wolfendale, Sanitary Inspector.
 Mr. A. F. V. Vaughan, Assistant Sanitary Inspector.

(b) FINANCIAL.

MEDICAL DEPARTMENT.

| | Estimated. | Actual. |
|--------------------------|------------|----------------|
| | £ | £ s. d. |
| Total Revenue | 350 | 473 16 7 |
| Total Expenditure | 15,471 | 13,487 0 2 |

PUBLIC HEALTH DEPARTMENT.

| | Estimated. | Actual. |
|--------------------------|------------|------------|
| | £ | £ s. d. |
| Total Revenue | 858 | 1,253 15 3 |
| Total Expenditure | 10,209 | 8,719 3 4 |

II. PUBLIC HEALTH.

(a) GENERAL REMARKS.

(1) *General Diseases.*

Disease of Chest and Intestine are the most prevalent Medical complaints and Ulcers the most common Surgical complaint. Venereal Diseases are also very widespread.

(2) *Communicable Diseases.*

1. *Insect-borne Diseases.*—(1) Yellow Fever, 3 cases, 1 death; (2) Malaria, 1,138 cases treated.

2. *Epidemic Diseases.*—(1) Small-pox, 24 cases, 2 deaths; (2) Plague, 35 cases, 31 deaths.

3. *Helminthic.*—Ascariasis, 307 cases noted.

(b) EUROPEAN OFFICIALS.

Health good. No deaths. Malaria appears to be the most frequently occurring complaint, and is most prevalent during the rainy season.

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

| | 1920. | 1921. | 1922. |
|---|-------|-------|--------|
| Total number of officials resident | 55 | 75 | 63 |
| Average number resident | 22·8 | 38 | 48 |
| Total number on sick list | 52 | 50 | 68 |
| Total number of days on sick list | 379 | 281 | 387 |
| Average daily number on sick list | 1·03 | 0·77 | 1·22 |
| Percentage of sick to average number resident ... | 158·5 | 131·5 | 141·66 |
| Average number of days on sick list for each patient | 7·28 | 5·0 | 5·47 |
| Average sick time to each resident | 11·5 | 7·0 | 8·06 |
| Total number invalided | 5 | 3 | 2 |
| Percentage of invalidings to total residents | 9·9 | 4 | 3·17 |
| Total deaths | 1 | — | — |
| Percentage of deaths to total residents | 1·8 | — | — |
| Percentage of deaths to average number resident ... | 3·04 | — | — |
| Number of cases of sickness contracted away from residence | — | — | — |

The causes of the two invalidings were—(1) Synovitis of knee; (2) Abscess of liver.

(c) NATIVE OFFICIALS.

The health of the African Official community does not compare so favourably with former years. Malaria and chest complaints are the two commonest causes of sick list entries.

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

| | 1920. | 1921. | 1922. |
|---|--------|-------|--------|
| Total number of officials resident | 167 | 177 | 192 |
| Average number resident | 132.07 | 155 | 177 |
| Total number on sick list | 186 | 182 | 270 |
| Total number of days on sick list | 792 | 854 | 1,096 |
| Average daily number on sick list | 2.16 | 2.41 | 3.1 |
| Percentage of sick to average number resident ... | 110.6 | 85.16 | 152.54 |
| Average number of days on sick list for each patient | 4.26 | 4.85 | 4.16 |
| Average sick time to each resident | 5.9 | 5.5 | 6.19 |
| Total number invalided | — | — | 2 |
| Percentage of invalidings to total residents | — | — | 1.04 |
| Total deaths | — | 1 | 5 |
| Percentage of deaths to total residents | — | — | 2.60 |
| Percentage of deaths to average number resident ... | — | .64 | 2.82 |
| Number of cases of sickness contracted away from residence | — | — | — |

The causes of the two invalidings were—(1) Fits; (2) Cough.

The causes of the five deaths were—(1) Small-pox, 1 case; (2) Tuberculosis, 2 cases; (3) Pneumonia, 2 cases.

(d) GENERAL EUROPEAN POPULATION.

This is made up as follows:—

| | Males. | Females. |
|-----------------------------------|--------|----------|
| Government Officials | 47 | 3 |
| Residents | 6 | 22 |
| Employees of Trading Firms | 115 | — |
| Missionaries | 5 | 7 |
| Total | 173 | 32 |

Grand total, 205.

Of the 155 non-officials, one was invalided and one died; a death and invaliding rate of 6.4 per 1,000.

The death was due to Aortic Disease and Syncope and the invaliding to Pyorrhoea.

(e) GENERAL AFRICAN POPULATION.

In a population of 9,395 there were 295 births, a birth rate of 31.39 per 1,000; and 437 deaths, a death rate of 46.62 per 1,000.

There were 50 still births and 123 deaths of infants up to one year of age.

Percentage of infants in total deaths, 28.12; the average of previous five years being 26.2.

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

| How employed. | Number. | Deaths. | Invalided. | Death rate per cent. | Invaliding rate per cent. |
|--------------------------|---------|---------|------------|----------------------|---------------------------|
| 1921. | | | | | |
| Merchants | 123 | 1 | 2 | ·81 | 1·62 |
| Other occupations | 28 | 1 | Nil | 3·75 | 3·75 |
| Missionaries | 12 | Nil | Nil | Nil | Nil |
| Total | 163 | 2 | 2 | 1·23 | 1·22 |
| 1922. | | | | | |
| Merchants | 115 | 1 | 1 | ·64 | ·64 |
| Other occupations | 28 | — | — | — | — |
| Missionaries | 12 | — | — | — | — |
| Total | 155 | 1 | 1 | ·64 | ·64 |

Cause of Death of European Non-Official.—Aortic Disease.

Cause of Invaliding of European Non-Official.—Pyorrhœa.

NUMBER OF DEATHS AND DEATH-RATE PER THOUSAND OF THE POPULATION FOR THE PAST TEN YEARS IN THE COLONY.

(*Vide* CENSUS, 1921, ETC.).

| Years. | Estimated Population. | Total Deaths. | Death-rate per 1,000. | Remarks. |
|-------------|-----------------------|---------------|-----------------------|-------------------------|
| 1913 | 13,157 | 335 | 25·47 | |
| 1914 | 13,157 | 342 | 25·99 | |
| 1915 | 13,157 | 296 | 22·49 | |
| 1916 | 7,700 | 272 | 35·32 | Bathurst only. |
| 1917 | 8,474 | 262 | 30·09 | Do. |
| 1918 | 8,474 | 662 | 77·08 | Do. (Influenza Epi- |
| 1919 | 8,474 | 299 | 35·28 | Bathurst only. [demic.] |
| 1920 | 8,474 | 414 | 45·43 | Do. |
| 1921 | 9,227 (census) | 394 | 42·59 | Do. |
| 1922 | 9,395 | 437 | 46·62 | 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. |
|-------------|---------------|---------------------------------------|--------------------------------------|-------------------------------------|------------------------|---------------|----------------|
| 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. |
| 1918 | 263 | 89 | 121 | 17 | — | 50 | Do. |
| 1919 | 234 | 30 | 63 | 18 | 4 | 39 | Do. |
| 1920 | 249 | 59 | 82 | 13 | 5 | 41 | Do. |
| 1921 | 284 | 60 | 40 | 25 | 6 | 52 | Do. |
| 1922 | 295 | 56 | 102 | 12 | 9 | 50 | Do. |

The birth rate 1922, 31·39 per 1,000.

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

| Years. | Births. | Deaths. | Births in Excess. | Deaths in Excess. | Remarks. |
|-------------|---------|---------|-------------------|-------------------|---------------------|
| 1913 | 254 | 282 | — | 28 | |
| 1914 | 306 | 342 | — | 36 | |
| 1915 | 279 | 296 | — | 17 | |
| 1916 | 314 | 306 | 8 | — | Bathurst only. |
| 1917 | 337 | 262 | — | 25 | Do. |
| 1918 | 263 | 662 | — | 399 | Influenza Epidemic. |
| 1919 | 234 | 299 | — | 65 | Bathurst only. |
| 1920 | 249 | 413 | — | 164 | Do. |
| 1921 | 284 | 399 | — | 115 | Do. |
| 1922 | 295 | 437 | — | 142 | Do. |

Death rate 1922, 46·62 per 1,000.

Registration compulsory and reliable.

III. SANITATION.

Small Pox.—Between January and June, 1922, twenty-four cases of Small Pox were notified and treated in the Infectious Diseases Hospital.

There were two deaths. It has been supposed and said that Bathurst is well vaccinated; but unfortunately hundreds of vaccinations have been performed, *e.g.*, in 1921, without success in a single case. It is also very common to find people from the Protectorate claiming to have been vaccinated who show traces of the lancet indeed but none of vaccine lymph. When confronted with cases of Small Pox, our greatest difficulties are to get reliable lymph, and to ascertain by actual inspection the results of vaccinations performed.

Plague.—In September an outbreak of sickness was reported on the North Bank which clinical and microscopic investigation proved to be septicæmic and bubonic plague.

Independent lines of infection were traced with certainty to a focus in French Senegal, and we were entirely unaware of its presence so near our border. Gambians consider it a new disease among them. Thirty-five cases were ascertained to have occurred, of which only four recovered. The last was observed on October 17. Immediately on discovery of the disease active measures were adopted, including isolation of infected villages, evacuation of infected huts, limitation of inter-village traffic, Haffkinisation of all infected villages, antirrat measures, and inspections and disinfectations at control stations in the interests of Bathurst.

Recrudescence, with possible extension, must be anticipated in 1923. Antirrat measures in Bathurst, so far, have been quite unsuccessful, and both education and new legislation have been recommended to help safeguard this long-threatened centre.

Yellow Fever.—We were next called to face Yellow Fever in October. Clinical and *post mortem* evidence settled the diagnosis of the first case. He was a young Moroccan.

Two mild cases (both adolescent natives) occurred later, and then two other suspected cases (native). An intensive antistegomyia campaign was rigorously prosecuted. All suspected non-immunes were carefully supervised.

Infected houses (and their immediate neighbours) were enveloped in large tarpaulins well laced or overlapped, and fumigation of them by Sulphur (both open pot and Clayton methods) was so successful that mosquitoes, beetles, bugs, ants, rats and bats all fell victims to the fumes. The people, at first chary of the performance, rejoiced over the wholesale destruction of their insect tormentors. No damage to property was reported.

Fumigation became popular.

Night Soil Service.—There is no system of disposal of Night Soil. That intolerable offence should be so markedly absent is one of the marvels of this river sandpit.

It is possible, however, for a community of 9,000 odd to trust too much and too long to entire absence of system in this fundamental matter. Trenching, incineration, biologic treatment, are all too difficult of adaptation or too expensive for this place. The possibilities of entirely successful river disposal all the more plainly claim exhaustive consideration. The Gambia river, four miles broad at the narrowest point in its Bathurst reach, of average depth of probably well over 25 feet, with easily reached currents that can carry away offensive material without returning it to the beach, and of 4-6 knots velocity, may be trusted to effect entire removal of night soil if only we can get it in at a suitable point. Should removal by anchored barge prove impossible, or towing out under power, then a scheme involving liquefaction and pneumatic ejection may have to be considered. The matter is very urgent for the whole community, and the necessary data for a decision should be acquired as soon as possible, and well considered action taken.

Storm Drains, etc.—The drains in town require a considerable amount of repair and regrading. If amalgamation of them into a system cannot be undertaken, great improvement could surely be effected in sections where the water has at present to be brushed up hill, wages, time and materials being annually used up to do what gravitation could be doing better all the time and for nothing. Certainly depressions in streets and yards have been filled up, and from certain levellings and fillings in and around the general cemetery a marked and permanent effect is anticipated in mosquito reduction. But with reduced instead of increased means we may be unable to stabilise and fructify these promising efforts.

Prison Oedema.—The Medical Officer in charge of Prisons has been reporting increase in these occasionally fatal "Beriberic" cases. The diet scale of prisoners has been subjected to scrutiny and found insufficient in quantity and defective in caloric, biologic and other values. The backbone of the diet is polished rice, and this should be forthwith entirely replaced by husked rice. There seems to be indications that defective diet is only a factor in the situation; the sleeping accommodation, *e.g.*, in the lower cells of No. 1 Prison, which have hitherto shown a predominance of cases, is damp and not well ventilated. Necessary changes in the diet scale have been recommended.

Vital Statistics.—The general death rate for 1922 is 46.62 per mille, and the average since 1916 is 41.99. In 1918, owing to influenza, it rose to 62.92.

It appears from the graph of monthly deaths, with population and rainfall superimposed, that for the last eight years, the heaviest mortality has occurred in October.—(*Graph attached.*)

Although the rains are practically over by October, and the population has then decreased by some 700 up-river traders, the death rate is twice as high as in, say, the month of April.

In attempting to account for this excessive mortality in October, the following factors claim attention :—

- (1) October is the hottest month in the year.
- (2) Its diurnal range of temperature is small.
- (3) Its relative humidity must be very high.
- (4) The number of sick at Out-Patient Department is heaviest in October.
- (5) The island is water-logged by heavy rains in August and September, and even slight showers in October do not evaporate readily but lie as pools and muddy areas.
- (6) Insect pests (flies and mosquitoes) are very numerous during the rains; and presumably all malarial, diarrhoeal, dysenteric infections and relapses of the rains attain their maximum ill effect in October.
- (7) Poverty has undoubtedly some effect. In this improvident community people are likely to be worst off for food in October, which is the end of their non-earning period. This fact is confirmed by the cash sales of the mercantile firms.

The influenza epidemic seems to have something to do with a slight but marked increase in mortality from respiratory diseases and tuberculosis. This is also indicated in graph form.—(*Graph attached.*)

Infant Mortality Rate.—The birth rate is 31·39. The average since 1916 is 31·17. It is not easy at first to realise what serious facts lie behind such simple looking rates. Infant deaths reach the high figure of 28 per cent. of the whole. Tetanus accounts for 32 per cent. of these infant deaths. Diarrhoea accounts for many also. Taking now the infant mortality rate, which “is looked upon by Sanitarians as affording the most important index as to the general sanitary conditions,” we find it stands at the atrociously high figure of 502.

In plain words infants (up to one year) in 1922 were dying at the rate of 502 for every 1,000 born—a perfect holocaust of infant life! The average figure since 1916 is 452. If it has been advanced by the Health Officer in Penang that 2 per cent. deaths from tetanus is “a striking testimony to the need for more trained midwives and more education for mothers,” what is to be said about 32 per cent. of Bathurst, which has no trained midwives? As far back as 1909 the Medical Report for this Colony called special attention to the high rate of loss of mothers and babies, when the infant mortality works out at 241. What added emphasis 502 calls for! Freetown makes no comment on its figure 333 recorded for 1921, though Lagos admits that its 285 is somewhat alarming. But Bathurst with 502 towers above all an easy first in failure to protect child life.—(*Graph attached.*)

It may be interesting to indicate the causes of this mortality :—

(1) *Tetanus.*—In the quinquennium 1917–1921, 26 per cent. of infant deaths were due to tetanus—be it noted an entirely preventable loss. Had this cause been eliminated, our mortality rate would have been 348 instead of 502.

