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Contributors

Tanganyika. Medical Department.

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Tanganyika Territory.

ANNUAL MEDICAL REPORT

FOR THE

YEAR ENDING DECEMBER 31st, 1924.

Price 5/-

PUBLISHED BY
THE CROWN AGENTS FOR THE COLONIES,
4 MILLBANK, LONDON, S.W.1.

Journal of the

Medical Society

of the

State of New York

Tanganyika Territory.

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Targanovka Territory

ANNUAL MEDICAL REPORT

FOR THE

YEAR ENDING DECEMBER 31st 1924

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THE MEDICAL DEPARTMENT
TARGANOVKA TERRITORY
SARATOV GOB. DISTRICT



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SKETCH MAP OF TANGANYIKA TERRITORY



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TANGANYIKA TERRITORY.

Annual Medical Report, 1924.

I. ADMINISTRATIVE.

(a) STAFF.

1. The establishment as authorised by the Estimates 1923-24 was as follows:—

EUROPEANS :

Principal Medical Officer.	17 Nursing Sisters.
Deputy Principal Medical Officer.	2 European Clerks.
Senior Sanitation Officer.	1 „ Storekeeper.
Director of Laboratory.	1 „ Assistant Storekeeper.
3 Senior Medical Officers.	1 Laboratory Assistant.
1 Dental Surgeon.	1 Superintendent, Lunatic Asylum.
24 Medical Officers.	1 Matron, Lunatic Asylum.
2 Senior Nursing Sisters.	7 Sanitary Superintendents.

ASIATICS :

30 Sub-Assistant Surgeons.	2 2nd Grade Clerks.
20 Compounders.	6 3rd and 4th Grade Clerks.

NATIVES :

A considerable number of Clerks, Hospital Attendants, Dispensers, Sanitary Inspectors, Vaccinators, Messengers and Labourers, and three Asiatic Sanitary Inspectors employed under the heading "Native Sanitary Inspectors."

2. For the year 1924-25 the authorised establishment was increased by:—

EUROPEANS :

2 Senior Medical Officers.
9 Medical Officers.
1 Assistant Bacteriologist.
1 Assistant Storekeeper.
1 Sanitary Superintendent.

ASIATICS :

1 Assistant Surgeon.
2 Senior Sub-Assistant Surgeons.
7 Sub-Assistant Surgeons.
1 Compounder.
1 3rd Grade Clerk.

3. At the beginning of 1924 there were the following shortages on the Staff:—

EUROPEANS :

1 Senior Medical Officer.
5 Medical Officers.
3 Nursing Sisters.
1 European Clerk.

ASIATICS :

2 Sub-Assistant Surgeons.

At the end of 1924 the shortages were as follows:—

EUROPEANS :

14 Medical Officers.	1 Assistant Bacteriologist.
	1 European Storekeeper.

This does not include shortages due to absence on leave.

The following officers held acting appointments during the year :—

Dr. J. O. Shircore, Acting P.M.O., 9th April, 1924, to 22nd December, 1924.

Dr. G. G. Butler, Acting D.P.M.O., 1st January, 1924, to 31st January, 1924 ; 9th April, 1924, to 14th December, 1924.

Dr. J. G. McNaughton, Acting S.M.O. from the beginning of the year until October 25th.

Dr. J. Hales Parry, Acting S.M.O. from 2nd February until 28th December.

Dr. R. R. Scott, M.C., Acting M.O.H. for whole year ; S.M.O.H. from 1st April, 1924, onwards.

Dr. A. I. Meek, Acting M.O.H. from the beginning of the year until 26th June.

Dr. R. Nixon, Acting M.O.H. from 27th June to the end of the year.

Miss E. Bishop, Acting Senior Nursing Sister from the beginning of the year until 2nd January, and from 3rd September to end of year.

Mr. R. J. Whelan, of the Police and Prisons Department, acted as Superintendent of the Lunatic Asylum, and Mrs. Whelan as Matron, from 1st April until 14th December, while the Superintendent and Matron (Mr. and Mrs. J. Spittles) were on leave.

Appointments :—

The following appointments were made during the year :—

EUROPEANS:

Dr. J. Pugh (S.M.O., Kenya), to be Deputy Principal Medical Officer, 15th December, 1924.

Dr. A. R. Lester, to be a Medical Officer, 16th February, 1924.

Dr. W. K. Connell, to be a Medical Officer, 31st July, 1924.

Dr. F. R. Lockhart, to be a Medical Officer, 18th September, 1924.

Miss E. F. S. Shaw, to be a Nursing Sister, 16th February, 1924.

Mrs. E. L. Evans do. do. 30th March, 1924.

Miss E. Haslett do. do. 29th May, 1924.

Miss K. P. Heckford do. do. 2nd October, 1924.

Mrs. E. S. Thomas do. do. (temporary), 4th May, 1924, to 31st July, 1924, and 20th November to the end of the year.

Mr. N. M. Moore to be a Clerk-Storekeeper, 30th January, 1924.

Mr. B. T. Bailey to be a Sanitary Superintendent, 2nd Grade, 18th September, 1924.

ASIATICS :

Mr. R. Mendirath, to be a Sub-Assistant Surgeon, 20th February, 1924.

Mr. Sant Ram, do. do. 25th June, 1924.

Mr. M. A. Bhosle, do. do. 6th August, 1924.

Mr. D. A. Mhaskar, do. do. 17th September, 1924.

Mr. Hari Singh, do. do. 17th September, 1924.

Mr. W. R. Bowry, do. do. 28th October, 1924.

Mr. M. A. Shaik, to be a Compounder, 1st October, 1924.

Mr. G. Hendricks, to be a 3rd Grade Clerk, 1st October, 1924.

Promotions :—

EUROPEANS :

- Dr. J. O. Shircore, Deputy P.M.O., to be Principal Medical Officer, 23rd December, 1924.
 Dr. J. McK. Clark, Medical Officer, to be a Senior Medical Officer, 1st April, 1924.
 Dr. R. R. Scott, M.C., Medical Officer, to be a Senior Medical Officer of Health, 1st April, 1924.

ASIATICS :

- Mr. J. C. Lemos, Sub-Assistant Surgeon, to be an Assistant Surgeon, 1st April, 1924.
 Mr. B. G. Pandit, Sub-Assistant Surgeon, to be a Senior Sub-Assistant Surgeon, 1st April, 1924.
 Mr. D. G. Kelkar, Sub-Assistant Surgeon, to be a Senior Sub-Assistant Surgeon, 1st April, 1924.

Retirement :—

- Dr. J. B. Davey, Principal Medical Officer, 23rd December, 1924.

Transfers :—

- Dr. J. M. Semple, Medical Officer, transferred to Zanzibar, 1st October, 1924.

Agreements Expired :—

EUROPEANS :

- Dr. W. E. Haworth, Temporary Medical Officer, 7th July, 1924.
 Mrs. S. M. Fichat, Temporary Nursing Sister, 10th March, 1924.

ASIATICS :

- Mr. S. V. Pantwaidya, Sub-Assistant Surgeon, 30th May, 1924.
 Mr. M. S. Desai, Sub-Assistant Surgeon, 11th June, 1924.

Agreements Terminated :—

- Mr. R. Mendirath, Sub-Assistant Surgeon, 6th September, 1924.
 Mr. R. G. Pradhan, Sub-Assistant Surgeon, 19th September, 1924.
 Mr. Verhumal Lakhmal, Compounder, 23rd September, 1924.

Resignations :—

- Miss M. H. Sanders, Nursing Sister, 22nd November, 1924.
 Mr. J. F. Freeman, Sub-Assistant Surgeon, 20th October, 1924.

Deaths :—

Nil.

Invalided :—

- Mr. G. G. Bam, Sub-Assistant Surgeon, 6th September, 1924.
 Mr. P. V. Mathew, Compounder, 4th October, 1924.

Leave of Absence :—

EUROPEANS :

- Dr. J. B. Davey, P.M.O., 9th April, 1924, to 22nd December, 1924.
 Dr. J. O. Shircore, Deputy P.M.O., beginning of the year till 30th January, 1924.
 Dr. A. H. Owen, S.S.O., 13th March, 1924, to 17th October, 1924.
 Dr. T. H. Suffern, S.M.O., 23rd February, 1924, to 17th October, 1924.

Dr. C. L. Ievers, S.M.O.,	16th February, 1924,	to 11th December, 1924.
Dr. P. F. Nunan, S.M.O.,	beginning of the year	till 30th January, 1924.
Dr. J. McK. Clark, S.M.O.,	beginning of the year	till 22nd August, 1924.
Dr. C. R. H. Tichborne, M.O.,	9th December, 1924,	till end of the year.
Dr. C. B. B. Reid, M.O.,	beginning of the year	till 2nd March, 1924.
Dr. J. Hales Parry, M.O.,	beginning of the year	till 28th January, 1924.
Dr. W. E. Haworth, Temporary M.O.,	23rd January, 1924,	to 7th July, 1924.
Dr. C. H. Phillips, M.O.,	beginning of the year	till 22nd February, 1924.
Dr. G. A. Williams, Temporary M.O.,	19th March, 1924,	to 5th December, 1924.
Dr. G. Maclean, M.O.,	beginning of the year	till 23rd September, 1924.
Dr. C. F. Shelton, M.O.,	13th April, 1924,	till end of the year.
Dr. R. Nixon, M.O.,	beginning of the year	till 26th June, 1924.
Dr. J. M. Semple, M.O.,	9th April, 1924,	to 30th September, 1924.
Dr. A. I. Meek, M.O.,	27th June, 1924,	till end of the year.
Mr. H. M. Fisher, Dental Surgeon,	beginning of the year	till 2nd January, 1924.
Miss F. M. Plant, Senior Nursing Sister,	beginning of the year	till 2nd January, 1924.
Miss J. Fraser, Senior Nursing Sister,	3rd September, 1924,	till end of the year.
Miss E. L. Kemsley, R.R.C., Nursing Sister,	beginning of the year	till 2nd January, 1924.
Miss S. Riordan,	do.	27th November, 1924, till end of the year.
Miss M. E. Shearing,	do.	beginning of the year till 13th July, 1924.
Miss W. R. Grant,	do.	1st January, 1924, to 13th July, 1924.
Miss E. Bishop,	do.	23rd January, 1924, to 21st August, 1924.
Miss N. E. Wells,	do.	beginning of the year till 10th February, 1924.
Miss B. G. Allardes,	do.	4th March, 1924, to 17th October, 1924.
Miss M. H. Sanders,	do.	21st May, 1924, to 21st November, 1924.
Miss M. H. B. Macrae,	do.	2nd August, 1924, till end of the year.
Mr. H. Hammond, Lab. Assistant,	beginning of the year	till 18th May, 1924.
Mr. J. L. Mason, European Clerk,	16th February, 1924,	to 5th December, 1924.
Mr. C. N. Rowe, 1st Grade Sanitary Superintendent,	beginning of the year	till 13th February, 1924.
Mr. R. E. Owen, 2nd Grade Sanitary Supt.,	24th December, 1924,	till end of the year.
Mr. T. Bell,	do.	do. beginning of the year till 28th January, 1924.
Mr. J. S. Humphrey,	do.	do. beginning of the year till 13th May, 1924.
Mr. J. Spittles, Superintendent, Lunatic Asylum,	27th April, 1924,	to 10th December, 1924.
Mrs. C. M. Spittles, Matron,	do.	do. do. do.