(2) *Flies.*—“Exhaustion from diarrhoea” is a common cause of infant death in our returns. I am aware of the large amount of breast feeding, and yet I venture to give flies a high place among lethal agents. The cesspitfuls and pailfuls of various fly larvæ in town could be reduced to nil by a proper night soil system for the town. Under a daily cleansing

system it would be an offence to have on one's premises fly larvæ of certain stage of development. The saving effect on all classes of the community would be both marked and immediate.

3. The fatal "convulsions" in infants are often due to malaria, yet its effects in producing grave anaemia and debility causes many tiny victims to succumb to disease which otherwise they would survive. Hence the value of continuing mosquito reduction, though, of course, infection can all too easily be got outside the protected area.

4. Poor housing on damp sites in neglected parts of the town contributes to all our high mortality figures. It is still unfortunately true that families in the rainy season are sometimes beaten to find a large enough dry area to make a fire on either outside their houses or inside for days on end. Sometimes the bed is almost the only article above water. There are areas in Bathurst on which no people ought to have been given sites till the level was sufficiently raised. Infancy must wage a precarious and often losing fight in such areas.

5. There is also the question of illegitimacy. Its influence *per se* almost halves an infant's chances of life. Though the amount of it in Bathurst is not known, it can by no means be considered a negligible factor. No doubt its effect is in direct ratio to its extent. It may be stated that Section 18 of Births, Deaths and Marriages Ordinance No. 11 of 1886 seems woefully weak in view of the trend of prospective British legislation.

The duty of this department is to recommend such action as is calculated to check this dire wastage of life. The only plan offering substantial success is the establishment of a modified "mother and child welfare" scheme adapted to local needs. This would include —

(A) Selection, instruction and supervision of, say, four Native Midwives ;

(B) A "Notification of Births Regulation" providing for notification to Board of Health of every birth or still-birth within twenty-four hours, under Public Health Ordinance No. 4 of 1912, Section 108 (20) ;

(C) Fees to Medical Practitioners in cases of authorized call.

It is hoped this year to recommend a definite scheme along these lines, leaving for later consideration such further preventive activities as health visiting, infant clinics, school-girl instruction, &c.

Water Supply.—It has been recently pointed out that a considerable proportion of water at present supplied the town has not passed through the one existing slow sand filter bed. The stream is fenced in, but nevertheless pollution flood washings of the collecting area is possible, and proper filtration therefore essential. It is impossible to have the original filter beds cleansed without the construction of a new one. Another matter of grave importance is the fact that there is no provision whatever for town supply in case of serious breakdown or delay in repair work. Such conditions as these ought not to be allowed to continue. Very many town wells have been closed since pipe-bourne supply was introduced ; and serious trouble would accompany any hurried resort to old wells or digging of new ones.

Slaughter House and Meat Supply.—The construction of a proper Slaughter House is called for on both humane and sanitary grounds. Killing and dressing are carried out amid the crush, darkness and dirt of a small over-river cell. Inspection of the reeking hot meat has to be done on and

around the retailing stalls, with the butchers and the public jostling around—all equally impatient of every bit of inspection done. Efficiency is thus an unapproachable ideal; and mistakes, should they unfortunately occur, would only be accepted, it is hoped, as a last palpable proof of most inadequate accommodation.

There is no official estimate of head of cattle in the Gambia, and it is a matter of pure conjecture how far we can continue to count on local herds to maintain our Meat Market. Even an approximate figure would be a great help, particularly if it could be arrived at yearly so that the rate of increase could be gauged. Any threatened shortage might be anticipated and provided against.

Market Buildings.—Not nearly large enough roofed area is yet provided in the Market. It will be a great step forward when covered stalls are available for all vendors of vegetables and fruit, in place of allotments on the pavements. The exclusion of dogs from the Market, provided for in Section 32 of the Market Consolidation Rules, 1915, is a dead letter. Instead of this, it ought to be rigidly enforced.

(Signed) FRANK A. INNES,

Medical Officer of Health.

VACCINATIONS PERFORMED.

| Number Vaccinated. | Successful. | Not seen. | Failed. |
|--------------------|-------------|-----------|---------|
| 3,183 | 1,209 | 1,942 | 32 |

IV. METEOROLOGY.

See Table for Bathurst and Georgetown.

V. HOSPITALS AND DISPENSARIES.

A new waiting-room for the Nursing Sister on duty was erected and attached to the main hospital.

VI. SCIENTIFIC.

There has been nothing of interest to record.

VII. PRISONS.

(a) BATHURST.

1. There are two, No. 1 Gaol, the old one in the town, and No. 2, which was the Sanitary Station, and was taken over as a temporary Prison in February, 1921; this prison is situated about two miles outside the town on the Cape St. Mary Road.

2. The opening of No. 2 has helped considerably to relieve the congestion that existed formerly in No. 1.

3. The general Sanitary arrangements are good and there is an ample pipe-borne water supply.

4. STATISTICS—Number of Prisoners = 412; number of Prisoners admitted to Gaol Infirmary = 114; number of Prisoners admitted to Colonial Hospital = 41; number of Deaths = 3.

5. The General Health of the prisoners in both prisons has been good, but is better in No. 2.

6. The prevalent Diseases were :—

Beri-Beri.
Ankylostomiasis.
Diarrhoea.

7. The quality of the prison diet has been good, but “polished rice” constitutes a rather large proportion of the prison rations.

8. RECOMMENDATIONS :—

(a) To remove the prisoners from No. 1 to No. 2, which is a far healthier site, after certain structural alterations have been made at the latter place, viz. :—

- (1) To make provision for an Infirmary.
- (2) To fix sides and cover for a well.
- (3) To ceiling with wood the largest association cell.

(b) To substitute native or “unpolished” rice for the “polished” variety now in use if possible.

(b) GEORGETOWN—MACCARTHY ISLAND.

A new prison has been erected and there is now no congestion, as prisoners can be transferred to Bathurst in the event of an increase in the numbers and the accommodation becoming insufficient.

VIII. RECOMMENDATIONS FOR 1922 IN THE 1921 ANNUAL REPORT.

1. Scheme for disposal of night-soil for Bathurst.
2. Recommendations of previous reports as funds become available.
 - (1) Filling and reclamation of land (Bathurst).
 - (2) Drainage (Bathurst).
 - (3) Extension of water supply (Bathurst).
 - (4) Abolition of tanks (Bathurst).
 - (5) Filling in of wells (Bathurst).
 - (6) Extension of sanitation to riverine, trading centres (Protectorate).
 - (7) Provision of Medical Aid (Protectorate).

The above recommendations were made in the 1921 Annual Report by Dr. T. F. G. Mayer, Senior Medical Officer.

The following action has been taken in the above :—

1. No scheme has yet been adopted. The Medical Officer of Health in his Sanitary Report has made several suggestions. Sooner or later this matter will have to be taken up seriously as the present system is both primitive and dangerous.

2.—(1) This has been gradually carried out throughout the year but is a slow process and an immense amount of work remains to be done.

(2) Nothing done.

(3) Nothing done. Please see M.O.H's remarks under sanitation.

(4) None removed. The necessity for their retention still exists until water supply more improved.

(5) 16 were closed. The same remarks in (4) apply here. Where parties have been twice convicted in one year for allowing larvæ, they are then ordered to fill the well.

(6) No definite progress to report.

(7) Owing to shortness of staff this has been difficult to provide for. One M.O. was stationed at Georgetown, McCarthy Island, for 4 months.

IX. RECOMMENDATIONS FOR 1923.

(a) SANITARY.

1. A scheme for the disposal of night soil for Bathurst; among many suggested are :—

(1) Trenching—Difficult to find a suitable area of land.

(2) Incineration—Insufficient supply of fuel for the large quantity of night soil that would have to be dealt with.

(3) Biologic treatment—Expensive.

(4) Towing the night soil out in barges to a sufficient distance where, when emptied into the river, currents would take the excremental material out to sea.

(5) System of soil pipes with pumping machinery to discharge into the sea—Expensive.

I think No. 4 would prove the most suitable. Some sort of system should soon be seriously considered, as the present system of emptying latrine buckets along the water's edge results in a considerable amount of night soil being deposited high and dry on the beach when the tide falls; also as the pan latrines are not sufficient for the needs of the whole population, many persons simply use their backyards; these methods are not very conducive to good health and tend to increase the risk of epidemic diseases.

2. A Drainage Scheme. Urgently required and really needs the services of a well trained Drainage Engineer who could give his whole time to the work.

3. A Sanitary Station. The present one having been taken over as a temporary Prison.

4. A modified mother and child welfare scheme.

5. Water Supply. Extension of and an additional filter bed at Lamin.

6. New Slaughter House, to include slaughter place for cattle and one for pigs and a cooling and inspecting chamber.

7. Extension of covered area of market.

(b) MEDICAL.

1. Maternity Ward, at the Victoria Hospital.

2. Electric Light Installation in the Victoria Hospital.

3. An improved Telephone Installation for the Hospital, S.M.O., M.O.H. Offices and S.M.O., M.O.H., M.O. and Nursing Sisters' Quarters.

4. Sufficient Staff to enable a Medical Officer to be permanently stationed in the Protectorate.

X. PUBLIC WORKS DURING 1922.

(a) BATHURST.

1. Nursing Sisters' Duty Room at the Victoria Hospital completed

2. Bungalow in Buckle Street for Medical Officer completed.

3. X Ray apparatus at the Victoria Hospital not yet completed.

4. Increased Accommodation at No. 2 Gaol not yet completed.

5. Reconstruction and improvement to two Public Pan Latrines.

(b) THE PROTECTORATE.

New Gaol at Georgetown—MacCarthy Island.

XI. PUBLIC WORKS ESTIMATES FOR 1922.

PUBLIC WORKS RECURRENT.

| | Estimates. | Actual Expenditure. | | |
|--|------------|---------------------|----|----|
| | | £ | s. | d. |
| 8. Upkeep of Latrines (Bathurst) | 60 | 40 | 6 | 2 |
| 13. " " Pump and Wells (Bathurst) | 120 | 25 | 12 | 7 |
| 20. " " Cemeteries (Bathurst) | 200 | 39 | 6 | 9 |

XXI. EXTRAORDINARY EXPENDITURE.

(a) PUBLIC WORKS.

| | Estimates. | Actual Expenditure. | | |
|---|------------|---------------------|----|----|
| | | £ | s. | d. |
| 3. Victoria Hospital (Bathurst) | 250 | 222 | 12 | 4 |
| 8. Temporary Gaol Extension (Bathurst) | 4,000 | 812 | 5 | 10 |
| 9. Improvement of Latrines (Bathurst) | 500 | 441 | 6 | 0 |

TABLE I.

RETURN OF STATISTICS OF POPULATION FOR THE YEAR 1922.

| | Europeans and Whites. | Africans and mixed colours. | East Indians. | Chinese and Malays. | Mixed and Coloured. | Totals. |
|-----------------------------------|-----------------------|-----------------------------|---------------|---------------------|---------------------|-----------------------|
| Number of Inhabitants in 1921 ... | 265 | 8,962 | | | | 9,227 (Census) |
| " " Births during the year 1922 | — | 295 | | | | 295 Ex. |
| " " Deaths " " " | 1 | 436 | | | | 437 Colonial Registry |
| " " Immigrants " " " | Not recorded. | | | Not recorded. | | — |
| " " Emigrants " " " | | | | | | — |
| Number of Inhabitants in 1922 ... | See Totals | | | | | 9,335 (Estimated) |
| Increase | | | | | | — |
| Decrease | | | | | | 168 (Estimated) |

TABLE II.

SUMMARY OF ROUTINE SANITARY WORK DONE DURING THE YEAR 1922
IN THE TOWN.

1. NAME OF TOWN.—BATHURST.

| | Approximate Area. | Number of proclaimed Open Spaces. |
|-------------|-------------------|-----------------------------------|
| 1920 | No record. | None. |
| 1921 | 400 acres. | None. |
| 1922 | 400 acres. | None. |

2. POPULATION.

| | Number of Natives. | | Number of Europeans. | | Total. |
|-------------|--------------------|----------|----------------------|----------|------------------|
| | Males. | Females. | Males. | Females. | |
| 1920 | No record. | | No record. | | — |
| 1921 | | | | | 9,227 (Census) |
| 1922 | 8,962 | | 265 | | 9,395 (Estimate) |

3. HOUSING.

| | Number occupied by Europeans. | Number occupied by Natives. |
|-------------------|-------------------------------|-----------------------------|
| Number of Houses— | | |
| 1920 | No record. | No record. |
| 1921 | 44 | 2,181 |
| 1922 | — | — |
| Number of Huts— | | |
| 1920 | No record. | — |
| 1921 | 3,494 | — |
| 1922 | — | — |

4. MOSQUITO PROTECTION OF HOUSES.

| | 1920. | 1921. | 1922. |
|--|---------|-------|-------|
| Number of European houses wholly mosquito-protected ... | Nil | Nil | 1 |
| Number of European houses with mosquito room ... | Off. 30 | 42 | 43 |
| Number rendered during the year wholly mosquito-protected | } Nil | — | — |
| Number rendered during the year partially mosquito-protected | | | |

5. ERECTION OF NEW BUILDINGS DURING THE YEAR.

| | 1920. | 1921. | 1922. |
|--|-------|-------|-------|
| 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 ... | — | — | 4 |
| Number of huts erected with sanction as to site, construction, and relation to other buildings ... | — | — | 24 |
| Number of houses built without sanction ... | — | — | } Nil |
| Number of huts built without sanction ... | — | — | |

ACTION TAKEN.

| | | | Number of Prosecutions. | | Number demolished. | |
|----------|-----|-----|-------------------------|---------|--------------------|---------|
| | | | Huts. | Houses. | Huts. | Houses. |
| 1920 ... | ... | ... | } Nil | Nil | Nil | Nil |
| 1921 ... | ... | ... | | | | |
| 1922 ... | ... | ... | | | | |

6. MARKETS.

| | | | | | | Total number. | Number paved and drained. | Number unpaved. |
|----------|-----|-----|-----|-----|-----|---------------|---------------------------|-----------------|
| 1920 ... | ... | ... | ... | ... | ... | 1 | 1 | } Nil |
| 1921 ... | ... | ... | ... | ... | ... | 1 | 1 | |
| 1922 ... | ... | ... | ... | ... | ... | 1 | 1 | |

7. SLAUGHTER-HOUSES.

| | | | | | | Total number. | Number paved and drained. | Number unpaved. |
|----------|-----|-----|-----|-----|-----|---------------|---------------------------|-----------------|
| 1920 ... | ... | ... | ... | ... | ... | 1 | 1 | } Nil |
| 1921 ... | ... | ... | ... | ... | ... | 1 | 1 | |
| 1922 ... | ... | ... | ... | ... | ... | 1 | 1 | |

8. LATRINES.

| | For Males. | | For Females. | |
|--|-------------------|------------------|--------------|------------------|
| | Number. | Number of seats. | Number. | Number of seats. |
| Number of Public Latrines :— | | | | |
| 1920 | 16 | 70 | 8 | 52 |
| 1921 | 16 | 70 | 8 | 52 |
| 1922 | 16 | 71 | 8 | 53 |
| Number of new Public Latrines erected during the year :— | | | | |
| 1920 | Nil | — | — | — |
| 1921 | | | | |
| 1922 | | | | |
| Number of Public Latrines repaired during the year :— | | | | |
| 1920 | 2 | — | — | — |
| 1921 | 5 | — | — | — |
| 1922 | 3 (reconstructed) | — | — | — |
| Number of Public Latrines demolished during the year :— | | | | |
| 1920 | Nil | — | — | — |
| 1921 | | | | |
| 1922 | | | | |
| | | 1920. | 1921. | 1922. |
| Number of Private Latrines | | 133 | 133 | 190 |
| Average number of pails of nightsoil removed daily ... | | 200 | 256 | 321 |
| Average number of soiled pails removed and clean pails substituted... .. | | 200 | 256 | 321 |
| Number of nightsoil men employed to clean latrines and remove excreta | | 19 | 21 | 22 |
| Number of cesspools | | 73 | 33 | 45 |
| Number of cesspools cleansed | | Nil | — | — |
| Number of new cesspools constructed during the year ... | | | | |
| Number of old cesspools abolished | | — | — | 20 |
| Number of cesspools oiled regularly by Department... .. | | — | 20 | 18 |

9. REMOVAL OF REFUSE.

| | 1920. | 1921. | 1922. |
|---|-------|----------|-------|
| Number of dustbins issued | — | 33 | 97 |
| Number of carts at work daily to remove refuse from streets ... | 9 | 11 | 12 |
| Amount of refuse removed daily | — | 160 | 95 |
| Number of carts at work daily to remove refuse from yards and premises | 9 | 11 | 12 |
| Amount of refuse removed daily from yards and premises ... | — | As above | — |
| Number of men employed for moving refuse | — | 35 | 38 |

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. | | |
|------------------------------|---|-------|-------|--|-------|-------|--|-------|-------|
| | 1920. | 1921. | 1922. | 1920. | 1921. | 1922. | 1920. | 1921. | 1922. |
| Buried or trenched | — | — | — | — | — | — | All thrown into the sea. | | |
| Burnt | — | — | — | — | 160 | 95 | | | |
| Thrown into sea | 200 | 256 | 273 | — | — | — | | | |
| *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.

| 1920. | 1921. | 1922. |
|------------------------------|-------|-------|
| Not kept separately from 10. | | |

12. WATER SUPPLY.

| Nature of Water Supply. | 1920. | 1921. | 1922. |
|---|-------|-------|-------|
| Pipe-borne water :— | | | |
| Source (river, lake, or spring) :— | | | |
| Number of linear yards | — | — | — |
| Number of stand-pipes along roads | — | 35 | 37 |
| Number of stand-pipes in compounds and houses ... | 14 | 20 | 29 |
| Wells :— | | | |
| Public :— | | | |
| Number | — | 43 | — |
| Number with pumps protected against surface water and mosquito-protected | — | 43 | — |
| Private :— | | | |
| Number | — | 4 | — |
| Number protected against surface water and mosquito-protected | — | 4 | — |
| Tanks :— | | | |
| Public :— | | | |
| Number underground | — | — | — |
| Number mosquito-protected and served by pumps ... | — | — | — |
| Number above ground | — | — | — |
| Number mosquito-protected | 129 | — | — |
| Number of 400 gallons capacity or less | 125 | — | — |
| Number above 400 gallons | 4 | — | — |

| Nature of Water Supply. | 1920. | 1921. | 1922. |
|---|-------|-------|-------|
| Tanks :— | | | |
| Private :— | | | |
| Number underground | — | 3 | — |
| Number mosquito-protected | — | 3 | — |
| Number above ground | — | 2 | — |
| Number mosquito-protected | — | 2 | — |
| Number of 400 gallons capacity or less | — | 170 | 166 |
| Number above 400 gallons | — | 4 | — |
| Nature of tanks :— | | | |
| Wood | Nil | — | — |
| Iron | 181 | 181 | 177 |
| Concrete | 2 | 2 | 2 |
| Barrels :— | | | |
| Number | } Nil | — | — |
| Number mosquito-protected | | | |

13. DRAINAGE.

| Nature of Drainage. | Public. | Private. |
|---|--|----------|
| Masonry drains :— | | |
| Lineal yards of Masonry drains :— | | |
| 1920 | — | — |
| 1921 | 1,000 | — |
| 1922 | 1,000 | — |
| Lineal yards reconstructed during the year :— | | |
| 1920 | Nil | — |
| 1921 | | |
| 1922 | | |
| Lineal yards repaired during the year :— | | |
| 1920 | Nil | — |
| 1921 | | |
| 1922 | | |
| Lineal yards of new drains constructed during the year :— | | |
| 1920 | Nil | — |
| 1921 | | |
| 1922 | | |
| Earth drains or ditches :— | | |
| Number of linear yards of ditches cleaned :— | | |
| 1920 | — | — |
| 1921 | 800 | — |
| 1922 | 800 | — |
| Number of linear yards of ditches dug and graded :— | | |
| 1920 | 550 (approx.) | — |
| 1921 | | |
| 1922 | | |
| Average frequency of clearing ditches of grass :— | | |
| 1920 | Once a week during rainy season. | — |
| 1921 | | |
| 1922 | | |

14. CLEARANCE OF UNDERGROWTH, LONG GRASS AND JUNGLE.

| | 1920. | 1921. | 1922. |
|---|-------|-------|---------------------------------|
| Number of square yards of weeds, grass, and vegetation cut and removed | — | 2,000 | 2,500 (approx.) |
| Average frequency of clearance of rank vegetation on same area | — | — | Once a month during rains |

15. EXCAVATIONS AND LOW-LYING LAND.

| | 1920. | 1921. | 1922. |
|--|-------|-------|--------------------|
| Number of pools and excavations | — | — | 6 |
| 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 | — | 1,487 | 1,000 (approx.) |
| Number of persons fined for making new excavations ... | Nil | — | — |
| Average number of men daily employed in filling up pools, &c. | | | |

16. OILING.

| | 1920. | 1921. | 1922. |
|--|-------|-------|-------|
| Number of drains oiled | 500 | 500 | 947 |
| Number of pools and excavations oiled | | | |
| Number of tanks and barrels oiled | | | |
| Average number of men daily employed for oiling drains, pools and water tanks or barrels | 70 | 80 | — |

17. INSPECTIONS AND PROSECUTIONS.

| | 1920. | 1921. | 1922. |
|---|-------|--------|--------|
| Number of inspectors employed | — | 6 | 7 |
| Number of houses inspected | — | 45,290 | 53,408 |
| Number of houses where larvæ were found | — | 169 | 210 |
| Number of notices served to remove conditions causing the breeding of larvæ | — | 203 | 218 |
| Number of persons fined for having mosquito larvæ on premises | — | 169 | 210 |
| Number of notices served to remove insanitary conditions on premises | — | 470 | 442 |
| Number of persons fined for not removing insanitary con- ditions after notice | — | — | 1 |
| Number of soda and aerated water factories inspected ... | — | 1 | 1 |

TABLE III.

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

1. NAME OF TOWN.—GEORGETOWN.

| | Approximate Area. | Number of proclaimed Open Spaces. |
|-------------|--|--------------------------------------|
| 1922 | { Town, 167 acres Swamps, 512 acres } | Nil |

2. POPULATION.

| | Number of Natives. | | Number of Europeans. | | Total. |
|-------------|--------------------|----------|----------------------|----------|--------|
| | Males. | Females. | Males. | Females. | |
| 1922 | 539 | 744 | 14 | Nil | 1,297 |

3. HOUSING.

| | Number occupied by Europeans. | Number occupied by Natives. |
|----------------------------------|----------------------------------|--------------------------------|
| Number of Houses— 1922 | 10 | No record. |
| Number of Huts— 1922 | No record. | |

4. MOSQUITO PROTECTION OF HOUSES.

| | 1922. |
|--|-------|
| Number of European houses wholly mosquito-protected ... | Nil |
| Number of European houses with mosquito room ... | 7 |
| Number rendered during the year wholly mosquito-protected | Nil |
| Number rendered during the year partially mosquito-protected | 2 |

5. ERECTION OF NEW BUILDINGS DURING THE YEAR.

| | 1922. |
|--|------------|
| 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 ... | 1 |
| Number of huts erected with sanction as to site, construction, and relation to other buildings ... | No record. |
| Number of houses built without sanction ... | 1 |
| Number of huts built without sanction ... | No record. |

ACTION TAKEN.

| | Number of Prosecutions. | | Number demolished. | |
|-------------|-------------------------|---------|--------------------|---------|
| | Huts. | Houses. | Huts. | Houses. |
| 1922 | Nil | Nil | 1 | Nil |

6. MARKETS.

| | Total number. | Number paved and drained. | Number unpaved. |
|-------------|---------------|------------------------------|-----------------|
| 1922 | 1 | Nil | 1 |

7. SLAUGHTER-HOUSES.

| | Total number. | Number paved and drained. | Number unpaved. |
|-------------|---------------|------------------------------|-----------------|
| 1922 | 1 | Nil | 1 |

8. LATRINES.

| | For Males. | | For Females. | |
|--|------------|------------------|---------------|------------------|
| | Number. | Number of seats. | Number. | Number of seats. |
| Number of Public Latrines :— | | | | |
| 1922 | 6 | 12 | 1 | 2 |
| Number of new Public Latrines erected during the year :— | | | | |
| 1922 | Nil | Nil | Nil | Nil |
| Number of Public Latrines repaired during the year :— | | | | |
| 1922 | Nil | Nil | Nil | Nil |
| Number of Public Latrines demolished during the year :— | | | | |
| 1922 | Nil | Nil | Nil | Nil |
| | | | 1922. | |
| Number of Private Latrines | | | 16 | |
| Average number of pails of nightsoil removed daily | | | Approx. 5,000 | |
| Average number of soiled pails removed and clean pails substituted | | | — | |
| Number of nightsoil men employed to clean latrines and remove excreta | | | 6 prisoners | |
| Number of cesspools | | | 400 | |
| Number of cesspools cleansed | | | No record | |
| Number of new cesspools constructed during the year | | | 16 | |
| Number of old cesspools abolished | | | 12 | |
| Number of cesspools oiled regularly by Department | | | Nil | |

9. REMOVAL OF REFUSE.

| | 1922. |
|---|-------|
| Number of dustbins | 8 |
| Number of carts at work daily to remove refuse from streets | Nil |
| Amount of refuse removed daily | 1 ton |
| Number of carts at work daily to remove refuse from yards and premises | Nil |
| Amount of refuse removed daily from yards and premises | — |
| Number of men employed for moving refuse | 6 |

10. MODE OF DISPOSAL OF EXCRETA, REFUSE AND OFFAL.

| | Daily average number of pails of excreta. | Daily average number of cartloads of refuse. | Daily average number of cartloads of Slaughter House and Market Offal. |
|------------------------------|---|--|--|
| | 1922. | 1922. | 1922. |
| Buried or trenched | 16 | 50 barrow loads | 3 barrow loads |
| 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.

1922 No records.

12. WATER SUPPLY.

| Nature of Water Supply. | 1922. |
|---|-------|
| Pipe-borne water :— | |
| Source (river, lake, or spring) :— | |
| Number of linear yards | River |
| Number of stand-pipes along roads | Nil |
| Number of stand-pipes in compounds and houses ... | 4 |
| Wells :— | |
| Public :— | |
| Number | — |
| Number with pumps protected against surface water and mosquito-protected | 1 |
| Private :— | |
| Number | — |
| Number protected against surface water and mosquito-protected | 7 |
| Tanks :— | |
| Public :— | |
| Number underground | — |
| Number mosquito-protected and served by pumps ... | 1 |
| Number above ground | — |
| Number mosquito-protected | — |
| Number of 400 gallons capacity or less | 32 |
| Number above 400 gallons | 1 |

| Nature of Water Supply. | 1922. |
|---|-------|
| Tanks :— | |
| Private :— | |
| Number underground | Nil |
| Number mosquito-protected | — |
| Number above ground | 33 |
| Number mosquito-protected | 9 |
| Number of 400 gallons capacity or less | — |
| Number above 400 gallons | — |
| 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 :— | | |
| 1922 | — | Nil |
| Lineal yards reconstructed during the year :— | | |
| 1922 | — | Nil |
| Lineal yards repaired during the year :— | | |
| 1922 | — | Nil |
| Lineal yards of new drains constructed during the year :— | | |
| 1922 | — | Nil |
| Earth drains or ditches :— | | |
| Number of linear yards of ditches cleaned :— | | |
| 1922 | — | 700 yards |
| Number of linear yards of ditches dug and graded :— | | |
| 1922 | — | Nil |
| Average frequency of clearing ditches of grass :— | | |
| 1922 | — | Twice in a month |

14. CLEARANCE OF UNDERGROWTH, LONG GRASS, AND JUNGLE.

| | 1922. |
|---|--------|
| Number of square yards of weeds, grass, and vegetation cut and removed | } Nil. |
| Average frequency of clearance of rank vegetation on same area | |

15. EXCAVATIONS AND LOW-LYING LAND.

| | 1922. |
|--|-------------------|
| Number of pools and excavations | Nil |
| Number of excavations filled up | — |
| Amount of low-lying and marsh land raised and drained ... | — |
| Number of pools, marshes, streams, &c., fish stocked ... | Nil |
| Number of cubic yards of material used for filling up pools and excavations | } 100 cubic yards |
| Number of persons fined for making new excavations ... | |
| Average number of men daily employed in filling up pools, &c. | Nil |

16. OILING.

| | 1922. |
|---|-------|
| Number of drains oiled | } Nil |
| Number of pools and excavations oiled | |
| Number of tanks and barrels oiled | |
| Average number of men daily employed for oiling drains, pools, and watertanks or barrels | |

17. INSPECTIONS AND PROSECUTIONS.

| | 1922. |
|--|-------|
| Number of inspectors employed | 1 |
| Number of houses inspected | 2,000 |
| Number of houses where larvæ were found | Nil |
| Number of notices served to remove conditions causing the breeding of larvæ | 4 |
| 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 ... | — |

TABLE IV.

BATHURST STATION.

METEOROLOGICAL RETURN FOR THE YEAR 1922.

| Months. | Temperatures. | | | | Rainfall. | Winds. |
|---------------|---------------|------------|--------|-------|-------------------|--------------------|
| | Shade Max. | Shade Min. | Range. | Mean. | Amount in Inches. | General Direction. |
| January ... | 95 | 58 | 37 | 76.5 | — | North-East |
| February ... | 94 | 59 | 35 | 76.5 | — | Do. |
| March ... | 96 | 59 | 37 | 77.5 | — | Variable |
| April ... | 89 | 60 | 29 | 74.5 | — | North-West |
| May ... | 95 | 60 | 35 | 77.5 | 0.24 | Do. |
| June .. | 95 | 60 | 35 | 77.5 | 0.33 | Do. |
| July ... | 93 | 68 | 25 | 80.5 | 4.33 | Do. |
| August ... | 90 | 70 | 20 | 80.0 | 18.48 | Do. |
| September ... | 90 | 70 | 20 | 80.0 | 14.10 | Do. |
| October ... | 90 | 69 | 21 | 79.5 | 8.18 | Variable |
| November ... | 90 | 68 | 22 | 79.0 | 0.05 | Do. |
| December ... | 90 | 60 | 30 | 75.0 | — | Do. |
| Total ... | 1,107 | 761 | 346 | 934.0 | 45.71 | |
| Average ... | 92.2 | 63.4 | 28.8 | 77.8 | — | |

TABLE V.

GEORGETOWN STATION, MACCARTHY ISLAND.