ASIATICS :—

Mr. D. G. Kelkar, Senior Sub-Assistant Surgeon,	12th February, 1924,	to 3rd September, 1924.
Mr. S. V. Pantwaidya, Sub-Assistant Surgeon,	beginning of the year	till 29th May, 1924.
Mr. M. S. Desai,	do.	do. 26th January, 1924, to 10th June, 1924.
Mr. D. A. Purandre,	do.	do. 13th January, 1924, to 20th July, 1924.
Mr. Dewan Chand,	do.	do. beginning of the year till 27th April, 1924.
Mr. P. S. Paranjpe,	do.	do. 19th April, 1924, to 12th October, 1924.
Mr. C. K. Borsada,	do.	do. 10th March, 1924, to 15th May, 1924.
Mr. J. F. Macedo,	do.	do. 9th August, 1924, till end of the year.
Mr. M. C. Thomas,	do.	do. 23rd October, 1924, till end of the year.
Mr. P. V. Mathew, Compounder,	beginning of the year	till 12th June, 1924.
Mr. Ujagar Singh,	do.	beginning of the year till 21st February, 1924.
Mr. Dasumal,	do.	17th May, 1924, to 14th September, 1924.
Mr. A. L. B. Fernandes, 1st Grade Clerk,	beginning of the year	till 10th June, 1924.
Mr. D. B. Somvasi, 4th Grade Clerk,	1st December, 1924,	till end of the year.

DISPOSITION OF THE EUROPEAN STAFF, AND OF THE ASSISTANT, SENIOR AND
SUB-ASSISTANT SURGEONS.

Name and Qualifications.	Rank.	Station, Dec. 31, 1924.	Remarks.
J. O. Shircore, M.B., Ch.B. (Edin.), L.R.C.P., L.R.C.S., and L.R.F.P. (Edin. and Glas.), M.R.C.P. (Edin.).	P.M.O. ..	Dar-es-Salaam	
J. Pugh, M.R.C.S. (Eng.), L.R.C.P. (Lond.)	Dy. P.M.O. ..	" ..	
A. H. Owen, B.A. (Camb.), M.R.C.S. (Eng.), L.R.C.P. (Lond.), D.T.M. and H. (Camb.).	S.S.O. ..	" ..	
G. G. Butler, M.B.E., M.R.C.S. (Eng.), L.R.C.P. (Lond.), M.D., B.Ch. (Cantab.).	Dir. of Lab. ..	" ..	
T. H. Suffern, M.B., B.A.O., Ch.B. (Royal University, Ireland).	S.M.O. ..	Tabora ..	
C. L. Ievers, L.R.C.S., L.R.C.P. (Edin.), D.T.M. (Liv.).	S.M.O. ..	Tanga ..	
Dr. P. F. Nunan, B.A., M.D., M.B., B.Ch. (Dublin).	S.M.O. ..	Dar-es-Salaam	
J. McK. Clark, M.B., Ch.B., D.T.M. (Liv.).	S.M.O. ..	Mahenge ..	
R. R. Scott, M.C., M.B., B.S. (Durham), M.R.C.S. (Eng.), L.R.C.P. (Lond.), D.P.H. (Lond.).	S.M.O.H. ..	Dar-es-Salaam	
C. R. H. Tichborne, L.A.H. (Dublin) ..	M.O. ..	Leave ..	
C. R. Wallace, L.R.C.P., L.R.C.S., L.M. (Ireland).	" ..	Kigoma ..	
G. R. C. Wilson, M.R.C.S. (Eng.), L.R.C.P. (Lond.).	" ..	Tukuyu ..	
C. B. B. Reid, M.B., Ch.B. (Edin.), D.T.M. (Liv.).	" ..	" ..	
J. H. Parry, B.A. (Cantab.), M.R.C.S. (Eng.), L.R.C.P. (Lond.).	" ..	Moshi ..	
A. McA. Blackwood, M.B., Ch.B. (Glas.)	" ..	Lindi ..	
J. G. McNaughton, M.D., M.R.C.P., M.B., C.M. (Edin.).	" (Temp.) ..	Bukoba ..	
C. H. Phillips, L.M.S.S.A. (Lond.) ..	" ..	Arusha ..	
G. A. Williams, M.R.C.S. (Eng.), D.R.C.P. (Lond.).	" (Temp.) ..	Morogoro ..	
G. Maclean, M.B., Ch.B. (Glas.), D.T.M. (Liv.).	" ..	Ufipa ..	
C. F. Shelton, M.D. (Lond.), M.B., B.S. (Lond.), M.R.C.S. (Eng.), L.R.C.P. (Lond.).	" ..	On Leave ..	
R. Nixon, M.B., Ch.B., D.T.M., D.P.H. (Liv.).	" ..	Tanga ..	Acting M.O.H.
A. I. Meek, L.R.C.P., L.R.C.S., D.P.H. (Edin.), L.R.F.P. and S. (Glas.).	" ..	On Leave ..	
J. J. B. Edmond, M.C., M.B., Ch.B. (Edin.), D.T.M. and H. (Lond.).	" ..	Moshi ..	
O. Fitzpatrick, M.B., Ch.B., L.R.C.P., L.R.C.S. (Edin.), L.R.F.P.S. (Glas.).	" ..	Sick ..	
A. R. Lester, M.B., B.S., (B'bay), F.R.F.P. and S. (Glas.), D.P.H., D.T.M. and H. (Edin.).	" ..	Dar-es-Salaam	
W. K. Connell, M.B., Ch.B. (Glas.) ..	" ..	Songea ..	
F. R. Lockhart, M.B., Ch.B. (Man- chester).	" ..	Dar-es-Salaam	
H. M. Fisher, L.D.S., R.C.S. (Eng.) ..	Dental Surgeon	" ..	
Miss F. M. Plant ..	Sen. N. Sister ..	On Leave ..	
Miss J. Fraser ..	" ..	" ..	
Miss E. L. Kemsley, R.R.C. ..	Nursing Sister	" ..	
Mrs. M. A. Cartlidge ..	" ..	Moshi ..	
Miss S. Riordan ..	" ..	On Leave ..	

DISPOSITION OF THE EUROPEAN STAFF, AND OF THE ASSISTANT, SENIOR AND
SUB-ASSISTANT SURGEONS—continued.

Name and Qualifications.	Rank.	Station, Dec. 31, 1924.	Remarks.
Miss M. E. Shearing	Nursing Sister	Dar-es-Salaam	
Miss W. R. Grant	" "	Mwanza ..	
Miss E. Bishop	" "	Tanga	Acting S.N.S.
Miss B. G. Allardes	" "	Dar-es-Salaam	Acting Health Visitor.
Miss M. H. B. Macrae	" "	On Leave ..	
Miss M. Donald	" "	Tabora ..	
Miss K. Thompson	" "	Dar-es-Salaam	
Miss A. Muncaster	" "	Tanga ..	
Mrs. K. M. Turnley	" "	Arusha ..	
Miss J. E. Wootten	" "	Dar-es-Salaam	
Miss E. Haslett	" "	Tanga ..	
Miss K. P. Heckford	" "	Dar-es-Salaam	
Mrs. E. S. Thomas	" "	" ..	
	(Temp.)		
J. C. Lemos, F.C.P.S. (Calcutta) ..	Asst. Surgeon..	Iringa ..	
B. G. Pandit, L.C.P. and S. (Bombay) ..	Sen. Sub-Asst. Surgeon	Bagamoyo ..	
D. G. Kelkar, L.C.P. and S. (Bombay)	" "	Biharamulo ..	
Dewan Chand, Cert. Lahore Medical School.	Sub-Asst. Surgeon	Dodoma ..	
D. A. Purandre, L.C.P. and S. (Bombay)	" "	Bukoba ..	
Y. L. Moole, L.C.P. and S. (Bombay) ..	" "	Mikindani ..	
C. K. Borsada, L.C.P. and S. (Bombay)	" "	Kilwa ..	
P. S. Paranjpe, L.C.P. and S. (Bombay)	" "	Lushoto ..	
J. F. Macedo, L.C.P. and S. (Bombay)	" "	On Leave ..	
Y. B. Kelshikar, L.C.P. and S. (Bombay)	" "	Dodoma ..	
M. C. Thomas, L.M.S. (Travancore) ..	" "	On Leave ..	
G. V. Sakrikar, L.C.P. and S. (Bombay)	" "	Pangani ..	
K. R. Pagadala, L.C.P. and S. (Bombay)	" "	Songea ..	
B. K. Christian, L.C.P. and S. (Bombay)	" "	Ujiji ..	
M. P. Dave, L.C.P. and S. (Bombay) ..	" "	Dar-es-Salaam	
A. K. Patreekar, Certificated Hydera- bad Decan Med. School.	" "	Musoma ..	
Chunilal Khana	" "	Shinyanga ..	
T. M. Joseph, L.M.P. (Madras)	" "	Kondoa-Irangi	
W. A. Irvine, L.C.P. and S. (Bombay) ..	" "	Tabora ..	
S. R. Abhyankar, L.C.P. & S. (Bombay)	" "	Dar-es-Salaam	
C. K. Desai, L.C.P. and S. (Bombay) ..	" "	Mwanza ..	
P. V. Gokhale, L.C.P. and S. (Bombay)	" "	Moshi ..	
M. B. Pandya, L.C.P. and S. (Bombay)	" "	Tanga ..	
L. Coro, Malta University	" "	Namanyere ..	
Sant Ram, Certificated Lahore Medical School.	" "	Kilosa ..	
A. M. Bhosle, L.C.P. & S. (Bombay) ..	" "	Tabora ..	
Hari Singh, L.S.M.F.	" "	Kahama ..	
D. A. Mhaiskar, L.C.P. & S. (Bombay)	" "	Lindi ..	
Walaiti Ram Bowry, L.M.F. (Bengal) ..	" "	Mwanza ..	

(b) FINANCIAL.

Estimated expenditure for period 1st January to 31st December, 1924 :—

Personal Emoluments :—

MEDICAL DIVISION :							£	£
Principal Medical Officer and Deputy Principal Medical Officer							2,200	
Clerical Staff, Medical Storekeepers, Packers, Messengers, etc.							3,600	
Senior Medical Officers	..	..	..	..	..	..	3,345	
Medical Officers	..	..	..	..	..	..	12,375	
Dental Surgeon	..	..	..	..	..	..	795	
Nursing Staff	..	..	..	..	..	..	4,250	
Superintendent and Matron, Lunatic Asylum	..	..	..	..	..	..	620	
Indian Medical Assistants, <i>i.e.</i> , S.A.S. and Compounders	..	..	..	..	..	..	10,640	
Native Dispensers and Hospital Attendants	..	..	..	..	..	..	3,390	
Other Charges	..	..	..	..	..	..	5,460	
								46,675

SANITATION DIVISION :

Senior Sanitation Officer, Medical Officers of Health, and Subordinate Staff for the suppression of Epidemic Diseases							7,075
---	--	--	--	--	--	--	-------

LABORATORY DIVISION :

Director of Laboratory and Laboratory Assistant	..	..					1,290	
Total Personal Emoluments		*55,040

Other Charges :—

ADMINISTRATIVE DIVISION :

Incidental Charges	395
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MEDICAL DIVISION :

Miscellaneous charges	665
-----------------------	----	----	----	----	----	----	-----

SANITATION DIVISION :

Maintenance of Lepers, Lunatics and Incurables					2,380
Sanitary Labour	..	..	..	..	..	..	10,980
Upkeep of Infectious Diseases Hospitals	..	..	..	..	..	..	1,135
Sanitary Oils and Disinfectants	..	..	..	..	..	..	215
Sanitary Equipment	..	..	..	..	..	..	1,010
Uniforms	..	..	..	..	..	..	300

LABORATORY DIVISION :

Vaccine and Serum	..	..	..	..	..	..	275
Miscellaneous	..	..	..	..	..	..	285

Special Expenditure :—

Sleeping Sickness and Special Sanitary Measures	..	..					335
For Treatment of Venereal Diseases	..	..	..	..	..	..	1,400

HOSPITALS, DISPENSARIES AND LUNATIC ASYLUM :

Maintenance of—

Medical and Surgical Stores	..	..	..	..	..	..	6,340
Equipment and Furniture	..	..	..	..	..	..	1,065
Upkeep of Hospitals	..	..	..	..	..	..	9,390
Upkeep of Lunatic Asylum at Lutindi	..	..	..	..	..	..	510
Uniforms	..	..	..	..	..	..	200

Miscellaneous Expenditure :—

Medical Library	140
Travelling Equipment	220
Transport, Railage and Passages	6,810
Total Other Charges	44,050
TOTAL	£99,090

* The Compensatory Allowance paid to the European Staff, approximating a total of £3,680, is not included in this amount.