METEOROLOGICAL RETURN FOR THE YEAR 1922.

| Months. | Temperatures. | | | | Rainfall. | Winds. |
|---------------|---------------|------------|--------|-------|-------------------|--------------------|
| | Shade Max. | Shade Min. | Range. | Mean. | Amount in Inches. | General Direction. |
| January ... | 101 | 53 | 48 | 77.0 | — | North-West |
| February ... | 101 | 59 | 42 | 80.0 | — | Do. |
| March ... | 109 | 66 | 43 | 87.5 | — | Do. |
| April ... | 109 | 68 | 41 | 88.5 | — | Variable |
| May ... | 111 | 71 | 40 | 91.0 | 0.53 | Do. |
| June ... | 105 | 68 | 37 | 86.5 | 3.15 | Do. |
| July ... | 99 | 68 | 31 | 83.5 | 6.26 | North-West |
| August ... | 93 | 63 | 31 | 78.5 | 6.99 | Do. |
| September ... | 93 | 67 | 26 | 80.0 | 6.18 | Variable |
| October ... | 94 | 66 | 28 | 80.0 | 5.40 | Do. |
| November ... | 96 | 60 | 36 | 78.0 | — | Do. |
| December ... | 97 | 54 | 43 | 75.5 | — | Do. |
| Total ... | 1,208 | 763 | 446 | 986.0 | 28.51 | |
| Average ... | 100.6 | 63.5 | 37.1 | 82.1 | — | |

TABLE VI.

VICTORIA HOSPITAL.

RETURN OF DISEASES AND DEATHS (IN-PATIENTS) FOR THE YEAR 1922.

| Diseases. | *Remaining in Hospital at end of 1921. | Yearly Total. | | †Total Cases Treated. | ‡Remain- ing in Hospital at end of 1922. | Remarks. |
|--|--|---------------|---------|-----------------------------|--|----------|
| | | Admissions. | Deaths. | | | |
| INFECTIVE DISEASES. | | | | | | |
| Beri-Beri | ... | 18 | 2 | 18 | ... | |
| Cerebro-Spinal Fever | ... | ... | ... | ... | ... | |
| Chicken-Pox | ... | ... | ... | ... | ... | |
| Cholera | ... | ... | ... | ... | ... | |
| Dengue | ... | ... | ... | ... | ... | |
| Diphtheria... .. | ... | ... | ... | ... | ... | |
| Dysentery | ... | ... | ... | ... | ... | |
| Dysentery—Amoebic | ... | 9 | 1 | 9 | 1 | |
| Enteric | ... | 2 | 1 | 2 | ... | |
| Erysipelas | ... | ... | ... | ... | ... | |
| Gonorrhœa | ... | 16 | ... | 16 | ... | |
| Rheumatism | ... | 1 | ... | 1 | ... | |
| Influenza | ... | 10 | ... | 10 | ... | |
| Kala Azar... .. | ... | ... | ... | ... | ... | |
| Leprosy— | | | | | | |
| (a) Nodular | ... | 2 | ... | 2 | ... | |
| (b) Anæsthetic | ... | ... | ... | ... | ... | |
| Malaria— | | | | | | |
| (a) Tertian | 1 | 123 | 1 | 124 | 1 | |
| Cachexia | ... | 1 | 1 | 1 | ... | |
| (b) Quartan | ... | ... | ... | ... | ... | |
| Rheumatism | ... | 2 | ... | 2 | ... | |
| (c) Aestivo-autumnal | ... | ... | ... | ... | ... | |
| (d) Chronic Malaria | ... | ... | ... | ... | ... | |
| (e) Black-water... .. | ... | 1 | 1 | 1 | ... | |
| Pyrexia | ... | 13 | ... | 13 | ... | |
| Measles | ... | ... | ... | ... | ... | |
| Malta Fever | ... | ... | ... | ... | ... | |
| Plague | ... | ... | ... | ... | ... | |
| Pneumonia | 1 | 69 | 19 | 70 | 2 | |
| Rabies | ... | ... | ... | ... | ... | |
| Debility | ... | 6 | 1 | 6 | ... | |
| Relapsing Fever | ... | ... | ... | ... | ... | |
| Senility | ... | 1 | ... | 1 | ... | |
| Myalgia | ... | 5 | ... | 5 | ... | |
| Rheumatic Fever | 1 | 25 | ... | 26 | 1 | |
| Septicæmia | ... | 2 | 1 | 2 | ... | |
| Trypanosomiasis (Sleeping Sickness) | ... | 4 | 2 | 4 | ... | |
| Small-Pox | ... | 1 | ... | 1 | ... | |
| Syphilis— | | | | | | |
| (a) Primary | ... | 23 | ... | 23 | ... | |
| (b) Secondary | ... | 3 | 2 | 3 | ... | |
| (c) Inherited | ... | ... | ... | ... | ... | |
| Tetanus | 1 | 7 | 5 | 8 | ... | |
| Tuberculosis | 2 | 7 | 2 | 9 | ... | |
| Whooping Cough | ... | 2 | ... | 2 | ... | |
| Carried forward ... | 6 | 353 | 39 | 359 | 5 | |

* i.e., the year previous to that for which the Return is made.

† "Total cases treated" will, of course, include those remaining in Hospital at the end of the previous year.

‡ The figures in this column to be carried on to the next year's Return.

TABLE VI.—*continued.*VICTORIA HOSPITAL—*continued.*RETURN OF DISEASES AND DEATHS (IN-PATIENTS) FOR THE YEAR 1922—*continued.*

| Diseases. | Remaining in Hospital at end of 1921. | Yearly Total. | | Total Cases Treated | Remain- ing in Hospital at end of 1922. | Remarks. |
|--|---|---------------|---------|---------------------------|---|----------|
| | | Admissions. | Deaths. | | | |
| Brought forward ... | 6 | 353 | 39 | 359 | 5 | |
| INFECTIVE DISEASES— <i>contd.</i> | | | | | | |
| Yaws | ... | ... | ... | ... | ... | |
| Yellow Fever | ... | 1 | 1 | 1 | ... | |
| Phthisis | ... | 3 | 1 | 3 | 1 | |
| Pulmonary Tuberculosis | ... | 3 | 1 | 3 | 1 | |
| General Tuberculosis | ... | 1 | 1 | 1 | ... | |
| Periostitis | ... | 1 | 1 | 1 | ... | |
| Septic Intoxication | ... | 1 | ... | 1 | ... | |
| INTOXICATIONS. | | | | | | |
| Alcoholism | ... | ... | ... | ... | ... | |
| Morphinism | ... | ... | ... | ... | ... | |
| Others | ... | ... | ... | ... | ... | |
| GENERAL DISEASES. | | | | | | |
| Anæmia | ... | 1 | ... | 1 | ... | |
| Anæmia—Pernicious | ... | ... | ... | ... | ... | |
| Diabetes | ... | ... | ... | ... | ... | |
| Exophthalmic Goitre | ... | ... | ... | ... | ... | |
| Gout | ... | ... | ... | ... | ... | |
| Leucocythæmia | ... | ... | ... | ... | ... | |
| Hodgkin's Disease | ... | ... | ... | ... | ... | |
| Myxœdema | ... | ... | ... | ... | ... | |
| Purpura | ... | ... | ... | ... | ... | |
| Rickets | ... | ... | ... | ... | ... | |
| Scurvy | ... | ... | ... | ... | ... | |
| Marasmus | ... | 10 | 3 | 10 | ... | |
| LOCAL DISEASES. | | | | | | |
| <i>Diseases of the Nervous System.</i> | | | | | | |
| Sub-section 1. | | | | | | |
| Neurasthenia | ... | 1 | ... | 1 | ... | |
| Neuritis | ... | 1 | ... | 1 | ... | |
| Meningitis... .. | ... | 4 | 2 | 4 | ... | |
| Meningitis—Spinal | ... | 1 | ... | 1 | ... | |
| Myelitis | ... | ... | ... | ... | ... | |
| Hydrocephalus | ... | ... | ... | ... | ... | |
| Encephalitis | ... | ... | ... | ... | ... | |
| Abscess of Brain | ... | ... | ... | ... | ... | |
| Congestion of Brain | ... | ... | ... | ... | ... | |
| Cerebral Hemorrhage | ... | 3 | 2 | 3 | ... | |
| Coma | ... | 1 | 1 | 1 | ... | |
| Heat Stroke | ... | 1 | ... | 1 | ... | |
| Sub-section 2. | | | | | | |
| Apoplexy | ... | ... | ... | ... | ... | |
| Paralysis | ... | 2 | ... | 2 | ... | |
| Paraplegia | ... | 1 | ... | 1 | ... | |
| Chorea | ... | ... | ... | ... | ... | |
| Epilepsy | ... | 2 | ... | 2 | ... | |
| Neuralgia | ... | 3 | ... | 3 | ... | |
| Hysteria | ... | ... | ... | ... | ... | |
| Convulsions | ... | 1 | ... | 1 | ... | |
| Syncope | ... | 1 | 1 | 1 | ... | |
| Carried forward ... | 6 | 396 | 53 | 402 | 7 | |

TABLE VI.—*continued.*VICTORIA HOSPITAL—*continued.*RETURN OF DISEASES AND DEATHS (IN-PATIENTS) FOR THE YEAR 1922—*continued.*

| Diseases. | Remaining in Hospital at end of 1921. | Yearly Total. | | Total Cases Treated. | Remain- ing in Hospital at end of 1922. | Remarks. |
|--|---|---------------|---------|----------------------------|---|----------|
| | | Admissions. | Deaths. | | | |
| Brought forward ... | 6 | 396 | 53 | 402 | 7 | |
| LOCAL DISEASES—<i>contd.</i> | | | | | | |
| <i>Mental Diseases.</i> | | | | | | |
| Sub-section 3. | | | | | | |
| Idiocy | ... | ... | ... | ... | ... | |
| Mania | ... | ... | ... | ... | ... | |
| Melancholia | ... | ... | ... | ... | ... | |
| Dementia | ... | ... | ... | ... | ... | |
| Delusional Insanity | ... | ... | ... | ... | ... | |
| <i>Diseases of the Eye.</i> | | | | | | |
| Ruptured Globe | ... | 1 | ... | 1 | ... | |
| Conjunctivitis | ... | 18 | ... | 18 | ... | |
| Trachoma | ... | 1 | ... | 1 | ... | |
| Ulceration of Cornea | ... | 3 | ... | 3 | ... | |
| Iritis | ... | 1 | ... | 1 | 1 | |
| Optic Neuritis | ... | 1 | ... | 1 | ... | |
| Staphyloma | ... | 1 | ... | 1 | ... | |
| Wound Eye | ... | 3 | ... | 3 | ... | |
| Glaucoma | ... | 2 | ... | 2 | ... | |
| Entropion | ... | 2 | ... | 2 | ... | |
| Foreign Body Eye | ... | 1 | ... | 1 | ... | |
| <i>Diseases of the Ear.</i> | | | | | | |
| Inflammation | ... | ... | ... | ... | ... | |
| Other Diseases | ... | ... | ... | ... | ... | |
| Keloid | ... | 1 | ... | 1 | ... | |
| Otorrhœa | ... | 1 | ... | 1 | ... | |
| Mastoiditis | ... | 1 | ... | 1 | ... | |
| <i>Diseases of the Nose</i> | | | | | | |
| ... | ... | ... | ... | ... | ... | |
| <i>Diseases of the Circulatory System.</i> | | | | | | |
| Cardiac Hypertrophy | ... | 1 | ... | 1 | 1 | |
| Pericarditis | ... | ... | ... | ... | ... | |
| Endocarditis | ... | 1 | ... | 1 | ... | |
| Valvular Mitral | 1 | 3 | ... | 4 | ... | |
| Aortic | ... | ... | ... | ... | ... | |
| Tricuspid | ... | ... | ... | ... | ... | |
| Pulmonary | ... | ... | ... | ... | ... | |
| Arterial Sclerosis | ... | ... | ... | ... | ... | |
| Aneurism | ... | ... | ... | ... | ... | |
| Cardiac Disease | ... | 13 | 1 | 13 | ... | |
| Edema | ... | 11 | 1 | 11 | ... | |
| Accidental Hæmorrhage | ... | 1 | ... | 1 | ... | |
| <i>Diseases of the Respiratory System.</i> | | | | | | |
| Laryngitis | ... | ... | ... | ... | ... | |
| Bronchitis | ... | 35 | 5 | 35 | ... | |
| Coryza | ... | 1 | ... | 1 | ... | |
| Broncho-pneumonia | 1 | ... | ... | 1 | ... | |
| Abscess of Lung | ... | 1 | ... | 1 | 1 | |
| Gangrene of Lung | ... | ... | ... | ... | ... | |
| Emphysema | ... | 1 | ... | 1 | ... | |
| Pleurisy | 1 | 4 | 1 | 5 | ... | |
| Carried forward ... | 9 | 505 | 61 | 514 | 10 | |

TABLE VI.—*continued.*VICTORIA HOSPITAL—*continued.*RETURN OF DISEASES AND DEATHS (IN-PATIENTS) FOR THE YEAR 1922—*continued.*

| Diseases. | Remaining in Hospital at end of 1921. | Yearly Total. | | Total Cases Treated. | Remain- ing in Hospital at end of 1922. | Remarks. |
|--|---|---------------|---------|----------------------------|---|----------|
| | | Admissions. | Deaths. | | | |
| Brought forward ... | 9 | 505 | 61 | 514 | 10 | |
| <i>LOCAL DISEASES—contd.</i> | | | | | | |
| <i>Diseases of the Respiratory System.</i> | | | | | | |
| Empyema | ... | ... | ... | ... | ... | |
| Asphyxia | ... | 1 | 1 | 1 | ... | |
| <i>Diseases of the Digestive System.</i> | | | | | | |
| Intestinal Catarrh | ... | 1 | ... | 1 | ... | |
| Stomatitis | ... | ... | ... | ... | ... | |
| Caries of teeth | ... | 4 | ... | 4 | ... | |
| Glossitis | ... | ... | ... | ... | ... | |
| Sore Throat | ... | ... | ... | ... | ... | |
| Inflammation of Tonsils | ... | ... | ... | ... | ... | |
| Gastritis | ... | 1 | ... | 1 | ... | |
| Ulceration of Stomach | ... | ... | ... | ... | ... | |
| Ulceration of Arms | ... | 1 | ... | 1 | ... | |
| Hæmatemesis | ... | 1 | 1 | 1 | ... | |
| Dilatation of Stomach | ... | ... | ... | ... | ... | |
| Stricture of Stomach | ... | ... | ... | ... | ... | |
| Dyspepsia | ... | 4 | ... | 4 | ... | |
| Enteritis | ... | ... | ... | ... | ... | |
| Appendicitis | ... | ... | ... | ... | ... | |
| Colitis | ... | ... | ... | ... | ... | |
| Ulceration of Intestines | ... | ... | ... | ... | ... | |
| Perforated Duodenal | ... | 1 | 1 | 1 | ... | |
| Sprue | ... | ... | ... | ... | ... | |
| Hernia—Inguinal | ... | 3 | ... | 3 | ... | |
| Strangulated | ... | 2 | ... | 2 | ... | |
| Diarrhoea | ... | 26 | 3 | 26 | ... | |
| Constipation | ... | 5 | ... | 5 | ... | |
| Colic | ... | 22 | ... | 22 | ... | |
| Hæmorrhoids | ... | 2 | ... | 2 | ... | |
| Peri Rectal Abscess | ... | 1 | ... | 1 | ... | |
| Ischio Rectal Abscess | ... | 1 | ... | 1 | ... | |
| Pancreatitis | ... | ... | ... | ... | ... | |
| Hepatitis—Acute | ... | 3 | 1 | 3 | ... | |
| Abscess | ... | 4 | ... | 4 | ... | |
| Cirrrosis | ... | 3 | ... | 3 | ... | |
| Jaundice | ... | ... | ... | ... | ... | |
| Peritonitis | ... | 4 | 3 | 4 | ... | |
| Ascites | ... | 3 | ... | 3 | ... | |
| Acute Peritonitis | ... | 1 | 1 | 1 | ... | |
| Inanition | ... | 1 | 1 | 1 | ... | |
| Enlarged Parotid | ... | 1 | ... | 1 | ... | |
| <i>Diseases of the Lymphatic System.</i> | | | | | | |
| Splenitis | ... | 1 | ... | 1 | ... | |
| Inflammation of Lymphatic Gland | ... | ... | ... | ... | ... | |
| Suppuration of Lymphatic Gland | ... | ... | ... | ... | ... | |
| Lymphangitis | ... | 2 | ... | 2 | ... | |
| Elephantiasis | ... | ... | ... | ... | ... | |
| Buboes | ... | 10 | ... | 10 | ... | |
| Adonitis | ... | 2 | ... | 2 | ... | |
| Carried forward ... | 9 | 616 | 73 | 625 | 10 | |

TABLE VI.—*continued.*VICTORIA HOSPITAL—*continued.*RETURN OF DISEASES AND DEATHS (IN-PATIENTS) FOR THE YEAR 1922—*continued.*

| Diseases. | Remaining in Hospital at end of 1921. | Yearly Total. | | Total Cases Treated. | Remain- ing in Hospital at end of 1922. | Remarks. |
|---|---|---------------|---------|----------------------------|---|----------|
| | | Admissions. | Deaths. | | | |
| Brought forward ... | 9 | 616 | 73 | 625 | 10 | |
| <i>LOCAL DISEASES—contd.</i> | | | | | | |
| <i>Diseases of the Urinary System.</i> | | | | | | |
| Nephritis | ... | 1 | ... | 1 | ... | |
| Bright's Disease | ... | 1 | ... | 1 | 1 | |
| Pyelitis | ... | ... | ... | ... | ... | |
| Calculus | ... | ... | ... | ... | ... | |
| Renal Colic | ... | ... | ... | ... | ... | |
| Cystitis | ... | 3 | ... | 3 | ... | |
| Vesical Calculus | ... | ... | ... | ... | ... | |
| Suppression | ... | 10 | ... | 10 | ... | |
| Hæmaturia | ... | 1 | ... | 1 | ... | |
| Chyluria | ... | ... | ... | ... | ... | |
| Renal Disease | ... | 1 | 1 | 1 | ... | |
| Phosphaturia | ... | 1 | ... | 1 | ... | |
| <i>Diseases of the Generative System.</i> | | | | | | |
| <i>Male Organs—</i> | | | | | | |
| Urethritis | ... | ... | ... | ... | ... | |
| Gleet | ... | ... | ... | ... | ... | |
| Stricture | ... | 1 | ... | 1 | ... | |
| Prostatitis | ... | ... | ... | ... | ... | |
| Soft chancre | ... | 1 | ... | 1 | ... | |
| Condyloma | ... | ... | ... | ... | ... | |
| Inflammation of Scrotum | ... | ... | ... | ... | ... | |
| Ulcer of Scrotum | ... | 2 | ... | 2 | ... | |
| Hydrocele | ... | ... | ... | ... | ... | |
| Orchitis | ... | 6 | ... | 6 | ... | |
| Epididymitis | ... | 1 | ... | 1 | ... | |
| Abscess of Testicle | ... | ... | ... | ... | ... | |
| Ulcer of Penis | ... | 2 | ... | 2 | ... | |
| Balanitis | ... | 1 | ... | 1 | ... | |
| Urethral Abscess | ... | 2 | ... | 2 | ... | |
| <i>Female Organs—</i> | | | | | | |
| Pregnancy | ... | 26 | ... | 26 | ... | |
| Ovaritis | ... | ... | ... | ... | ... | |
| Still Births | ... | ... | 7 | ... | ... | |
| Ovarian Cyst | ... | ... | ... | ... | ... | |
| Endometritis | ... | 2 | ... | 2 | ... | |
| Displacement of Uterus | ... | ... | ... | ... | ... | |
| Vaginitis | ... | ... | ... | ... | ... | |
| Amenorrhœa | ... | ... | ... | ... | ... | |
| Dysmenorrhœa | ... | ... | ... | ... | ... | |
| Menorrhagia | ... | ... | ... | ... | ... | |
| Leucorrhœa | ... | 1 | ... | 1 | 1 | |
| Abortion | ... | 2 | ... | 2 | ... | |
| “ Threatened | ... | 3 | ... | 3 | ... | |
| Delayed Labour | ... | ... | ... | ... | ... | |
| Postpartum Hæmorrhage | ... | ... | ... | ... | ... | |
| Metrorrhagia | ... | 1 | ... | 1 | ... | |
| Retained Placenta | ... | 1 | ... | 1 | ... | |
| Premature Birth | ... | ... | ... | ... | ... | |
| Puerperal Septicæmia | ... | ... | ... | ... | ... | |
| Mastitis | ... | ... | ... | ... | ... | |
| Abscess of Breast | ... | ... | ... | ... | ... | |
| Sterility | ... | 1 | ... | 1 | ... | |
| Carried forward ... | 9 | 687 | 81 | 696 | 12 | |

TABLE VI.—*continued.*VICTORIA HOSPITAL—*continued.*RETURN OF DISEASES AND DEATHS (IN-PATIENTS) FOR THE YEAR 1922—*continued.*

| Diseases. | Remaining in Hospital at end of 1921. | Yearly Total. | | Total Cases Treated. | Remain- ing in Hospital at end of 1922. | Remarks. |
|--|---|---------------|---------|----------------------------|---|----------|
| | | Admissions. | Deaths. | | | |
| Brought forward ... | 9 | 687 | 81 | 696 | 12 | |
| <i>LOCAL DISEASES—contd.</i> | | | | | | |
| <i>Diseases of Organs of Locomotion.</i> | | | | | | |
| Tuberculosis Knee ... | ... | 2 | ... | 2 | ... | |
| Osteitis ... | ... | 1 | ... | 1 | ... | |
| Arthritis ... | ... | 2 | ... | 2 | 1 | |
| Spondylitis ... | ... | ... | ... | ... | ... | |
| Bursitis ... | ... | ... | ... | ... | ... | |
| Myositis ... | ... | 2 | ... | 2 | ... | |
| Sciatica ... | ... | 13 | ... | 13 | ... | |
| Osteoma ... | ... | 1 | ... | 1 | ... | |
| Septic Thigh ... | ... | 1 | ... | 1 | ... | |
| <i>Diseases of Connective Tissue.</i> | | | | | | |
| Cellulitis ... | ... | 4 | ... | 4 | ... | |
| Abscess ... | ... | 5 | ... | 5 | ... | |
| Elephantiasis ... | ... | ... | ... | ... | ... | |
| Synovitis ... | ... | 3 | ... | 3 | ... | |
| <i>Diseases of the Skin.</i> | | | | | | |
| Furunculosis ... | ... | 4 | ... | 4 | ... | |
| Urticaria ... | ... | ... | ... | ... | ... | |
| Eczema ... | ... | ... | ... | ... | ... | |
| Boil ... | ... | 6 | ... | 6 | ... | |
| Carbuncle ... | ... | ... | ... | ... | ... | |
| Herpes ... | ... | ... | ... | ... | ... | |
| Psoriasis ... | ... | 1 | ... | 1 | ... | |
| Oriental Sore ... | 3 | ... | ... | 3 | ... | |
| Tinea ... | ... | ... | ... | ... | ... | |
| Scabies ... | ... | 3 | ... | 3 | ... | |
| Acne ... | ... | ... | ... | ... | ... | |
| Prickly Heat ... | ... | ... | ... | ... | ... | |
| Ulcers ... | ... | 26 | 1 | 26 | 4 | |
| <i>Injuries—</i> | | | | | | |
| General ... | 6 | 18 | ... | 24 | 1 | |
| Local ... | ... | 53 | ... | 53 | ... | |
| Burn ... | ... | 6 | 2 | 6 | ... | |
| Mauled by Leopard ... | ... | 3 | 2 | 3 | 1 | |
| <i>Surgical Operations—</i> | | | | | | |
| Amputation of Hand ... | ... | 1 | ... | 1 | ... | |
| „ Toe ... | ... | 1 | ... | 1 | ... | |
| <i>Tumours—</i> | | | | | | |
| Non-Malignant ... | ... | 4 | ... | 4 | ... | |
| <i>Malformations—</i> | | | | | | |
| Snake Bite ... | ... | 1 | ... | 1 | ... | |
| Fish Sting ... | ... | 1 | ... | 1 | ... | |
| Poisons ... | ... | ... | ... | ... | ... | |
| Carried forward ... | 18 | 849 | 86 | 867 | 19 | |

TABLE VI.—*continued.*VICTORIA HOSPITAL.—*continued.*RETURN OF DISEASES AND DEATHS (IN-PATIENTS) FOR THE YEAR 1922—*continued.*

| Diseases. | Remaining in Hospital at end of 1921. | Yearly Total. | | Total Cases Treated. | Remain- ing in Hospital at end of 1922. | Remarks. |
|----------------------------|---|---------------|---------|----------------------------|---|----------|
| | | Admissions. | Deaths. | | | |
| Brought forward ... | 18 | 849 | 86 | 867 | 19 | |
| Parasites— | | | | | | |
| Animal ... | ... | ... | ... | ... | ... | |
| Protozoa ... | ... | ... | ... | ... | ... | |
| Trematoda (Flukes) ... | ... | ... | ... | ... | ... | |
| Cestoda— | | | | | | |
| Taenia Solium ... | ... | 1 | ... | 1 | ... | |
| Nematoda— | | | | | | |
| Ascaris ... | ... | 6 | ... | 6 | ... | |
| Tricocephalus Dispar. ... | ... | ... | ... | ... | ... | |
| Trichina ... | ... | ... | ... | ... | ... | |
| Dracunculus ... | ... | ... | ... | ... | ... | |
| Filariasis ... | ... | 1 | ... | 1 | ... | |
| Tumour ... | ... | 1 | ... | 1 | ... | |
| Strongylus ... | ... | ... | ... | ... | ... | |
| Ankylostomiasis ... | ... | ... | ... | ... | ... | |
| Oxyuris ... | ... | ... | ... | ... | ... | |
| Insecta— | | | | | | |
| Myiasis ... | ... | ... | ... | ... | ... | |
| No appreciable disease ... | ... | 3 | ... | 3 | ... | |
| Malingering ... | ... | 1 | ... | 1 | ... | |
| Total ... | 18 | 862 | 86 | 880 | 19 | |

TABLE VII.

VICTORIA HOSPITAL.

RETURN OF DISEASES (OUT-PATIENTS) FOR THE YEAR 1922.

| Diseases. | Males. | Females. |
|--|--------|----------|
| Beri-Beri | 23 | 2 |
| Dysentery | 17 | 14 |
| Gonorrhoea | 35 | 4 |
| Influenza | 36 | 32 |
| Malaria (c) Aestivo-autumnal | 601 | 413 |
| Pneumonia | 20 | 6 |
| Rheumatic Fever | 331 | 237 |
| Lumbago | 17 | 5 |
| Syphilis (a) Primary | 12 | ... |
| Tetanus | 3 | 5 |
| Tuberculosis | 6 | 3 |
| Tuberculosis Knee | 1 | ... |
| Whooping Cough | 11 | 11 |
| Debility | 11 | 3 |
| Buboe | 12 | ... |
| Neuritis | ... | 1 |
| Vertigo | 1 | 1 |
| Neuralgia | 26 | 12 |
| Headache | 59 | 23 |
| Convulsions | ... | 1 |
| <i>Diseases of the Eye.</i> | | |
| Conjunctivitis | 188 | 115 |
| Optic Neuritis | ... | 1 |
| Cataract | 1 | ... |
| <i>Diseases of the Ear.</i> | | |
| Earache | 41 | 17 |
| Otitis | 2 | ... |
| Otorrhoea | 3 | 1 |
| <i>Diseases of the Nose.</i> | | |
| Ulceration Nasal | 1 | ... |
| Epistaxis | 2 | ... |
| <i>Diseases of the Circulatory System.</i> | | |
| Pericarditis | 6 | 3 |
| Valvular Mitral | 11 | 6 |
| Cardiac | 22 | 6 |
| Hæmorrhoea | ... | 1 |
| Tachycardia | 2 | ... |
| <i>Diseases of the Respiratory System.</i> | | |
| Asthma | 2 | 1 |
| Bronchitis | 539 | 342 |
| Coryza | 9 | 5 |
| Broncho-pneumonia | ... | 1 |
| Pleurisy | 19 | 9 |
| Cough | 470 | 272 |
| Congestion of Lungs | 2 | ... |
| Pleurodynia | 2 | 3 |
| <i>Diseases of the Digestive System.</i> | | |
| Stomatitis | 53 | 39 |
| Caries of Teeth | 68 | 30 |
| Glossitis | 2 | 1 |
| Sore Throat | 27 | 18 |
| Inflammation of Tonsils | ... | 1 |
| Carried forward | 2,694 | 1,645 |

TABLE VII.—*continued.*VICTORIA HOSPITAL—*continued.*RETURN OF DISEASES (OUT-PATIENTS) FOR THE YEAR 1922—*continued.*

| Diseases. | Males. | Females. |
|--|--------|----------|
| Brought forward | 2,694 | 1,645 |
| <i>Diseases of the Digestive System—contd.</i> | | |
| Gastritis | 2 | ... |
| Hiccough | 1 | ... |
| Vomiting | 16 | 18 |
| Dyspepsia | 128 | 151 |
| Umbilical Hernia | ... | 1 |
| Appendicitis | ... | 1 |
| Abdominal pains | 9 | 7 |
| Fistula | 2 | ... |
| Hernia | 4 | ... |
| Diarrhœa | 234 | 160 |
| Constipation | 522 | 332 |
| Colic | 63 | 58 |
| Hæmorrhoids | 2 | 4 |
| Teething | 1 | ... |
| Abscess | 11 | 2 |
| Jaundice | 1 | ... |
| Ascites | ... | 1 |
| Indigestion | 6 | 9 |
| Marasmus | ... | 1 |
| <i>Diseases of the Lymphatic System.</i> | | |
| Splenitis | 9 | 4 |
| Inflammation of Lymphatic Gland | 5 | 3 |
| Lymphangitis | 1 | ... |
| Parotitis | 4 | ... |
| Mumps | 5 | 1 |
| Gout | 1 | ... |
| <i>Diseases of the Urinary System.</i> | | |
| Bright's Disease | 1 | ... |
| Painful Micturitis | ... | 1 |
| Suppression | 8 | ... |
| Œdema | 20 | 5 |
| Gall Stones | 1 | ... |
| Nocturnal Incontinence of Urine | 1 | ... |
| <i>Diseases of the Generative System.</i> | | |
| Male Organs— | | |
| Inflammation of Scrotum | 1 | ... |
| Hydrocele | 2 | ... |
| Orchitis | 4 | ... |
| <i>Diseases of the Generative System.</i> | | |
| Female Organs— | | |
| Amenorrhœa | ... | 1 |
| Dysmenorrhœa | ... | 10 |
| Menorrhagia | ... | 8 |
| Leucorrhœa | ... | 1 |
| Abortion | ... | 12 |
| Mastitis | ... | 12 |
| Affections connected with Pregnancy | ... | 15 |
| <i>Diseases of Organs of Locomotion.</i> | | |
| Periostitis | 2 | 3 |
| Synovitis | 1 | ... |
| Carried forward | 3,762 | 2,466 |