STATEMENT OF REVENUE, 1924.

	£
From Hospital Fees, Sale of Drugs, etc.	6,650
Fees collected by Port and Marine Department for Bills of Health	538
Sale of Vaccine to Zanzibar Government	160
TOTAL	£7,348

LIBRARY.

A number of new books have been added to the Medical Library during the year, and several out-stations have been issued with medical works.

Numerous scientific periodicals of Medical interest have been taken in as before, and the Tropical Diseases Bulletin and the annals of Tropical Medicine and Parasitology distributed to a number of stations.

LEGAL.

During the year 1924 the following Enactments, Rules and Notices were gazetted.

No. 16 of 1924.—An Ordinance to regulate immigration into the Territory. Under this Ordinance powers exist to prohibit immigrants, not being natives born or domiciled in the Territory, viz., a destitute person, an idiot or lunatic, any person certified by a Medical Officer to be suffering from a contagious or infectious disease which makes his entry into the Territory dangerous to the community, a prostitute, the children or dependants, if under the age of sixteen years, of a prohibited immigrant. Under Section 40, sub-section (a) any place or port may be declared a port of entry, and any place or port cancelled as a port of entry, and under (b) that any disease shall or shall not be considered a contagious or infectious disease for the purposes of this Ordinance.

Government Notice No. 60.—Under the Townships Ordinance 1920 (No. 10)—entitled "The Townships (Aerated Water and Ice Factories) Rules 1924—deals in detail with the building and factory used for the manufacture for sale of aerated water and ice to the public, and with all questions of hygiene relating thereto, and to the preparation of aerated water and ice.

Government Notice No. 218.—Under the Opium Proclamation, 1920, exempts certain preparations containing Opium, Morphine and Arsenic from the operation of Government Notice No. 126 of 1921.

Government Notice No. 122.—Under Registration of Births and Deaths Ordinance 1920 and 1922, amends Rule 3 (2) of the Registration of Births and Deaths Rules 1922, to the effect that the District Registrar shall forward particulars to the Registrar General, and that entry in the register of the particulars shall be deemed to be the registration of such birth or death.

Government Notice No. 141, under The Municipal House Tax Ordinance, 1922 (No. 27), directed that a municipal house tax shall be levied and raised on the net annual value of every house in certain specified townships, at specified rates.

Government Notice No. 160, under The Township Rules, 1923, prescribed certain areas in townships known as zones of which there are three mentioned. Zone I, for residential buildings of European type, Zone II, for residential and trading buildings, and Zone III, where native quarters may be erected.

Government Notice No. 171, under The Prisons Ordinance, 1921 (No. 14), Dietary Table for Native Prisoners, provides for a better balanced diet, with the addition of meat for long term Prisoners.

Government Notice No. 205, under The Native Authority Ordinance, 1923 (No. 25), Extermination and Control of Tsetse Fly, sanctions the making of regulations and the issue of orders in all districts for the purposes indicated.

Government Notice No. 210, under The Customs Ordinance, 1922 (No. 3), prohibits the importation of Cannabis Sativa or Bhang.

HOSPITALS AND DISPENSARIES.

Besides a few minor items the following is a list of work undertaken by the Public Works Department for this department.

These returns have been taken from the Blue Book for 1924.

Station.	Whether construction or repair.	Whether finished or unfinished.
Kigoma, Native Hospital	Construction.	Unfinished.
Mwanza, Extension of Hospital	do.	do.
Tanga, Infectious Diseases Hospital	do.	do.

MEDICAL STORES.

The delay in distribution of Medical Stores, partially due to lack of space at the central store, the demands from new stations, and long lines of communication, has decided me to indent separately on the Crown Agents for each one of the main medical centres. The stores will therefore be consigned, from 1925 onwards, directly to these centres, thereby cutting out very largely the turnover at the central store at Dar-es-Salaam.

The usual routine was for the whole lot of the stores to be landed in bulk, transported to the central store, unpacked, repacked to meet the different indents, and then transported to the various stations.

The new arrangement should therefore bring about a considerable reduction in time, labour, and expense, in connection with both the Medical and Transport Departments.

INSPECTIONS.

The following stations were inspected during the year by the Acting Principal Medical Officer :—

Dar-es-Salaam	Kidugallo	Ngerengere	Morogoro (twice)
Kilosa (twice)	Npapa	Dodoma (twice)	Tabora
Iringa	Malangali		

Extracts from the reports on these stations with such recommendations as were considered necessary were sent to the Departments concerned.

REGISTRATION OF MEDICAL AND DENTAL PRACTITIONERS.

On January 1st, 1924, the Register contained the names of:—

Medical Practitioners	..	..	32
Dentists	..	..	1

During 1924, the following were added to the Register:—

Medical Practitioners	..	..	8
Dentists	..	..	0

and there were removed from the Register, on departure from the Territory, the names of:—

Medical Practitioners	..	..	5
Dentists	..	..	0

Of the new names added to the Register 7 are that of members of the Medical Department, and one a private practitioner.

At the end of 1924, there were also 28 persons holding licences to practice medicine and surgery, all of whom were in Government Service.

The Medical Board consisted on the 31st December, 1924, of Dr. J. O. Shircore (Chairman)—Dr. J. B. Davey having retired from the Service—and Drs. A. H. Owen and G. G. Butler (Members).

REGISTRATION OF DRUGGISTS.

No new names were added to the list during the year.

II. INTRODUCTORY.

(a) GENERAL.

This is the fifth Annual Report of the Medical and Sanitation Department of the Tanganyika Territory. The 1922 Report followed closely the general arrangement adopted in the Report for 1921. In the 1922 Report certain tables which had been introduced into the 1921 Report were left out, as it was thought that nothing was to be gained by setting out at length the figures for each station. The 1923 Report followed the standard Report required by the Colonial Office, but the tables shewing comparative figures for the different stations were reintroduced. These tables are of value in forming some idea of the distribution of the various diseases, or those that might be peculiar to the different districts, on which prophylactic and other measures might be based.

Climatic Conditions. In the Costal Zone, with the exception of a prolonged and trying hot season, which lasted until May, the weather for the rest of the year was pleasantly cool. The climatic conditions elsewhere in the Territory call for no comment.

The health of the population of the Territory has been satisfactory. Tables I, III, IV, V and VII shew an improvement over the figures for preceding years, which might be regarded as the result of the general improvement of our townships, in water supplies and drainage, although much remains to be done in the latter respect; model town planning, the reservation of definite residential areas for the different communities and of open spaces; and more adequate medical and sanitation services.

Malaria still continues to provide the principal cause of illness, and the value of quinine prophylaxis is again earnestly brought to the notice of all the denominations concerned. Much has been achieved in the way of clearing trees, filling up and drainage, by the Health Department, of swamps which form reservoirs of anopheline mosquitoes,

It is hoped that with the appointments of a Sanitary Engineer and a Medical Entomologist, the main anopheline reservoirs on the outskirts of Dar-es-Salaam, from which source it is suspected the low lying areas nearer and within the township derive their supplies of anophelines, will be effectively treated, and that the reduction in the incidence of Malaria will be a material one. During 1924 the quantities of Quinine issued from the Central Medical Store for prophylactic and therapeutic purposes were as follows :—

163,230 Tabloids, 522 lbs. 2 ozs. powder, and 1,730 ampoules.

Euquinine 575 Tabloids and 1 lb. 5 ozs. of powder.

Health Resorts. The demand for a Sanatorium on the central line still continues. It is considered that this might best be met by having two Sanatoria, one at Mpapua the other at Itigi. Mpapua is nearer Dar-es-Salaam, has an altitude of 3,380 ft., and although 10 miles from the railway has a motor road leading to it. It is furthermore conveniently situated near the Veterinary Experimental Laboratory and Farm, from which plentiful supplies of dairy produce are available. Itigi is situated some 300 miles from the coast, and is the highest point on the railway line, with an altitude of 4,225 ft., and possesses a healthy bracing climate. It is nearly equidistant between Dar-es-Salaam and Kigoma, the railway terminus at Lake Tanganyika, and could thus be available to all sections on the line.

Maternity & Child Welfare.—During November one of the Nursing Sisters, Miss Allardes, was detailed for special duty in this connection. A small clinic, including a lying-in ward with sufficient accommodation for 4 beds, was in the process of building, but was uncompleted by the end of the year. The work performed by Miss Allardes has been most encouraging in every respect, and a similar clinic will be established at Tabora if possible during 1925. (See also Senior Medical Officer of Health's (Dar-es-Salaam), report on page 141).

SICK, INVALIDINGS AND DEATH RATES AND SPECIAL REPORTS ON THE KING'S AFRICAN RIFLES, POLICE AND PRISONERS.

Whilst statistics of the sick, invaliding and death rates, certain special morbidity rates and reports, regarding the different denominations are given below separately, the collective incidence of diseases and deaths of the population of the Territory as a whole is summarised under the heading "Public Health," which follows immediately thereafter.

EUROPEAN OFFICIALS.

Deaths.—There were only 4 deaths among European Officials, 2 of these were due to accidents and only 2 to disease.

	1922.	1923.	1924.
Cerebro-Spinal Meningitis	1	0	0
Influenza	1	0	0
Malaria	1	1	1
Blackwater Fever	1	2	0
Pyrexia of uncertain origin	0	1	0
Aortic Disease, Angina Pectoris	1	0	0
Appendicitis	0	1	0
Gastro-enteritis	1	0	0
Carcinoma	0	1	0
Accidental	0	0	2
Enteric	0	0	1
	<hr/> 6	<hr/> 6	<hr/> 4

Invalidings.—7 European Officials were invalided during the year, as compared with 14 and 13 during the two preceding years.

	1922.	1923.	1924.
Enteric Fever	1	1	0
Dysentry (Amoebic) .. .	0	2	0
Malaria	2	1	1
Blackwater Fever .. .	3	1	1
Tuberculosis (Pulmonary) .. .	1	2	1
General Debility .. .	3	1	0
Neurasthenia .. .	0	4	1
Psychasthenia .. .	1	0	0
Delusional Insanity .. .	0	1	0
Endarteritis Obliterans .. .	1	0	0
Exophthalmic Goitre .. .	0	1	0
Loss of Vision .. .	1	0	0
Paralysis Agitans .. .	0	0	1
V.D.H. .. .	0	0	1
Fracture of Patella and Septic Knee Joint	0	0	1
	—	—	—
	13	14	7
	—	—	—

TABLE I.

SICK, INVALIDING AND DEATH RATES, EUROPEAN OFFICIALS, 1922, 1923 AND 1924.
(For the three Principal Towns and the Whole Territory.)