TABLE VII.—*continued.*VICTORIA HOSPITAL—*continued.*RETURN OF DISEASES (OUT-PATIENTS) FOR THE YEAR 1922—*continued.*

| Diseases. | | | | | | | | Males. | Females. |
|---------------------------------------|--|--|--|--|--|--|--|--------|----------|
| Brought forward | | | | | | | | 3,762 | 2,466 |
| <i>Diseases of Connective Tissue.</i> | | | | | | | | | |
| Abscess | | | | | | | | 11 | 2 |
| Axilla | | | | | | | | 3 | ... |
| Whitlow | | | | | | | | 3 | 1 |
| <i>Diseases of the Skin.</i> | | | | | | | | | |
| Eczema | | | | | | | | 3 | ... |
| Boil | | | | | | | | 33 | 16 |
| Herpes | | | | | | | | 1 | ... |
| Scabies | | | | | | | | 79 | 35 |
| Ulcers | | | | | | | | 944 | 225 |
| Craw-craw | | | | | | | | 22 | 7 |
| Dermatitis Scrotum | | | | | | | | 6 | ... |
| <i>Injuries.</i> | | | | | | | | | |
| General wounds | | | | | | | | 200 | 122 |
| Local | | | | | | | | 182 | 48 |
| Burns | | | | | | | | 5 | 9 |
| Bites | | | | | | | | 2 | ... |
| <i>Parasites—</i> | | | | | | | | | |
| Lice | | | | | | | | ... | 3 |
| Ascaris | | | | | | | | 155 | 146 |
| No diagnosis recorded | | | | | | | | 167 | 136 |
| Total | | | | | | | | 5,578 | 3,216 |

TABLE VIII.

RETURN SHOWING THE CASES TREATED AT THE VENEREAL DEPARTMENT
BETWEEN JANUARY 1ST TO JUNE 30TH, 1922.

| Diseases. | In-Patients. | | Out-Patients. | | Total. | Remarks. |
|-----------------------------|--------------|---------|---------------|---------|--------|----------|
| | Male. | Female. | Male. | Female. | | |
| Gonorrhœa | 17 | — | 20 | 8 | 45 | |
| Syphilis | 10 | — | 5 | — | 15 | |
| Periurethral Abscess | 1 | — | — | — | 1 | |
| Vaginitis—Simple | — | — | — | 8 | 8 | |
| Total | 28 | — | 25 | 16 | 69 | |

R. H. MILLER,
Medical Officer.

THE SENIOR MEDICAL OFFICER,
BATHURST, R. GAMBIA.
12th July, 1922.

TABLE IX.

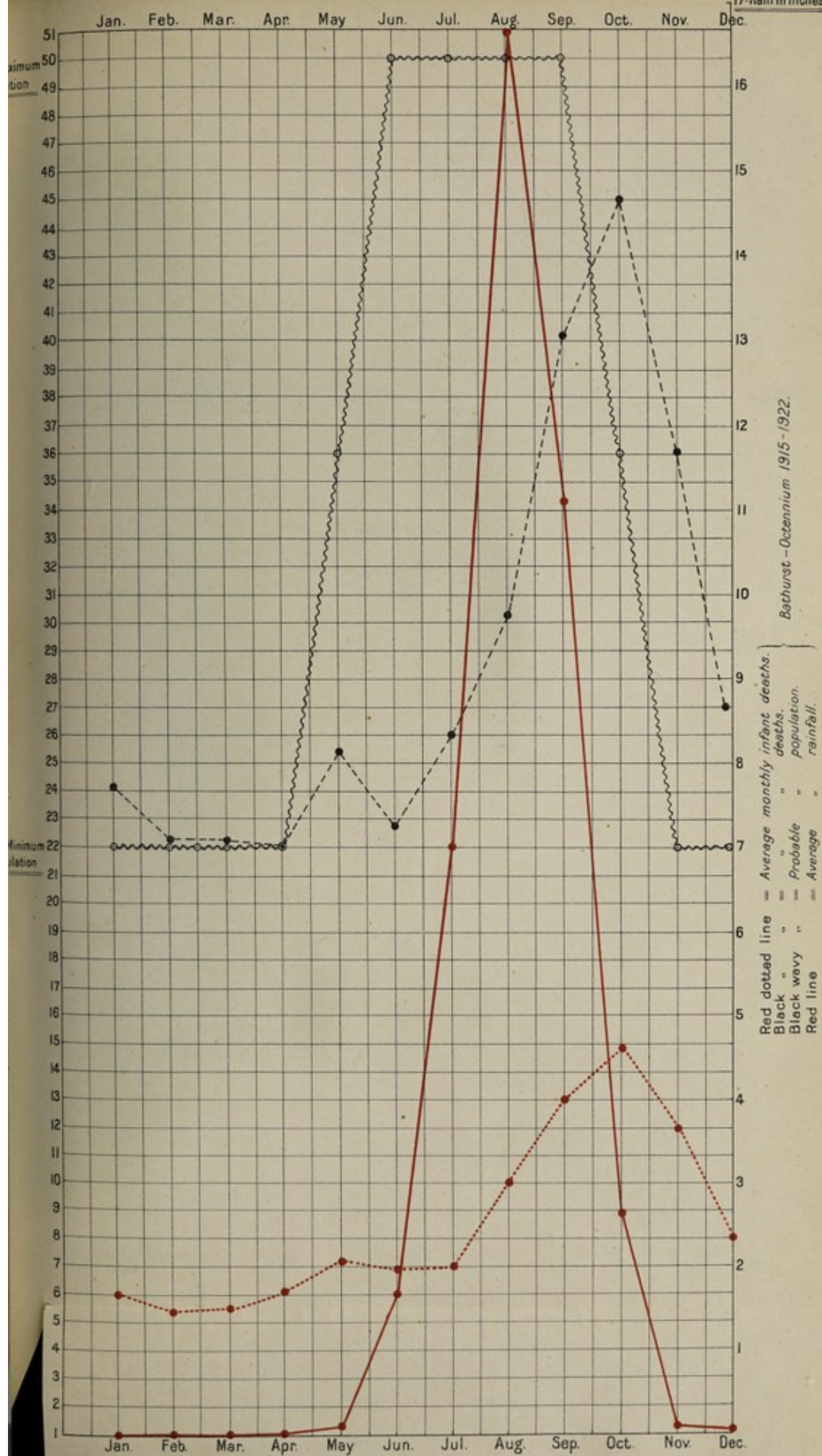
FINANCIAL STATEMENT.—MEDICAL DEPARTMENT.

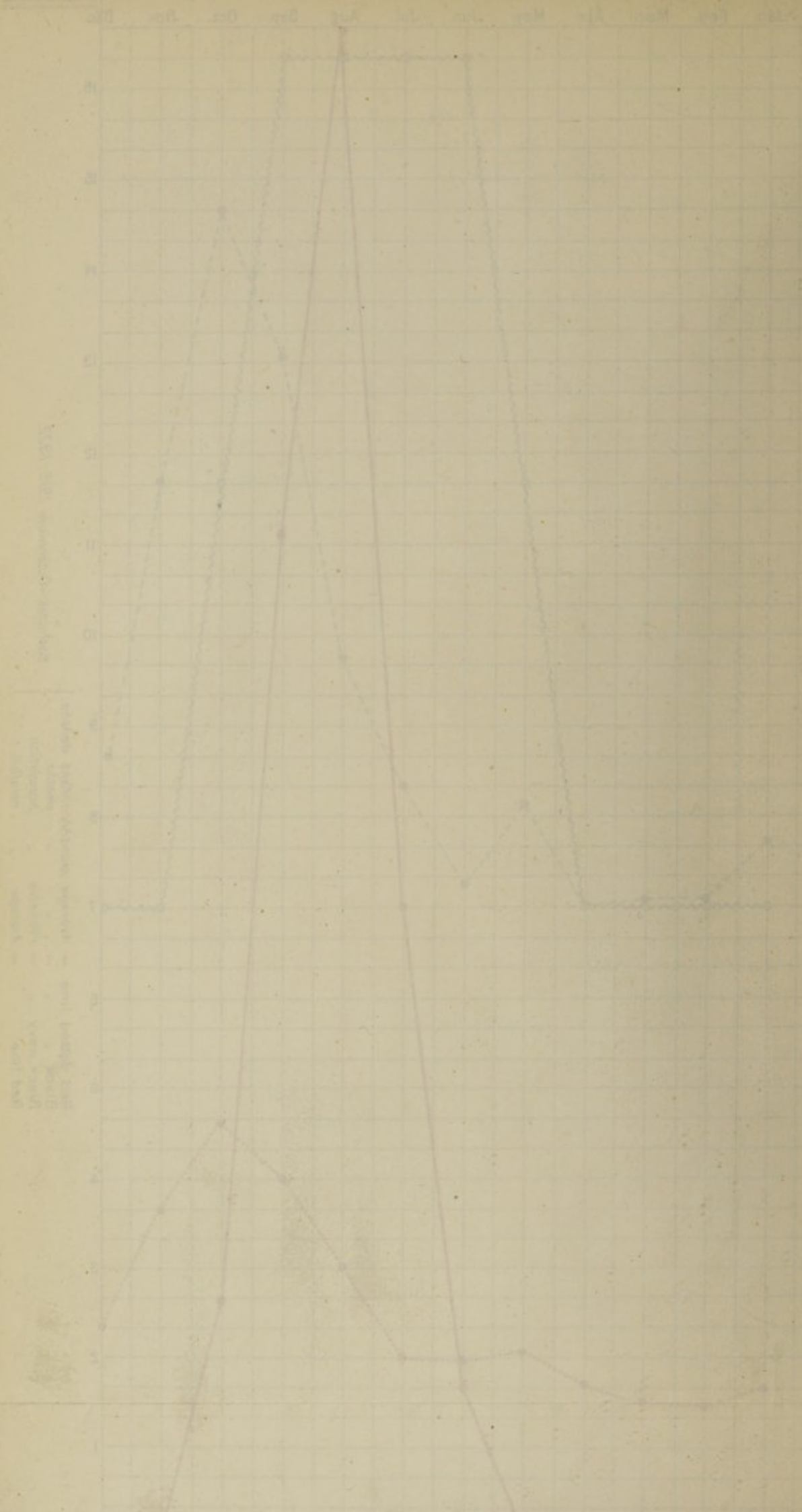
| | Estimated Expenditure. | Actual Expenditure. | | |
|--|---------------------------|------------------------|----|----|
| | £ | £ | s. | d. |
| Personal Emoluments | 9,746 | 9,092 | 18 | 3 |
| Bush Allowance to Medical Officer in Protectorate | 50 | 31 | 5 | 0 |
| Horse, Motor and Bicycle Allowances | 140 | 127 | 17 | 9 |
| Fees for Course of Instructions to Medical Officers in England | 50 | 5 | 5 | 0 |
| Outfit Allowances to Medical Officers | 60 | — | — | — |
| „ „ „ Nursing Sisters | 90 | 87 | 10 | 0 |
| Fees for Selection and Medical Examination of Officers and Nursing Sisters | 10 | 17 | 9 | 11 |
| Sea Passages | 472 | 473 | 3 | 11 |
| Travelling Expenses for Nursing Sisters in England | 10 | 16 | 9 | 0 |
| Uniforms for Attendants | 85 | 73 | 12 | 1 |
| Maintenance of Sick Dietary, etc. | 1,450 | 1,010 | 14 | 1 |
| Repairs to Hospital Appliances | 50 | 46 | 12 | 2 |
| „ „ „ Furniture | 50 | 6 | 14 | 4 |
| Bedding and Clothing | 213 | 162 | 1 | 11 |
| Medicines and Vaccines | 1,000 | 818 | 3 | 8 |
| Dressings | 315 | 136 | 3 | 11 |
| Medical Comforts | 90 | 32 | 10 | 5 |
| Instruments | 20 | 18 | 11 | 1 |
| Washing Disinfectant and Soap | 140 | 147 | 7 | 1 |
| Fuel and Lighting | 120 | 76 | 11 | 3 |
| Infectious Diseases Prevention | 100 | 165 | 12 | 10 |
| „ „ Hospital | 30 | 8 | 13 | 0 |
| Vaccinations | 300 | 398 | 0 | 7 |
| Expenses of Burials | 30 | 27 | 2 | 0 |
| Maintenance of Lunatic at Sierra Leone | 380 | 138 | 16 | 0 |
| „ „ Home for Destitutes | 230 | 125 | 19 | 10 |
| Transport | 130 | 198 | 13 | 6 |
| Sundries | 50 | 35 | 11 | 7 |
| Extra Medical Attendance in Emergency Cases | 30 | — | — | — |
| Georgetown Hospital | 10 | — | — | — |
| Dental Equipment | 20 | 7 | 10 | 0 |
| Total | £15,471 | £13,487 | 0 | 2 |

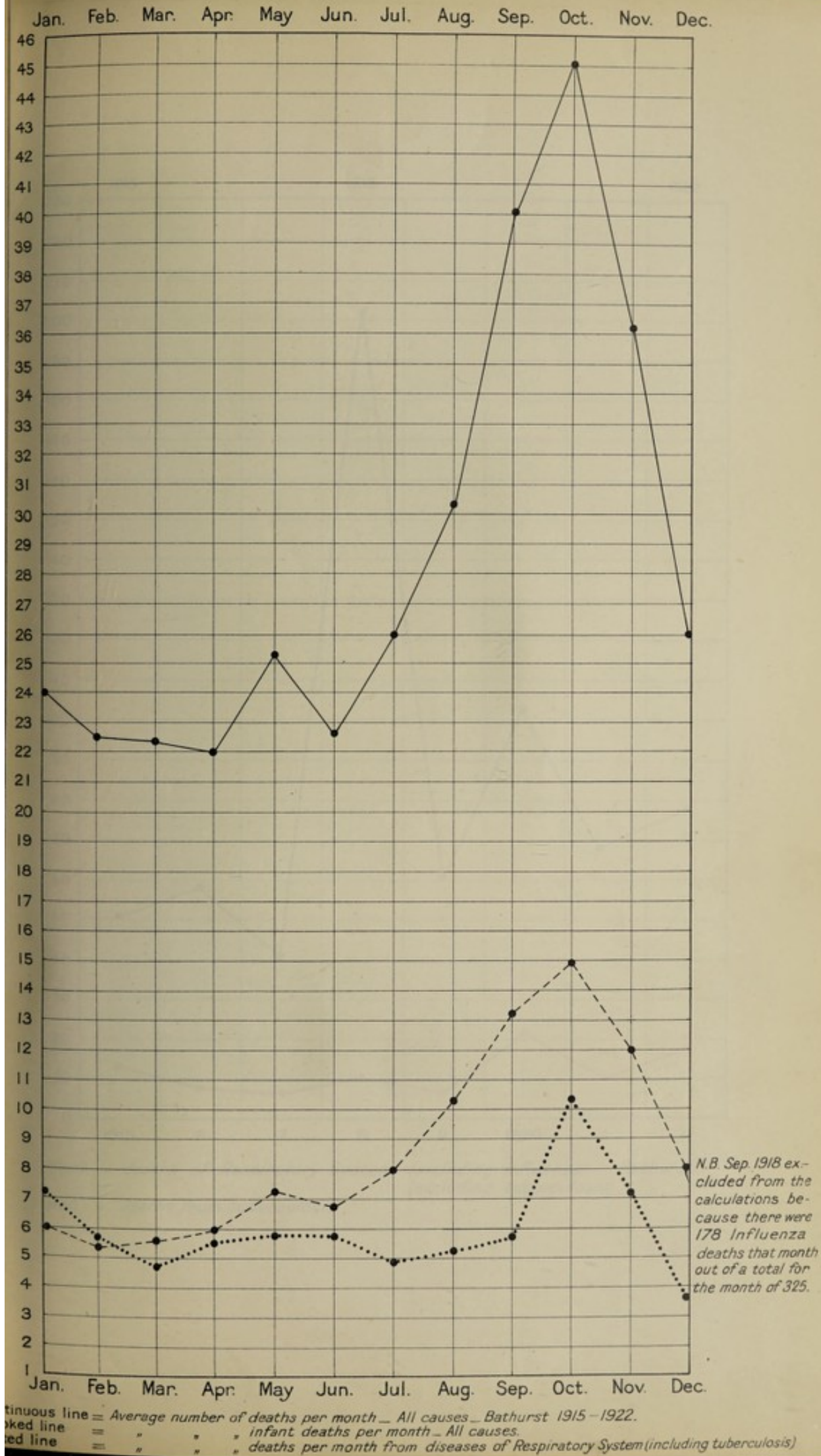
TABLE X.