	Dar-es-Salaam.			Tabora.			Tanga.			Whole Territory.		
	1922	1923	1924	1922	1923	1924	1922	1923	1924	1922	1923	1924
1. Total number of Officials Resident ..	418	349	343	86	78	72	94	138	51	836A	800C	861
2. Average number Resident ..	260	229	232	56	47	72	56	51.14	51	656A	600C	594
3. Total number on Sick List ..	327	280	358	87	32	50	42	44	36	618B	543	646
4. Total number of days on Sick List ..	2,115	1,969	2,795	449	265	317	260	221	229	4,245B	3,535D	4,584
5. Average daily number on Sick List ..	5.79	5.39	7.66	1.23	0.72	0.87	0.71	0.605	0.63	11.63	9.68D	12.56
6. Percentage of Sick to average number Resident.	2.23	2.35	3.30	2.20	1.53	1.21	1.27	1.18	1.24	1.77	1.61	2.11
7. Average number of days on Sick List for each Patient.	6.47	7.03	7.81	5.16	8.28	6.34	6.19	5.02	6.36	6.87	6.51	7.10
8. Average Sick Time to each Resident	8.13	8.60	12.05	8.02	5.64	4.40	4.64	4.32	4.49	6.47	5.89	7.72
9. Total number Invalided ..	6	7	6	1	—	—	—	1	1	13A	14	7
10. Percentage of Invalidings to total Residents.	1.44	2.01	1.75	1.16	—	—	—	0.72	1.96	1.56	1.75	0.81
11. Total Deaths ..	4	1	1	—	1	1	—	—	—	6A	6	4
12. Percentage of Deaths to total Residents	0.96	0.29	0.29	—	1.28	1.39	—	—	—	0.72	0.75	0.46
13. Percentage of Deaths to average number Resident.	1.54	0.44	0.43	—	2.13	1.39	—	—	—	0.91	1.00	0.67
14. Number of Cases of Sickness contracted away from Residence.	—	—	—	—	3	—	—	—	—	—	16	20

A.—Compiled from Staff Records.

B.—From 17 Stations for which returns are available, viz., Dar-es-Salaam, Dodoma, Tanga, Tabora, Iringa, Mikindani, Lindi, Kilwa, Bukoba, Utete, Kilosa, Pangani, Arusha, Songea, Mwanza, Tukuyu, Bagamoyo; the answers to Questions 5 to 8 are calculated from these figures, the answers to the remaining questions are calculated on numbers of Officials resident in the whole Territory (*i.e.*, answers to Questions 1 and 2).

C.—Approximate only; accurate figures not available.

D.—From 21 Stations shown in TABLE I. in the 1923 Annual Report.

E.—"Whole Territory," implying those Stations from which reliable returns have been received, *i.e.*, District as enumerated in TABLE XIV. on pages 73-90.

TABLE II.

EUROPEAN OFFICIALS.—TABLE SHOWING THE SICK, INVALIDING AND DEATH RATES, 1924, BY DISTRICTS.

	Arusha.	Bagamoyo.	Bukoba.	Dar-es-Salaam.	Dodoma.	Iringa.	Kigoma.	Kilosa.	Kilwa.	Kondoa-Irangi.
Total number of Officials Resident	31	8	26	343	36	17	42	11	12	10
Average number Resident	20	4	14	232	22	12	21	7	8	5
Total number on Sick List	13	1	15	358	26	5	26	6	4	2
Total number of days on Sick List	104	2	92	2,795	130	48	114	26	11	5
Average daily number on Sick List	0.28	0.06	0.25	7.66	0.36	0.13	0.31	0.07	0.03	0.01
Percentage of Sick to average number Resident ..	1.40	1.50	1.78	3.30	1.64	1.08	1.48	1.00	0.37	0.20
Average number of days on Sick List for each Patient.	8.00	2.00	6.13	7.81	5.00	9.60	4.38	4.33	2.75	2.50
Average Sick Time to each Resident	—	0.50	6.57	12.05	5.91	4.00	5.43	3.71	1.37	1.00
Total number Invalided	—	—	—	6	—	—	—	—	—	—
Percentage of Invalidings to total Residents ..	—	—	—	1.75	—	—	—	—	—	—
Total Deaths	—	—	1	1	—	—	—	1	—	—
Percentage of Deaths to total Residents	—	—	3.85	0.29	—	—	—	9.09	—	—
Percentage of Deaths to average number Resident	—	—	7.14	0.43	—	—	—	14.28	—	—
Number of Cases of Sickness contracted away from Residence.	6	—	—	—	—	—	—	—	—	—

TABLE II.—continued.

EUROPEAN OFFICIALS.—TABLE SHOWING THE SICK, INVALIDING AND DEATH RATES, 1924, BY DISTRICTS—continued.

	Lindi.	Lushoto (Usambara).	Mbulu.	Mafia.	Mahenge.	Mikindani.	Morogoro.	Moshi.	Musoma.	Mwanza.
Total number of Officials Resident	20	8	2	2	13	5	27	16	6	35
Average number Resident	11	6	2	1	7	2	22	12	4	20
Total number on Sick List	11	2	1	—	6	2	16	9	3	15
Total number of days on Sick List	11	11	19	—	22	6	78	118	33	161
Average daily number on Sick List	0.30	0.03	0.05	—	0.06	0.02	0.21	0.32	0.09	0.44
Percentage of Sick to average number Resident	2.73	0.50	2.50	—	0.86	1.00	1.00	2.67	2.25	2.20
Average number of days on Sick List for each Patient.	10.00	5.50	0.19	—	3.66	3.00	4.87	13.11	11.00	10.73
Average Sick Time to each Resident	10.00	1.83	9.50	—	3.14	3.00	3.54	9.83	8.25	8.05
Total number Invalided	—	—	—	—	—	—	—	—	—	—
Percentage of Invalidings to total Residents	—	—	—	—	—	—	—	—	—	—
Total Deaths	—	—	—	—	—	—	—	—	—	—
Percentage of Deaths to total Residents	—	—	—	—	—	—	—	—	—	—
Percentage of Deaths to average number Resident	—	—	—	—	—	—	—	—	—	—
Number of Cases of Sickness contracted away from Residence.	1	—	—	—	—	—	—	—	—	3

TABLE II.—continued.

EUROPEAN OFFICIALS.—TABLE SHOWING THE SICK, INVALIDING AND DEATH RATES, 1924, BY DISTRICTS—continued.

	Namanyere.	Pangani.	Singida.	Shinyanga.	Songea.	Tabora.	Tanga.	Tukuyu (Rungwe).	A Ujiji.	Ute.	* Whole Territory.
Total number of Officials Resident	6	7	4	16	11	72	51	16	—	8	861
Average number Resident	4	4	2	6	8	72	51	11	—	4	594
Total number on Sick List	1	2	2	7	3	50	36	23	—	1	646
Total number of days on Sick List	2	6	4	54	19	317	229	65	—	3	4,584
Average daily number on Sick List	0.05	0.02	0.01	0.15	0.05	0.87	0.63	0.17	—	0.08	12.56
Percentage of Sick to average number Resident ..	1.25	0.50	0.50	2.33	0.62	1.21	1.24	1.55	—	2	2.11
Average number of days on Sick List for each Patient.	2.00	3.00	2.00	7.77	6.33	6.34	6.36	2.83	—	3	7.10
Average Sick Time to each Resident	0.50	1.50	2.00	9.00	2.37	4.40	4.49	5.90	—	0.75	7.72
Total number Invalided	—	—	—	—	—	—	1	—	—	—	7
Percentage of Invalidings to total Residents ..	—	—	—	—	—	—	1.96	—	—	—	0.81
Total Deaths	—	—	—	—	—	1	—	—	—	—	4
Percentage of Deaths to total Residents	—	—	—	—	—	1.39	—	—	—	—	0.46
Percentage of Deaths to average number Resident	—	—	—	—	—	1.39	—	—	—	—	0.67
Number of Cases of Sickness contracted away from Residence.	1	—	—	7	—	—	—	2	—	—	20

A.—Included in Kigoma figures.
 * Stations as enumerated above.

TABLE III.
"SHOWING MORBIDITY RATES FOR MALARIA AND BLACKWATER FEVER AMONGST OFFICIALS," DAR-ES-SALAAM.

EUROPEAN OFFICIALS.										ASIATIC OFFICIALS.									
Total days off duty.				Days off duty for Malaria.			Days off duty for B.W. Fever.			Total days off duty.			Days off duty for Malaria.			Days off duty for B.W. Fever.			
1922 1923 1924				1922 1923 1924			1922 1923 1924			1922 1923 1924			1922 1923 1924			1922 1923 1924			
January	178	156	219	40	90	65	—	—	—	330	269	443	184	138	173	—	—	—
February	180	96	282	19	18	74	—	—	—	315	344	257	92	114	89	10	—	—
March	241	247	329	82	31	64	12	—	—	375	274	282	138	94	151	15	—	—
April	152	214	231	71	10	92	—	—	21	244	208	228	93	51	153	—	—	—
May	218	229	312	92	107	163	1	29	25	316	453	235	203	287	144	—	—	—
June	266	192	254	90	105	91	—	17	20	398	335	327	228	273	214	7	—	16
July	237	151	225	75	57	39	32	—	26	311	337	236	176	154	117	10	70	—
August	102	95	142	18	9	23	19	—	—	213	238	283	94	95	134	—	29	20
September	107	89	152	42	27	17	—	—	—	158	166	297	47	56	85	—	—	—
October	123	236	234	18	20	33	—	—	—	175	182	238	57	65	95	—	—	—
November	203	197	205	60	6	1	42	—	—	231	168	233	83	50	103	7	—	—
December..	..	108	146	210	40	29	43	18	—	—	279	339	180	128	129	89	—	—	—
TOTAL	2,115	2,048	2,795	647	509	705	124	46	92	3,345	3,313	3,839	1,523	1,506	1,547	49	99	36
Percentage of days off duty for Malaria and Blackwater Fever to total days off duty, 1922 ..										Percentage of days off duty for Malaria and Blackwater Fever to total days off duty, 1922 ..									
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TABLE IV.

"SHOWING MORBIDITY RATES FOR MALARIA AND BLACKWATER FEVER AMONGST OFFICIALS," TABORA.

	EUROPEAN OFFICIALS.						ASIATIC OFFICIALS.					
	Total days off duty.			Days off duty for Malaria.			Total days off duty.			Days off duty for Malaria.		
	1922	1923	1924	1922	1923	1924	1922	1923	1924	1922	1923	1924
January ..	32	52	91	11	1	3	115	211	80	103	107	58
February ..	10	19	64	9	3	13	187	191	117	146	93	63
March ..	21	13	108	11	3	43	231	182	157	149	66	67
April ..	39	46	108	9	13	28	210	277	202	120	142	111
May ..	73	90	96	63	24	39	289	193	83	182	82	23
June ..	51	32	51	42	32	3	247	273	122	158	134	73
July ..	30	36	22	12	32	7	167	367	167	140	169	40
August ..	28	31	23	16	28	2	88	208	102	77	132	50
September ..	26	45	51	6	1	11	87	274	128	63	90	84
October ..	41	25	82	11	11	21	15	111	70	6	33	44
November ..	74	15	33	7	6	2	164	115	93	96	36	76
December..	24	20	33	13	—	14	131	73	104	51	31	50
TOTAL ..	449	424	762	210	154	186	1,931	2,475	1,425	1,291	1,115	748

Percentage of days off duty for Malaria and Black-

water Fever to total days off duty, 1922 .. 46.77
 Do. do. do. 1923 .. 46.00
 Do. do. do. 1924 .. 24.41

Percentage of days off duty for Malaria and Black-

water Fever to total days off duty, 1922 .. 66.86
 Do. do. do. 1923 .. 45.05
 Do. do. do. 1924 .. 53.89

TABLE V.
"SHOWING MORBIDITY RATES FOR MALARIA AND BLACKWATER FEVER AMONGST OFFICIALS," TANGA.

	EUROPEAN OFFICIALS.						ASIATIC OFFICIALS.					
	Total days off duty.			Days off duty for Malaria.			Total days off duty.			Days off duty for Malaria.		
	1922	1923	1924	1922	1923	1924	1922	1923	1924	1922	1923	1924
January ..	27	7	16	—	—	8	56	98	84	51	75	31
February ..	24	21	4	16	—	4	124	95	89	65	54	35
March ..	24	35	18	20	—	—	200	175	89	55	84	32
April ..	18	5	10	3	2	10	123	78	48	57	45	31
May ..	45	25	31	32	13	4	181	130	21	105	96	9
June ..	16	40	33	16	32	—	122	174	61	56	92	50
July ..	32	19	30	21	13	12	194	185	125	132	129	40
August ..	20	6	32	15	3	1	148	99	33	66	61	9
September ..	32	15	4	9	2	4	93	123	30	39	44	18
October ..	9	20	31	4	13	—	91	101	25	40	40	10
November ..	3	7	16	1	1	4	84	113	2	35	12	2
December..	10	20	3	3	10	—	142	91	58	66	11	18
TOTAL ..	260	220	228	140	89	47	1,558	1,462	665	767	744	285
Percentage of days off duty for Malaria and Blackwater Fever to total days off duty, 1922 ..						53.85	Percentage of days off duty for Malaria and Blackwater Fever to total days off duty, 1922 ..					
Do. 1923 ..						40.45	Do. 1923 ..					
Do. 1924 ..						20.61	Do. 1924 ..					

TABLE VI.

THE FOLLOWING LIST, KINDLY SUPPLIED BY THE REGISTRAR GENERAL OF BIRTHS AND DEATHS, IS A SUMMARY OF THE REGISTERED DEATHS.

District.	No.	Age.	Sex.	Nationality.	Occupation.	Cause of Death.
Bagamoyo ..	1	39 Years ..	Male	French ..	Missionary ..	Cerebral Malaria.
Dar-es-Salaam	2	32 " ..	"	Belgian ..	Bank Manager ..	Rupture of Gastric Ulcer-Peritonitis.
" ..	3	62 " ..	"	British ..	Missionary ..	Lobar Pneumonia.
" ..	4	7½ Months	"	" ..	Infant ..	Broncho Pneumonia.
" ..	5	48 Years ..	"	" ..	Commercial Firm's Employee.	Suicide.
" ..	6	34 " ..	Female	" ..	Married woman ..	Poisoning, Fish.
" ..	7	2 " ..	Male	" ..	Child ..	" "
Kigoma ..	8	23 " ..	"	Belgian ..	Belgian Agent, Rubanda ..	Heart Failure while bathing.
Lushoto ..	9	29 " ..	"	British ..	Mechanic ..	Cerebral Hæmorrhage
" ..	10	54 " ..	"	" ..	Prospector ..	Blackwater Fever.
Mahenge ..	11	33 " ..	"	Swiss ..	Missionary ..	Dysentery.
" ..	12	42 " ..	"	" ..	" ..	Blackwater Fever.
" ..	13	? ..	Female	" ..	" ..	Malaria.
Morogoro ..	14	? ..	Male	British ..	Engineer ..	Blackwater Fever.
" ..	15	5 Yrs. 7 Mths.	"	Irish ..	Child ..	Cardiac Failure.
" ..	16	7 Hours ..	"	British ..	— —	Prematurity.
Moshi ..	17	60 Years ..	"	Hollander	Prospector ..	Apoplexy.
" ..	18	58 " ..	Female	S.A. Dutch	Married woman ..	Cancer of Breast.
" ..	19	14 Months	Male	Greek ..	Infant ..	Lobar Pneumonia.
" ..	20	30 Years ..	"	British S.A.	Bank Accountant	Sub-Tertian Coma & Convulsions.
" ..	21	29 " ..	Female	Greek ..	Married woman ..	Sub-Tertian Malaria.
" ..	22	12 Hours ..	Male	" ..	— —	P.U.O.
" ..	23	53 Years ..	"	" ..	Ganger, Rly. Construction.	Broncho-Pneumonia.
" ..	24	39 " ..	"	British ..	Saw Mills Employee	Valvular Disease of Heart.
Rungwe ..	25	62 " ..	"	S. African	Prospector ..	Blackwater Fever.
Tabora ..	26	40 " ..	"	French ..	Missionary ..	" "
" ..	27	45 " ..	"	Greek ..	Trader ..	Epyæma, Heart Failure.
Tanga ..	28	25 " ..	Female	" ..	? ..	Malaria, Hyperpyrexia & Heart Failure.
" ..	29	42 " ..	"	British ..	Missionary ..	Sunstroke and Septicæmia.
" ..	30	45 " ..	Male	" ..	Stevedore ..	Suicide.
" ..	31	52 " ..	"	" ..	Missionary ..	General Septicæmia & Septic Pneumonia.
" ..	32	36 " ..	Female	" ..	? ..	Shock and Myocardial weakness.
" ..	33	41 " ..	"	" ..	Machinist ..	Cerebral Malaria.

ASIATIC OFFICIALS :

Deaths.—Among the Asiatic Officials there were four deaths, whereas there were nine each during 1922 and 1923.

	1922.	1923.	1924.
Malaria	3	1	0
Blackwater Fever	1	1	1
Plague	1	0	0
Pneumonia	2	1	1
Septicæmia	0	1	1
Small-pox	0	1	0
Tuberculosis	0	2	0
Cerebral Hæmorrhage	1	0	0
Fatty Degeneration of Heart	0	1	0
Nephritis	1	0	0
Alcoholism (Acute)	0	1	0
Heart Failure	0	0	1
	<hr/> 9	<hr/> 9	<hr/> 4

Invalidings.—Seven Asiatic Officials were invalided during the year, only three of whom might be attributable to residence within the Territory.

	1922.	1923.	1924.
Malaria	2	0	1
Tuberculosis	1	4	0
Pernicious Anæmia	0	1	0
Diabetes	2	0	1
Hemiplegia	0	1	1
Paralysis	1	0	1
Neurasthenia	0	2	1
Chronic Bronchitis	0	1	0
Physically Unfit	0	0	1
Syphilis	0	0	1
	<hr/> 6	<hr/> 9	<hr/> 7

TABLE VII.

SICK, INVALIDING AND DEATH RATES, ASIATIC OFFICIALS, 1922, 1923 AND 1924.
(For the three Principal Towns and the Whole Territory.)

	Dar-es-Salaam.			Tabora.			Tanga.			Whole Territory.		
	1922	1923	1924	1922	1923	1924	1922	1923	1924	1922	1923	1924
1. Total number of Officials Resident ..	463A	598	707	113A	153	139	197A	115	92	756B	1,000D	1,250D
2. Average number Resident ..	347A	472	585	85A	116	139	148A	90.14	92	664B	877.5D	1,011D
3. Total number on Sick List ..	983	1,040	1,377	473	112	341	265	229	123	1,898B	1,807	2,189
4. Total number of days on Sick List ..	3,345	3,167	3,239	1,931	1,638	1,420	1,558	1,465	538	7,565B	8,190	7,140
5. Average daily number on Sick List ..	9.1	8.68	8.87	5.3	4.49	3.89	4.3	4.01	1.47	20.7	22.44	19.56
6. Percentage of Sick to average number Resident.	2.8	1.84	1.52	4.0	3.9	2.79	5.3	4.45	1.60	3.1	2.55	1.93
7. Average number of days on Sick List for each Patient.	3.4	3.05	2.35	4.0	14.6	4.16	5.9	6.35	4.37	3.9	4.53	3.26
8. Average Sick Time to each Resident..	9.6	6.71	5.54	14.4	14.0	10.22	19.5	12.74	5.84	11.4	9.33	7.06
9. Total number Invalided ..	2	4	3	—	2	2	1	2	1	6	9	7
10. Percentage of Invalidings to total Residents	0.4	0.67	0.42	—	1.7	1.4	0.5	1.74	1.08	0.6C	0.9	0.56
11. Total Deaths ..	1	1	2	1	2	—	2	2	1	9	9	4
12. Percentage of Deaths to total Residents	0.2	0.17	0.28	0.9	1.30	—	1.0	1.74	1.08	0.8C	0.9	0.32
13. Percentage of Deaths to average number Resident.	0.3	0.21	0.34	1.2	1.72	—	1.3	2.22	1.08	1.1C	1.02	0.40
14. Number of Cases of Sickness contracted away from Residence.	—	—	—	—	—	—	—	—	—	—	—	11

A.—From 1921 Census. Total resident estimated by adding 33½ per cent. Approximate only.

B.—From 15 Stations from which returns received, viz., Dar-es-Salaam, Tabora, Mwanza, Kilwa, Bukoba, Utete, Kilosa, Pangani, Dodoma, Iringa, Tanga, Mikindani, Lindi, Tukuyu, and Bagamoyo.

C.—Calculated on 1921 Census—804 Asiatic Officials. Total resident estimated by adding 33½ per cent.

D.—Approximate only; accurate figures not available.

E.—Returns from Mahenge not available for 1923.

F.—"Whole Territory," implying those Stations from which reliable returns have been received, i.e., District as enumerated in TABLE XIV., on pages 73-90.

TABLE VIII.

ASIATIC OFFICIALS.—TABLE SHOWING THE SICK, INVALIDING AND DEATH RATES, 1924, BY DISTRICTS.

	Arusha.	Bagamoyo.	Bukoba.	Dar-es-Salaam.	Dodoma.	Iringa.	Kigoma.	Kilosa.	Kilwa.	Kondoa-Irangi.
Total number of Officials Resident	7	7	16	707	50	4	52	7	18	6
Average number Resident	6	7	8	585	28	3	30	7	10	3
Total number on Sick List	3	8	11	1,377	81	—	56	8	11	1
Total number of days on Sick List	60	32	52	3,239	448	—	256	71	78	6
Average number of days on Sick List	0.16	0.09	0.14	8.87	1.23	—	0.70	0.19	0.21	0.02
Percentage of Sick to average number Resident	2.66	1.28	1.75	1.52	4.39	—	2.33	2.71	2.10	0.67
Average number of days on Sick List for each Patient	20.00	4.00	4.73	2.35	5.53	—	4.57	8.87	7.09	6.00
Average Sick Time to each Patient	10.00	4.57	6.50	5.54	0.16	—	8.53	10.14	7.80	2.00
Total number Invalid	—	—	—	3	—	—	—	—	—	—
Percentage of Invalids to total Residents	—	—	—	0.42	—	—	—	—	—	—
Total Deaths	—	—	—	2	—	—	—	—	—	—
Percentage of Deaths to total Residents	—	—	—	0.28	—	—	—	—	—	—
Percentage of Deaths to average number Resident	—	—	—	0.34	—	—	—	—	—	—
Number of Cases of Sickness contracted away from Residence	—	—	—	—	—	—	2	—	1	—

TABLE VIII.—*continued*.ASIATIC OFFICIALS.—TABLE SHOWING THE SICK, INVALIDING AND DEATH RATES, 1924, BY DISTRICTS—*continued*.