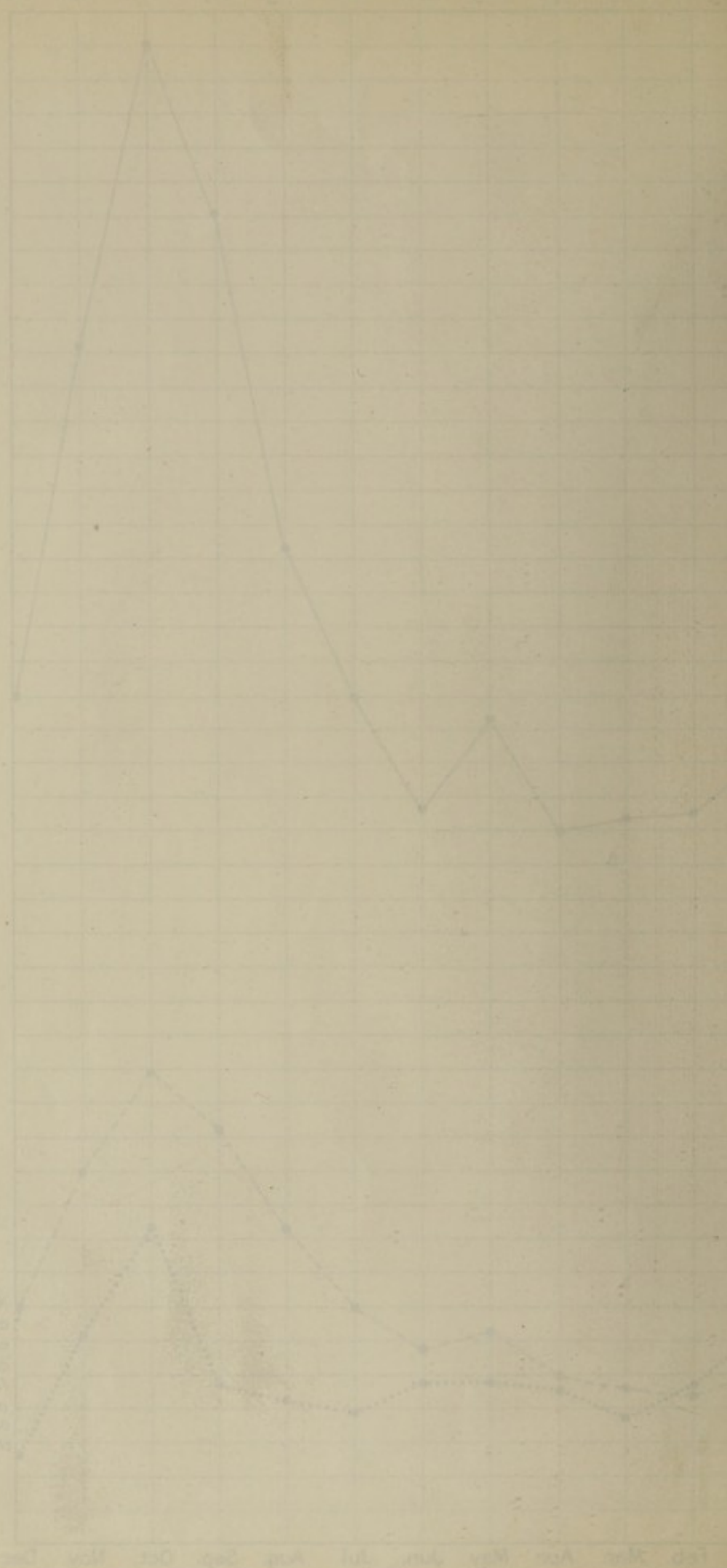
FINANCIAL STATEMENTS.—PUBLIC HEALTH DEPARTMENT.

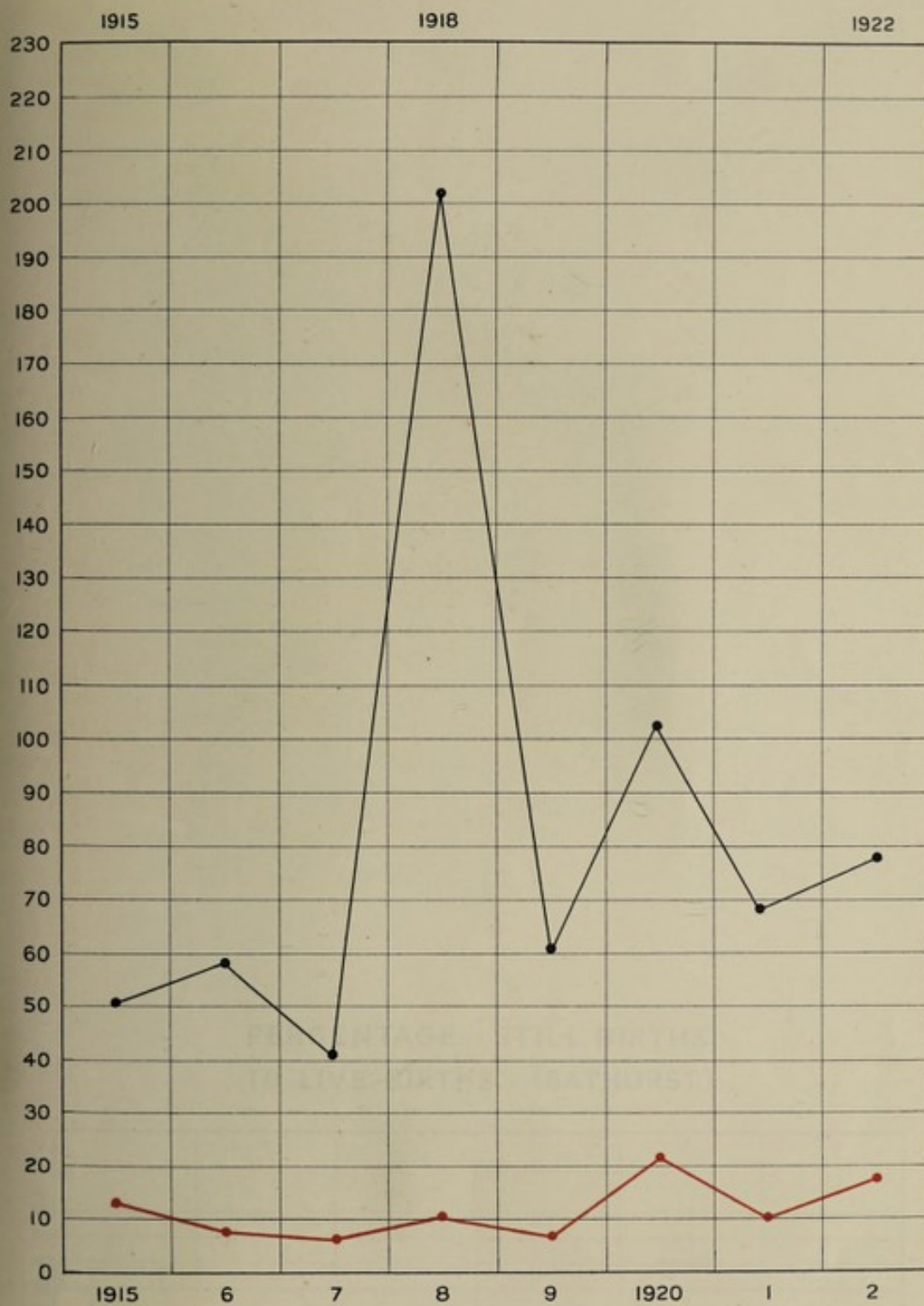
| | Estimated Expenditure. | Actual Expenditure. | | |
|---|---------------------------|------------------------|----|----|
| | £ | £ | s. | d. |
| A.—BOARD OF HEALTH. | | | | |
| Personal Emoluments | 2,737 | 2,804 | 7 | 11 |
| Other Charges | — | — | — | — |
| Horse, Motor and Bicycle Allowances | 90 | 75 | 1 | 3 |
| Sea Passages | 130 | 172 | 16 | 0 |
| Uniforms | 100 | 35 | 12 | 1 |
| Anti-Mosquito Measures—Oil, Disinfectant | 800 | 768 | 14 | 2 |
| Upkeep of Horses and Carts | 1,100 | 860 | 11 | 7 |
| Upkeep of Street Lights | 450 | 258 | 13 | 1 |
| Cleaning Streets and Drains | 1,600 | 1,494 | 15 | 6 |
| Sanitary Night Service | 850 | 777 | 10 | 0 |
| Cleaning Market and Slaughterhouses | 100 | 99 | 17 | 9 |
| Cleaning of Cemeteries | 130 | 99 | 13 | 0 |
| Cleaning of Government Compounds | 250 | 240 | 10 | 0 |
| Expenses of Working Sluice Gates | 100 | 87 | 14 | 3 |
| Mangrove Cutting | 300 | 287 | 11 | 0 |
| Sundries | 20 | 11 | 9 | 5 |
| Latrine Pails and Dustbins | 200 | 179 | 17 | 4 |
| Rat Traps and Poison, etc. | 100 | 18 | 15 | 0 |
| B.—PROTECTORATE SANITATION. | | | | |
| Personal Emoluments | 82 | 16 | 0 | 0 |
| Other Charges | — | — | — | — |
| Cleaning, Anti-Mosquito Measures, etc. | 1,000 | 379 | 6 | 0 |
| Tools | 30 | 15 | 13 | 3 |
| Upkeep of Street Lights, Georgetown | 40 | 34 | 14 | 9 |
| Total | £10,209 | £8,719 | 3 | 4 |



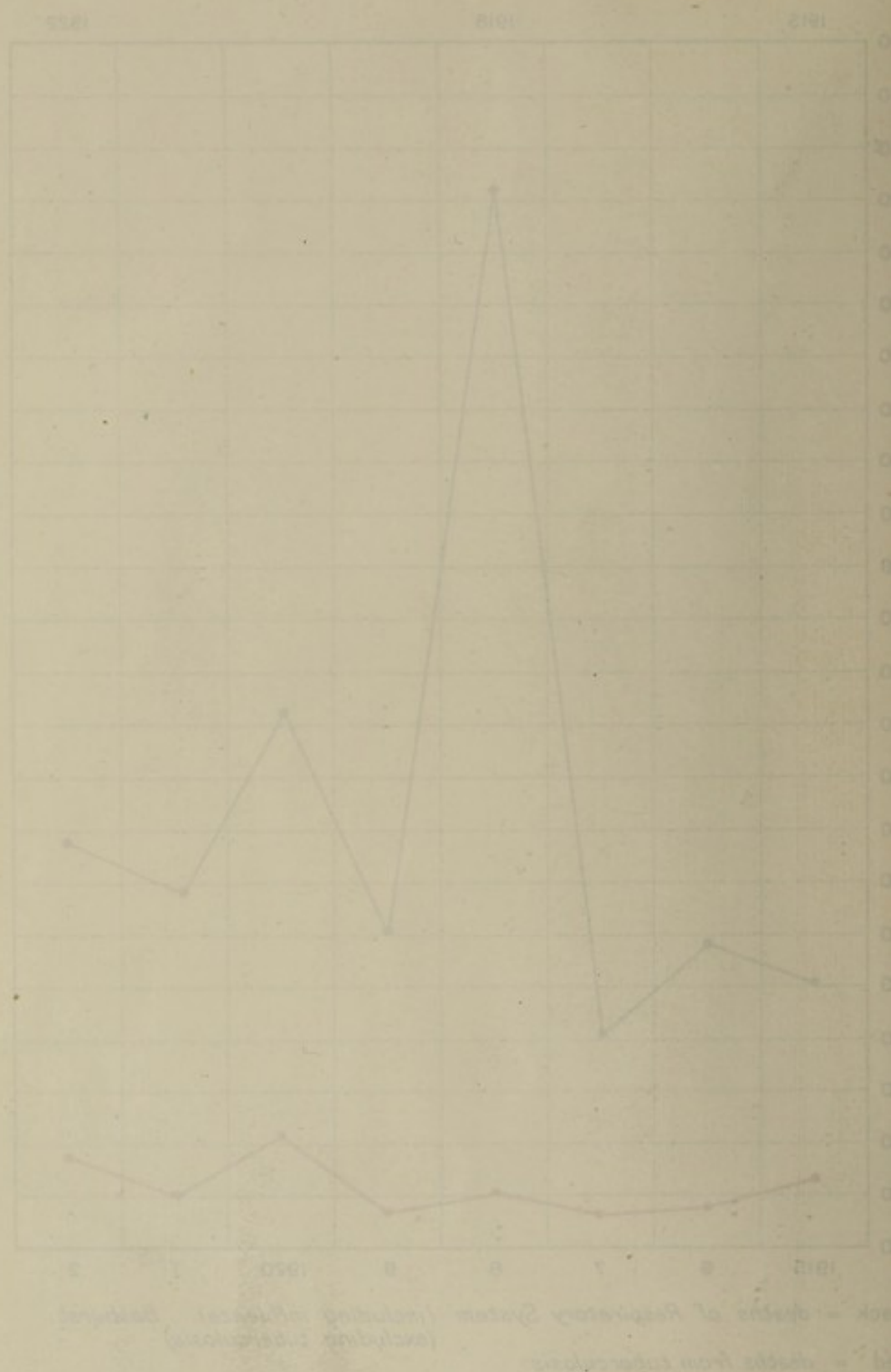








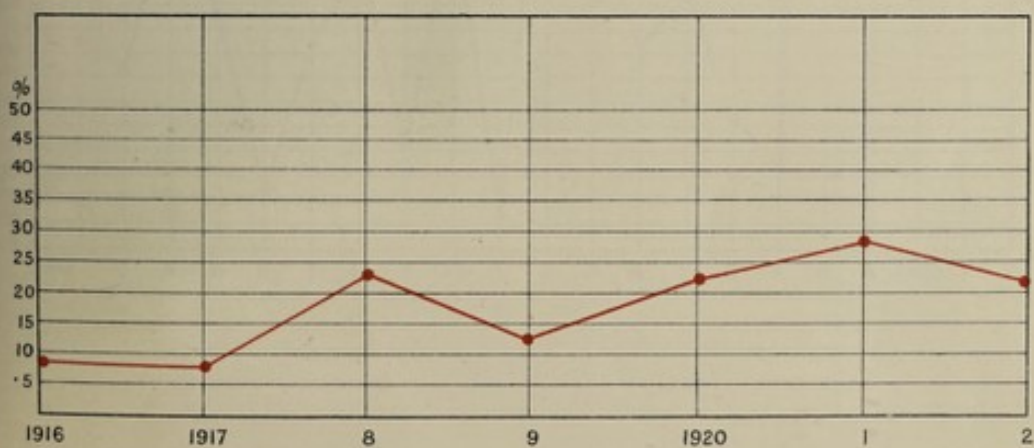
Black = *deaths of Respiratory System (including influenza). Bathurst.*
 Red = *deaths from tuberculosis.*