	Lindi.	Lushoto (Usambara).	Mbulu.	Mafia.	Mahenge.	Mikindani.	Morogoro.	Moshi.	Musoma.	Mwanza.
Total number of Officials Resident	20	9	2	3	2	8	11	19	5	33
Average number Resident	10	5	2	3	2	6	8	19	3	14
Total number on Sick List	9	6	—	1	2	11	31	54	6	22
Total number of days on Sick List	110	32	—	5	6	46	109	144	55	276
Average number of days on Sick List	0.30	0.09	—	0.01	0.02	0.13	0.30	0.39	0.15	0.76
Percentage of Sick to average number Resident	3.00	1.80	—	3.00	1.00	2.16	3.75	2.05	5.00	5.43
Average number of days on Sick List for each Patient	12.22	5.33	—	5.00	3.00	4.18	3.52	2.66	9.16	12.55
Average Sick Time to each Patient	11.00	6.40	—	1.66	3.00	7.66	13.62	7.57	18.33	19.71
Total number Invalided	—	—	—	—	—	—	—	—	—	1
Percentage of Invalidings to total Residents	—	—	—	—	—	—	—	—	—	3.03
Total Deaths	—	—	—	—	—	—	—	—	—	1
Percentage of Deaths to total Residents	—	—	—	—	—	—	—	—	—	3.03
Percentage of Deaths to average number Resident	—	—	—	—	—	—	—	—	—	7.18
Number of Cases of Sickness contracted away from Residence	—	—	—	—	2	—	—	—	—	3

TABLE VIII.—continued.

ASIATIC OFFICIALS.—TABLE SHOWING THE SICK, INVALIDING AND DEATH RATES, 1924, BY DISTRICTS—continued.

	Namanyere.	Pangani.	Singida.	Shinyanga.	Songea.	Tabora.	Tanga.	Tukuyu (Kungwe).	Ujiji.	Ute.	* Whole Territory.
Total number of Officials Resident	—	6	4	4	3	139	92	1	8	7	1,250
Average number Resident	—	6	2	2	2	139	92	1	5	3	1,011
Total number on Sick List	—	1	3	3	2	341	123	—	5	13	2,189
Total number of days on Sick List	—	4	24	13	6	1,420	538	—	15	95	7,140
Average number of days on Sick List	—	0.01	0.07	0.03	0.02	3.89	1.47	—	0.04	0.26	19.56
Percentage of Sick to average number Resident	—	0.16	3.50	1.50	1.00	2.79	1.60	—	0.80	8.66	1.93
Average number of days on Sick List for each Patient	—	4.00	8.00	4.33	3.00	4.16	4.37	—	3.00	7.30	3.26
Average Sick Time to each Patient	—	0.66	12.00	6.50	3.00	10.22	5.84	—	3.00	31.66	7.06
Total number Invalid	—	—	—	—	—	2	1	—	—	—	7
Percentage of Invalidings to total Residents	—	—	—	—	—	1.44	1.08	—	—	—	0.56
Total Deaths	—	—	—	—	—	—	1	—	—	—	4
Percentage of Deaths to total Residents	—	—	—	—	—	—	1.08	—	—	—	0.32
Percentage of Deaths to average number Resident	—	—	—	—	—	—	1.08	—	—	—	0.40
Number of Cases of Sickness contracted away from Residence	—	—	—	3	—	—	—	—	—	—	11

* Stations as enumerated above.

NATIVE OFFICIALS :

REPORT ON THE HEALTH OF THE KING'S AFRICAN RIFLES, TANGANYIKA TERRITORY.

6th Battalion.—Headquarters at Dar-es-Salaam, with Garrisons at Arusha, Mahenge, and Songea.

	Dar-es-Salaam.		Arusha.	Mahenge.	Songea.
	All Diseases.	Malaria & Blackwater.			
Total British Officers and N.C.O.'s Resident, 30.	—	—	5	5	3
Average British Officers and N.C.O.'s Resident, 12.	—	—	0.20	2	2
Total on Sick List	24	15	3	2	1
Total days on Sick List	337	132	33	5	6
Average daily number Sick	0.92	0.36	0.08	0.03	0.02
Percentage of Sick to average number Resident.	7.66	3	3.64	1.50	1
Average number of days on Sick List for each Patient.	14.04	8.80	11	2.50	6
Average Sick Time to each Resident ..	11.23	4.4	6.60	2.50	3
Total number Invalided	3	—	—	—	—
Percentage of Invalided to total Residents.	10	—	—	—	—
Percentage of Invalided to average number Resident.	25	—	—	—	—
Total Deaths	1	1	—	—	—

Days on Sick List.

The Invalidings were due to—	Septic Arthritis	156
	Debility	40
	Chronic Malaria	19

The Death was due to Cerebral Malaria.

OTHER RANKS.

	Dar-es-Salaam.	Arusha.	Mahenge.	Songea.
Total strength, Native Ranks ..	—	195	112	209
Average strength, Native Ranks ..	463	159	97.27	194.33
Average daily number on Sick List ..	18	6.5	2.3	9.95
Percentage of Sick to average Strength.	3.89	4.09	2.3	5.10
Total number Invalided	13	—	—	—
Percentage of Invalidings to average Strength.	2.59	—	—	—
Total Deaths	3	—	2	2
Percentage of Deaths to average Strength.	0.65	—	2.05	1.02
Total Admissions	634	161	101	91
The Invalidings were due to ..	Chronic Malaria ..	—	—	Tabes Dorsalis.
	Hernia	—	—	Hernia.
	Debility	—	—	Conjunctivitis.
The Deaths were due to	Obstruction to Portal Circulation.	—	Phthisis	Phthisis.
	Ankylostomiasis ..	—	Bright's Disease	Gunshot wound (self inflicted).
	Cerebral Malaria ..	—	—	—

Admissions to Hospital, "Other Ranks," were due to the following diseases:—

DAR-ES-SALAAM.

Malaria	75	Other respiratory diseases ..	85
Cerebral Malaria	1	Digestive diseases	66
Gonorrhœa	71	Of generative system	60
Syphilis	6	Connective tissue and skins ..	99
Other infective diseases ..	68	Injuries	16
Conjunctivitis	20	Parasites	47
Phthisis	2	Other diseases	18
		TOTAL	<u>634</u>

ARUSHA.

Colic	7	Local Injury	25
Gonorrhœa	19	Diarrhœa	8
Dysentery Amœbic	5	Malaria B.T.	5
Bronchitis	6	Rheumatism	6
Chicken Pox	35	Influenza	22
Orchitis	5	Ulcers	8
Broncho Pneumonia	2	Bronchial Catarrh	8
		TOTAL	<u>161</u>

MAHENGÉ.

Malaria	39	Erythema	1
Injuries	5	Bronchitis	2
Boils	3	Pneumonia	1
Tapeworm	1	Influenza	8
Venereal sore	1	Gumboil	1
Diarrhœa	4	Abscess	2
Conjunctivitis	3	Inflamed glands	1
Bright's Disease	1	Tonsilitis	1
Threadworms	1	Myalgia	1
Orchitis	1	Tuberculosis of Lungs	1
Rectal Fistula	1	Tick Fever	1
Gonorrhœa	7	Lumbago	1
Hard Chancre	1	Synovitis	2
Phimosis	1	Dysentery	2
Bubo	1	P.U.O.	2
Condylomata	1		
		TOTAL	<u>98</u>

SONGEA.

Gonorrhœa	24	Diarrhœa	3
Bronchitis	12	Hernia	1
Rheumatism	8	Ulcer	1
Syphilis	7	Otitis	1
Anæmia	4	Gunshot wound (self inflicted) ..	1
Dysentery	3	Cellulitis	1
Tapeworm	2	Dislocated Shoulder	1
Lumbago	2	Abscess	1
Synovitis	2	Soft Sore	1
Conjunctivitis	2	Pleurisy	1
Tabes Dorsalis	2	Pneumonia	1
Malaria	5	Phthisis	1
Orchitis	4		
		TOTAL	<u>91</u>

2nd Battalion.—Headquarters at Tabora, with Garrisons at Iringa, Mwanza and Tukuyu.

	Tabora.	Iringa.	Mwanza.	Tukuyu.
Total British Officers and N.C.O.'s Resident	34	7	5	3
Average British Officers and N.C.O.'s Resident	13	3	3	1.3
Total on Sick List	26	4	—	1
Total days on Sick List	412	42	—	11
Average daily number on Sick List	1.13	0.1	—	—
Percentage of Sick to average number Resident.	8.69	3.3	—	—
Average number of days on Sick List of each Patient.	15.85	10.50	—	11
Average Sick Time to each Resident ..	31.60	14	—	10
Total number Invalided	—	—	—	—
Percentage of Invaliding to total Resident ..	—	—	—	—
Total Deaths	1	—	—	—

Invalidings, NIL.

The Death was due to Typhoid.

OTHER RANKS.

	Tabora.	Iringa.	Mwanza.	Tukuyu.
Total strength, Native Ranks.. .. .	519	98	193	85
Average strength, Native Ranks	504	98	153	80
Average daily number on Sick List	15.06	1	6	4.5
Percentage of Sick to average Strength ..	3	1.02	3.9	5.6
Total number Invalided	17	1	2	3
Percentage of Invalidings to average Strength	3.36	1.02	1.2	3.7
Total Deaths	3	1	1	—
Percentage of Deaths to average Strength ..	0.55	1.02	0.6	—
Total Admissions	384	64	46	48
The Invalidings were due to	Old Age.	Chronic Ulcers.	General Paralysis.	Leprosy.
	Physical Unfitness.	—	Phthisis.	Paralysis.
	Wound of Finger.	—	—	Tuberculosis.
	Injury.	—	—	—
	Psoriasis.	—	—	—
The Deaths were due to	Malaria.	Broncho Pneumonia.	Pneumonia.	—
	Mumps.	—	—	—
	Tubercular Peritonitis.	—	—	—

Admissions to Hospital, " Other Ranks," were due to the following diseases :—

TABORA.

Malaria	..	..	..	179	Dysentery	..	..	..	10
Influenza	..	..	..	15	Diarrhœa	..	..	..	29
Mumps ..	..	..	..	101	Gonorrhœa	..	..	..	34
Tick Fever	..	..	..	4	Syphilis ..	..	..	..	12
						TOTAL	..	..	384

IRINGA.

Orchitis	I	Bronchitis	4
Gonorrhœa *	16	Broncho-Pneumonia	1
Dysentery	4	Myalgia	2
Mumps	1	Abscess	1
Measles	1	Chicken-pox	3
Malaria	14	Diarrhœa	2
Injuries.. .. .	3	Arthritis	1
Cellulitis	2	Neuralgia	1
Primary Syphilis	5	Tænia Saginata	1
Chronic Ulcers.. .. .	1		
		TOTAL	64

MWANZA.

Influenza	4	Barache	1
Malaria	13	Colitis	1
Syphilis	5	Jaundice	1
Gonorrhœa	2	Cellulitis	1
Pneumonia	2	Abscess	1
Phthisis	1	Local Injury	4
Dysentery Bacillary	1	Fracture Forearm	1
Conjunctivitis	2	Bubo	2
General Paralysis	1	Ulcer	1
Other Eye Diseases	1	Bronchitis	1
		TOTAL	46

TUKUYU.

Injury	1	Malaria	12
Intestinal Stasis	1	Paraphymosis	1
Yaws	2	Conjunctivitis	2
Relapsing Fever	8	Influenza	4
Cellulitis	3	Hæmoptysis	1
Corneal Ulcer	1	Pleurisy	1
Syphilis	3	Ulcer	1
Paralysis	1	Gonorrhœa	2
Synovitis	3	Abscess	1
		TOTAL	48

TABLE IX.

REPORT ON THE HEALTH OF THE POLICE.

	Arusha.	Bagamoyo.	Bukoba.	Dar-es-Salaam.	Dodoma.	Iringa.	Kahama.	Kigoma.	Kilosa.	Kilwa.	Kondea-Irangi.	Lindi.	Lushoto.	Mafia.	Mahenge.	Mbulu.
Total Strength ..	73	41	126	225	126	69	26	22	23	70	52	93	49	30	62	20
Average Strength ..	72	39	117.4	187.7	105	65	26	22	23	70	44.7	77	49	—	40	20
Average daily number on Sick List ..	2.0	1.6	6.3	11	1.1	0.6	0.5	0.4	0.5	1.1	—	7.7	2	—	0.23	.06
Number Invalid ..	—	—	3	4	—	—	—	—	—	—	—	5	—	—	—	—
Number of Deaths ..	—	—	—	2	—	1	—	—	—	1	—	—	—	—	—	—
Total Admissions to Hospital ..	47	43	—	164	51	42	22	14	—	22	12	—	1	—	—	4

TABLE IX.—*continued.*REPORT ON THE HEALTH OF THE POLICE—*continued.*

	Mikindani.	Morogoro.	Morogoro Depot.	Moshi.	Musoma.	Mwanza.	Namanyere.	Pangani.	Shinyanga.	Singida.	Songea.	Tabora.	Tanga.	Tukuyu.	Tunduru.	Ujiji.	Utete.
Total Strength ..	25	78	190	59	37	104	38	41	28	17	57	178	79	85	25	59	54
Average Strength ..	24	78	176	55	34	100	38	39	24.2	15	57	107	79	80	20	59	54
Average daily number on Sick List.	1.3	3	10	3.12	1.25	7	2.6	1.6	0.3	.0.07	2	2.4	1.14	4.5	—	2.4	3.3
Number Invalided ..	2	1	5	1	1	3	—	1	—	—	1	1	2	3	—	1	—
Number of Deaths ..	—	—	2	—	1	—	—	—	—	—	—	1	2	—	—	—	—
Total Admissions to Hospital ..	24	164	164	23	2	81	—	8	26	2	23	134	38	48	14	28	—

The Invalidings were chiefly due to defective visions and affections of the organs of locomotion.

The Deaths in Hospital were due to :—

Dar-es-Salaam.	Iringa.	Kilwa.	Morogoro Depot.	Musoma.	Tabora.	Tanga.
Septic Arthritis & Septicæmia.	Dysentery.	Malaria.	Multiple Abscesses.	Enteritis.	Tertiary Syphilis.	Paraplegia.
Chronic Endocarditis.	—	—	—	—	—	Hæmoptysis.

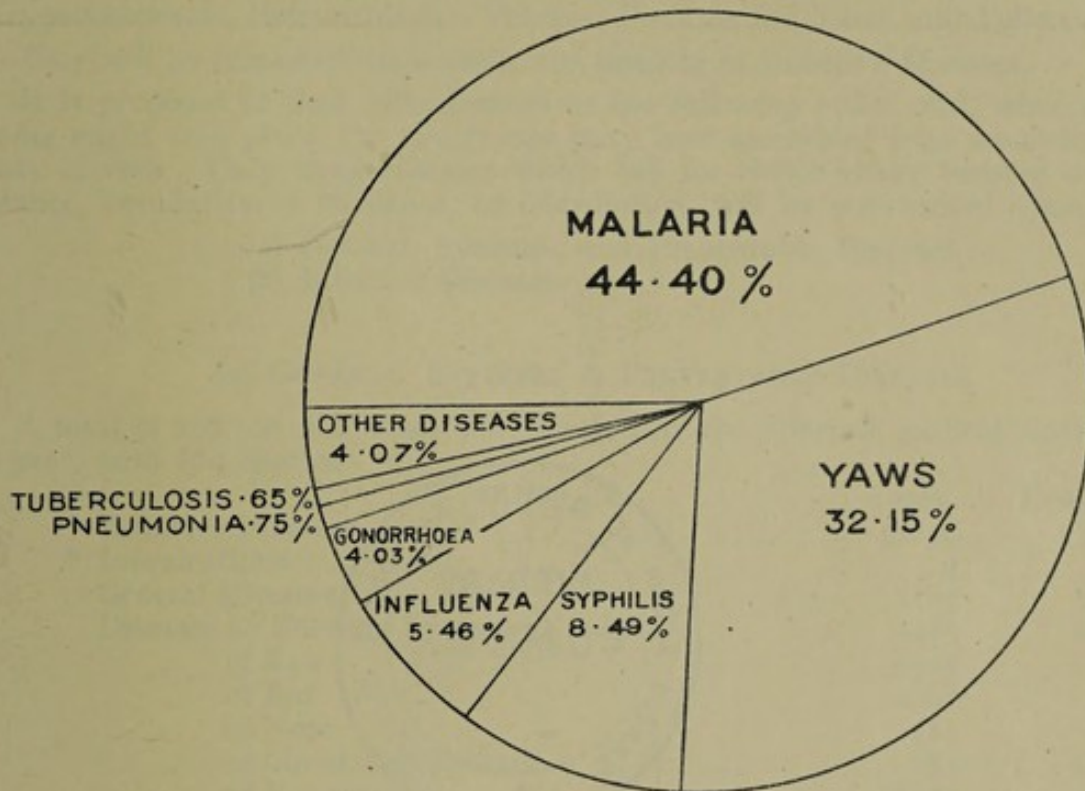
TABLE X.
REPORT ON THE HEALTH OF THE PRISONERS.

STATIONS.	Total number committed during 1924.	Daily average number in Prison.	The number of admission to Hospital during the Year 1924.	The daily average on the Sick List.	The number of Deaths during 1924.
Arusha	277	63	36	4	1
Mbulu	74	12	—	—	—
Bagamoyo	191	32	—	1	—
Bukoba	412	117	96	21	3
Biharamulo	37	5	—	—	—
Dar-es-Salaam	940	208	54	7	6
Dodoma	366	92.6	141	5.1	—
Manyoni	57	5	—	—	—
Singidda	124	10.4	4	—	1
Iringa	280	39.3	2	0.1	—
Malangali	90	7	—	0.34	1
Namanyere	72	18.6	2	—	1
Kasanga	59	8	—	4.79	—
Kilwa	176	30	3	—	—
Kibata	20	2	—	3	—
Liwale	40	4.6	—	—	—
Kondoa-Irangi	79	30.4	17	3.7	1
Mkalama	105	21	—	—	—
Lindi	264	47	50	10.3	2
Masasi	31	3	—	—	—
Mikindani	396	26	1	2	—
Newala	9	2	—	—	—
Tunduru	42	8.7	—	0.08	—
Lushoto	90	21	3	3	1
Mahenge	89	14.1	—	2.4	—
Mkasu	—	—	—	—	—
Morogoro	336	130	119	5	25
Kilosa	309	10	1	0.01	—
Moshi	490	45.3	3	1.06	—
Mwanza	650	156.4	63	19.27	14
Musoma	305	42.25	—	3.25	2
Pangani	579	37.2	9	4.5	—
Handeni	9	2.5	—	—	—
Songea	144	29	19	3	—
Lipumba	41	8	1	0.2	—
Tabora	542	170	171	9	5
Kahama	76	17.3	—	2.2	—
Shinyanga	121	9.54	—	0.43	—
Tanga	349	119	62	2	2
Tukuyu	200	109	94	9	2
Utete	77	15	12	2	1
Ujiji	260	—	4	1.49	1
Kasulu	54	6.5	—	—	—
Kibondo	17	—	—	—	—
Mafia	52	15.61	—	0.5	—
TOTAL	8,931	1,750.2	967	130.7	69

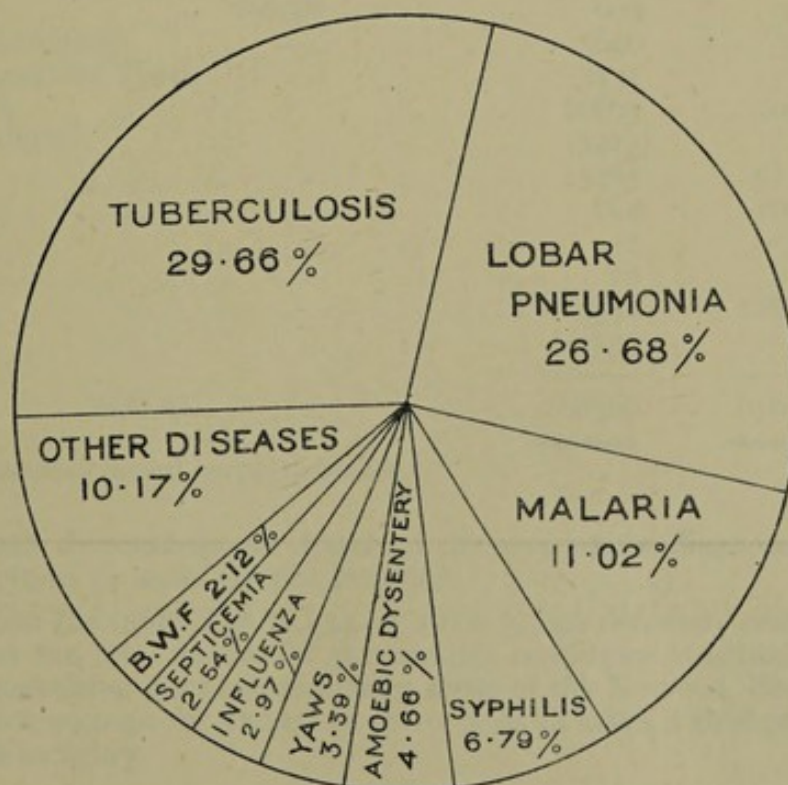
For the above Table I am indebted to the Commissioner of Police and Prisons, Dar-es-Salaam.

INFECTIVE DISEASES

TOTAL INCIDENCE - 51189



TOTAL DEATHS - 236





(b) PUBLIC HEALTH.

The more intimately this department gets into touch with the native population in the districts, the more vividly the importance of expansion, and the provision of hospital accommodation display themselves to one's mind. More light has been thrown on the following diseases:—

Trypanosomiasis, Helminthiasis – Venereal Diseases and Yaws, and Tuberculosis.

They will be remarked upon under the heading of Infective Diseases.

It is proposed to deal with diseases in the following order, and, while some overlapping might take place, the two groups have been assembled from somewhat different points of view. Only those diseases which call for notice either because of their importance, peculiarity of incidence, or distribution, will be commented upon.

(a) General, Systemic and Preventable Diseases.

(b) Infective Diseases.

(a) GENERAL, SYSTEMIC & PREVENTABLE DISEASES.

A total of 168,300 new cases were treated at the different medical stations during the year, with 679 deaths.

	Cases.	Deaths.
* Infective Diseases	51195	237
* Intoxications	4	1
General Diseases	1197	19
Diseases of Nervous System	5483	28
„ of Eye	5903	—
„ of Ear	2261	1
„ of Nose	114	—
„ of Circulatory System	153	11
„ of Respiratory „	18150	31
„ of Digestive „	23492	107
„ of Lymphatic „	679	2
„ of Urinary „	180	8
„ of Generative Organs, male	1309	4
„ of „ „ female	603	9
„ of Locomotion	5696	3
„ of Connective Tissue	3231	7
„ of Skin	26663	20
* (Scabies)	(5417)	—
* Injuries	15465	61
Tumours	162	10
Malformations	7	—
* Poisons	78	2
* Helminths	5542	118
* Insecta	733	—
TOTAL.	168300	679

* Diseases classed as preventable.