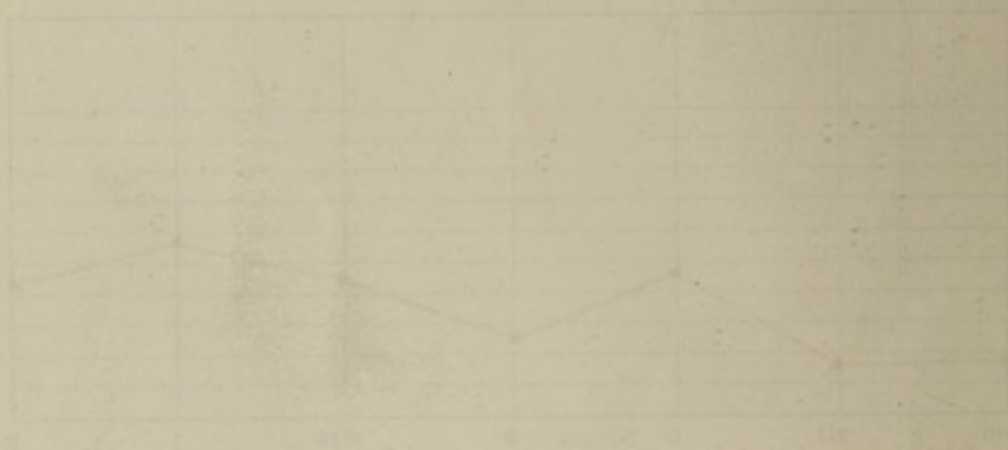
GRAPH OF INFANT MORTALITY AND STILLBIRTHS

1905 - 1921, INCLUSIVE

PERCENTAGE STILL BIRTHS
TO LIVE BIRTHS. (BATHURST.)

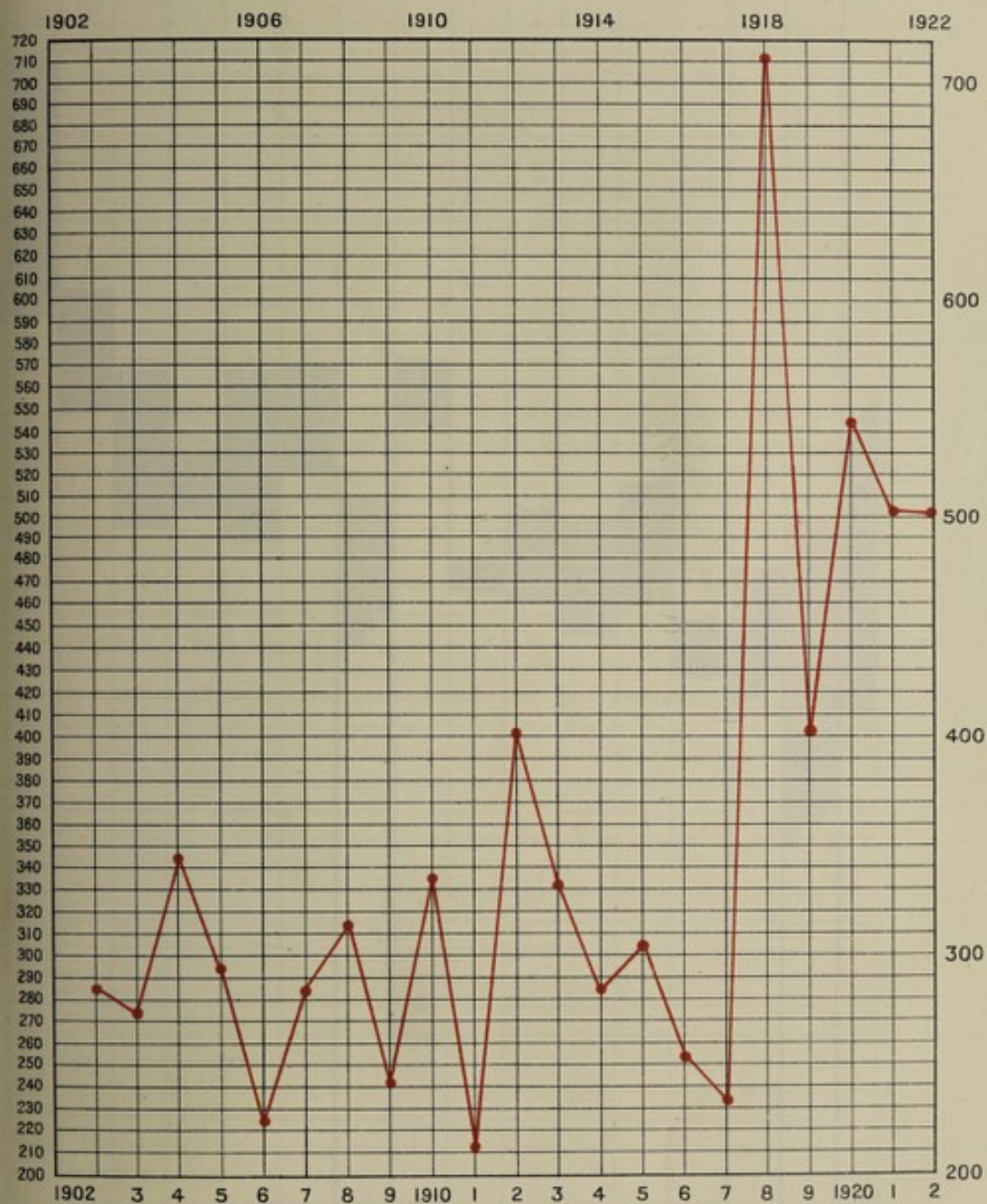


PERCENTAGE STILL BIRTHS
TO LIVE BIRTHS (BATHURST)

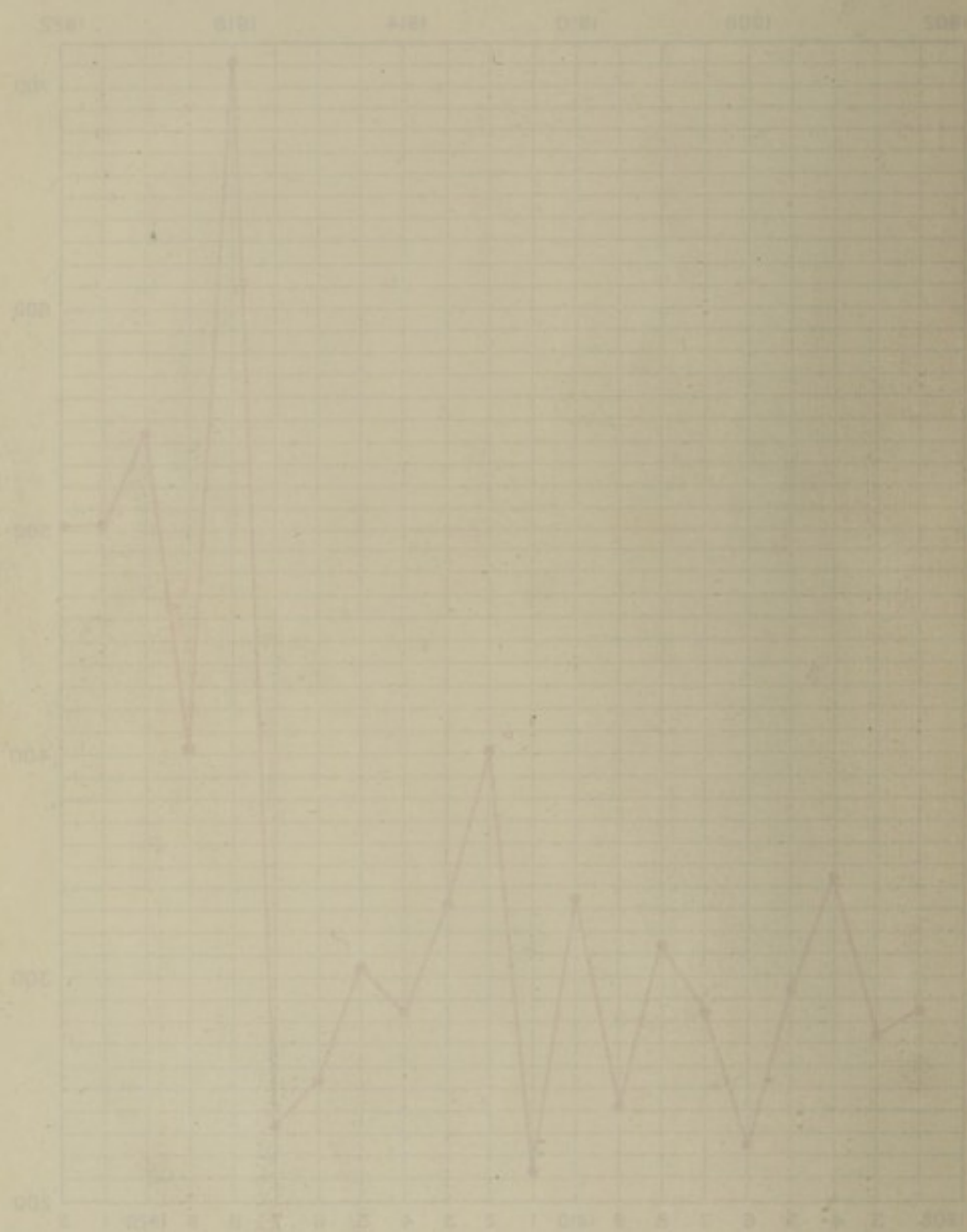


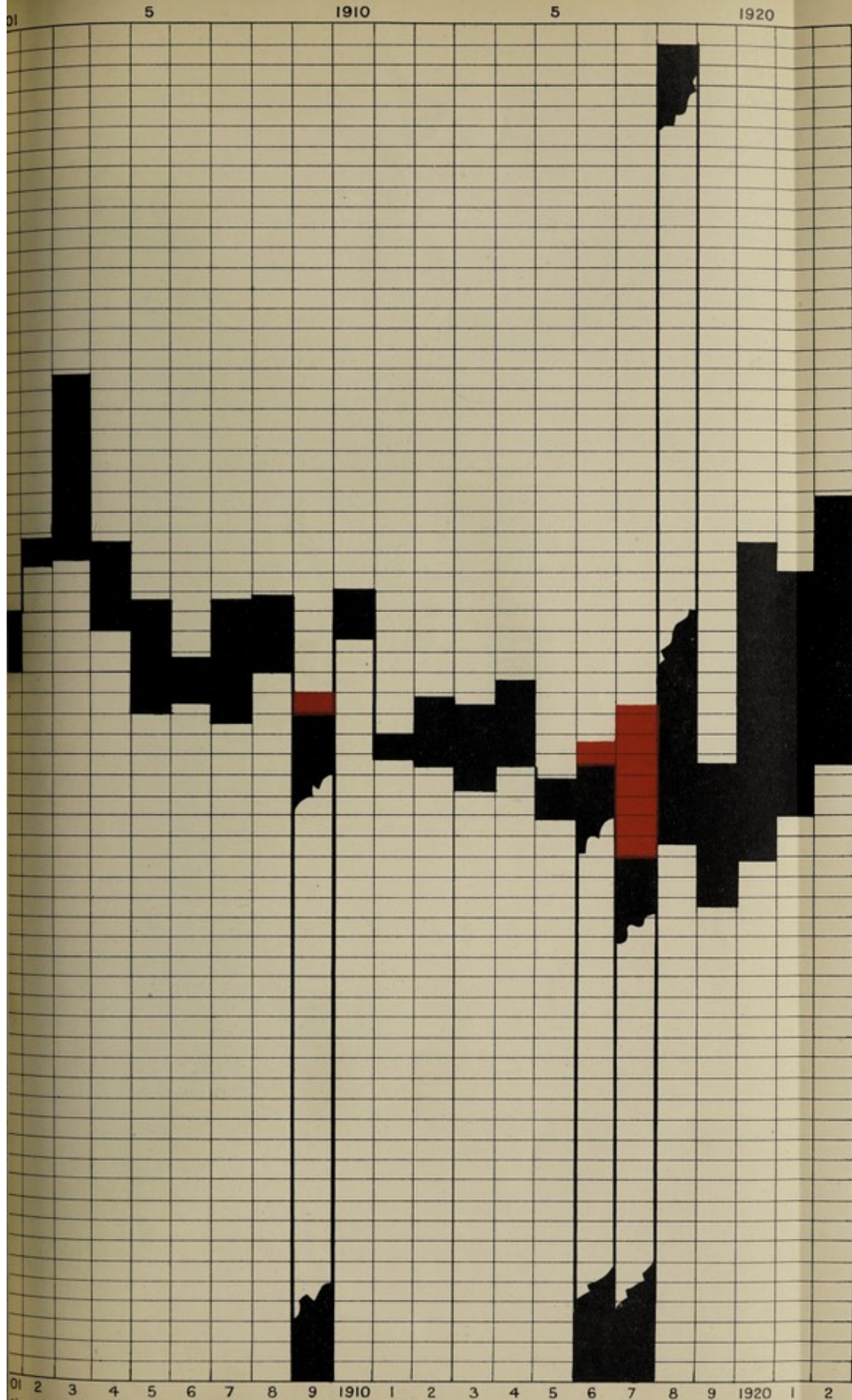
GRAPH OF INFANT MORTALITY RATE (BATHURST)

→ 1902 - 1921 INCLUSIVE. ←



GRAPH OF INFANT MORTALITY RATE (BATHURST)
1902 - 1921 INCLUSIVE





Births and deaths in Bathurst 1901-1922 (reliable from 1916.)
 Black parts indicate excess deaths over births, red excess births over deaths.
 White alone = Total births except where red is to be added to White and black for that year.
 Black and White = Total deaths.