Figures from small dispensaries in charge of dressers whose diagnoses merely consist of records of symptoms or signs are not included.

It will be observed from the table that 78,434, or 46.60 %, are definitely cases of preventable conditions. That the total figures for preventable conditions is actually larger is certain because of the remaining diseases, especially those of the Nervous, Respiratory and Digestive systems which account for 47,125, or 27.10 % of all cases, a good proportion would also fall within this category.

Of Skin diseases numbering 26,663, comprising 15.84 % of the total cases, no less than 17,078, or 63.9 %, were due to Ulcers, and 5,417 or 20.4 % to Scabies. A fair number of the General Diseases 1,197, and those of the remaining systems, Eye 5,903, which shewed a large proportion of Conjunctivitis, Lymphatic System 679, Organs of Generation 2,912, Locomotion 5,696, and Connective Tissue 3,231, totalling 19,618, might also be regarded as resulting from the Infective group; and therefore preventable. It would be reasonable to presume therefore that at least 50% of the diseases the African native suffers from are preventable. Of the Infective Diseases, 51,195 in all, 43,543, or 85% were due to three diseases, Malaria, which accounted for 22,732, Yaws 16,463*, and Syphilis 4,348. This group returned 237 deaths, or 34.9% of the total deaths from all causes.

Of the 237 deaths due to Infective Diseases, Lobar Pneumonia accounted for 63 and Tuberculosis 70, 56.1%, and Malaria 25, or 10.5%. Of the other systems the greatest number of deaths were due to diseases of the Digestive tract, 23,492 cases with 107 deaths, and Intestinal Parasites, chiefly Hookworm 5,542, with 118 deaths. Thus, of the total number of 679 deaths from all causes 68% were due to Infective Diseases, diseases of the Digestive System, and to Intestinal Parasites. Apart from Injuries which caused 61 deaths, the other deaths of note were due to General Diseases 19, Respiratory 31, and Skin 20.

Extension of field work directly dealing with Yaws and Syphilis, renewed efforts against the reduction of Malaria and the suppression of Anopheline mosquitoes in and around our larger and more populated townships, the advancement of general and rural sanitation, and more particularly the improvement of water supplies in as wide an application as possible, by the introduction of properly constructed covered wells, with pumps, in all townships, and indeed at all large centres of native population, where a clean and suitable water supply, piped or otherwise, is not available for the African, should bring about a notable reduction of the diseases and deaths which have been drawn to attention above.

Deficiency Diseases.—These have been dealt with by the Senior Sanitation Officer, but the subject is so intertwined with the health and dietary of labourers and prisoners, that I propose to deal with it from this common aspect under the head of Labour, and prison labour is included in this category.

Plantation Labour.—Labourers in large numbers are employed on plantation work in several parts of the Territory. Extensive areas under Cotton and Sisal along the Central Railway from Ruvu up to Kilosa are under Cotton or Sisal. There are areas in the Lindi, Pangani, Tanga, Lushoto and other districts where similar conditions prevail. The bulk of this labour is recruited from the Tukuyu and Ufipa reserves to the south-west hundreds of miles away, and the labourers have perforce to march these long distances en route for their destinations. In the past no provision of any description was made for this long journey, except an initial supply of coarse food which was consumed within a few hours. On arrival at the plantations the labourers were turned on to build any sort of shelter, and within a day or two were put to work. The Diet issued was deficient in quality and variety, and there were no adequate arrangements for Hospital accommodation, medical attention, water supplies, kitchens, latrines, etc. As a sequence, dysentery, bowel troubles and deaths ensued, and the proportion rendered unfit was large. In order therefore to deal with the various factors involved, and to make available details of remedial measures to employers of labour in simple form, a memorandum dealing with the care of native labour was issued. Some 200 copies were distributed to the Chambers of Commerce, all employers of labour, all Administrative and Medical Officers for guidance. The memorandum, besides general considerations, dealt with and supplied data as follows:— Prerecruiting problems, Recruiting, Diet and Feeding, Clothing, Housing, Maintenance of Cleanliness, Water supplies, Bath and Laundry accommodation, Latrines, Hospital accommodation and Staff, Hospital diet, Drugs and Dressings, Instruments and Equipment. One anticipates that during the course of the forthcoming year some

* Not including the total for district work - see under YAWS.

definite effort will be made to give effect to the points covered in the different sections of the memorandum, and that, if by the end of 1925 reasonable improvement has not taken place regarding the organisation of African labour, legislation be introduced to enforce it.

Prison Labour.—For years the question of the improvement of prison diet has been raised (see Medical Annual Reports, p. 5 of 1922, and pp. 159, 169, 199 and 202 of 1923). During 1924 a recrudescence of disease and deaths revived the subject anew. There were several deaths at the Morogoro Central Jail, and the majority of the long term prisoners lost weight.

The number of prisoners weighed were 142. Their dates of admission to prison life ranged from 1919 – 1924, only one was admitted prior to 1919, i.e. during 1916.

The Prisoners have been divided into two groups.

(A) up to and including 1921.

(B) from 1-1-22 onwards to 9-4-24.

Total Prisoners weighed 142.

(A) 61 Long Term Prisoners.

20 gained weight, at an average of 7.1 lbs., i.e. 32.7 %.

3 were stationary.

6 were in Hospital and were probably under weight on date of weighing.

32 lost weight at an average of 9.8 lbs.

(B) 81 Long Term Prisoners.

23 gained weight, at an average of 5.9 lbs., i.e. 28.1 %.

10 were stationary.

10 were in Hospital, and were probably under weight on date of weighing.

38 lost weight at an average of 10.9 lbs.

The Commissioner of Police and Prisons stated in a communication as follows :—

“ I admit that at certain periods of the year it is exceedingly difficult to obtain accessory food factors, such as vegetables, sweet potatoes, but I can safely say that the Morogoro prisoners have exactly the same dietary scales as those in Dar-es-Salaam, Tabora and Dodoma.”

The conclusion that was arrived at after reviewing the histories of these outbreaks, and reconsidering the recorded opinions in the Medical Annual Reports, was that the loss of weight of the long term prisoners, and the deaths at the Morogoro Jail were due to several factors, for which an ill-balanced and deficient dietary was chiefly responsible.

The main article of diet that the prisoners depend upon for their protein is Maize or Maize meal, or meal derived from other grain, potatoes, which are not always available, and beans, the stock of which latter are in the majority of samples riddled by weevils, which destroy the most valuable part, i.e., the germ, see p.197 Laboratory Report. All legumes are difficult of digestion, therefore the loss of the protein in beans is great in any case, and is still greater when damaged beans are used.

To compensate for this loss of protein a great bulk of carbohydrate (meal, bread, flour) would be necessary, for carbohydrate contains a comparatively small percentage of protein, which would result in an unbalanced dietary. It was in order to obviate a state of affairs which has been going on for some years, to provide a balanced and easily assimilable diet and to raise the resistance to disease that the addition of meat to the dietary of the long term prisoners was recommended.

The following are the quantities of meat that are considered necessary for the African Labourer by certain Governments and various large employers :—

	1	2	3	4	5	6	7	8	9
Meat ..	194	129	194	224	185	214	163	214	214 grammes.
„ ..	6.4	4.3	6.4	7.4	6.1	7.1	4.7	7.1	7.1 ozs.
An average of 6.3 ozs. per diem.									

- 1.—Minimum diet requirements laid down by the Government of Union of South Africa in 1911.
- 2.—Minimum diet requirements laid down by the Administration of Northern Rhodesia in 1917.
- 3, 4 and 5.—Actual dietary issued on three representative compounds on Rand in 1918.
- 6.—Diet scale in use by Union Miniere, the Katanga, since 1917.
- 7.—A diet scale formerly used by Union Miniere, now abandoned in favour of 6. (Meat increased by 71 grammes. Meal reduced by 315 grammes.)

The following extracts from the "Hygiene of Native Compounds" (Pearson & Mouchet) are illuminating.

"In the Katanga, when vegetables are difficult to obtain, their place is taken " by an extra ration of $\frac{1}{2}$ Kilo. of meat per week."

"The Prescorbutic condition in which, as has been noted, many natives arrive " from the villages for work makes it necessary for us to issue a diet which is not " only sufficient to meet the daily output of energy required from them, but which " is capable of restoring them to a normal condition, improving their general condition, " and building up both their tissues and their powers of resistance."

"Diet of Mine Natives," published by Dr. Loesser, on the Rand in 1912, the Author compares the scurvy noted among South African natives with that of sailors on board ship on long voyages. He states his belief that the native suffers because of a shortage of both protein food and of fresh vegetables, while the sailor is ill on account of a shortage of the latter only. He attributes to this reason the value of limejuice to the sailor, and its failure with the native on the Rand. He believes that it is necessary to give the native additional meat which he finds preferable to limejuice.

In another standard work "The Health of the Industrial Worker" (Collis & Greenwood), the following statements are made:—

"Thus it comes about that while carbohydrates, protein and fats are all " available sources of fuel, deprivation of proteins, however much energy be offered in " the guise of fats or carbohydrates, is fatal."

"The need for calories for the human engine is fundamental, no subtle " arguments, no appeal to a specialised experience, no invocation of half compre- " hended factors such as "Vitamins" must be allowed for an instant to obscure " this truth."

"The retribution of neglect in this matter is slow but sure. An underfed " industrial population does not collapse suddenly. In short the consequences of " undernutrition are slowly progressive decline of efficiency. Unless the deficit " is qualitative as well as quantitative there will be no dramatic incidents. Morbid- " ity will increase, but there will be no new or strange diseases, merely an increased " toll taken by the customary kinds of sickness."

This is indeed what we have experienced.

It has been suggested that meat does not form part of the ordinary diet of Africans in this Territory. It can however be stated with confidence that the only natives of this country who do not eat meat are those who are unable to obtain it. Tribes occupying cattle country obtain their protein from blood, milk and curds, and therefore do not feel the need for meat. Tribes that live in fly country cannot get meat except by hunting, and this they are prohibited from doing by our game laws. Natives in townships purchase meat whenever they possess the means to do so.

In view of the above data a recommendation was made to the effect that a meat ration was essential, and that not less than six ozs. of meat should be allowed per diem, per long term prisoner.

I should like to see our game laws relaxed somewhat, to permit of the native of the country making some addition in the form of meat to his dietary, without running the risk of prosecution.

Poisons.—Two deaths due to Tetraden poisoning occurred at Dar-es-Salaam. It appears that the servant in charge of an European child, while having an evening outing on the beach, took a small fish, which was carried home. The fish roe was cooked for the child's supper, and the mother tasted some before the child ate it. Within a few minutes the child felt very unwell, nausea, severe abdominal pain, collapse, and ascending paralysis supervened in quick succession, and before the child could be taken to hospital it succumbed. The unfortunate mother was seized somewhat later, in a similar manner and died in Hospital, four hours after. The fish is known locally by the name of "Bunju," and may be found in the shallows left on the reef by the receding tide. (See also p. 209 Laboratory Report).

Urinary Diseases.—An interesting case of Calculus in the bladder of an African native was recorded at Singidda. The Sub-Assistant Surgeon, Mr. Paranjpe, who was in charge of this sub-station, removed the stone by Supra-pubic Cystotomy. The stone was sent to the Laboratory at Dar-es-Salaam for examination. It weighed $5\frac{1}{2}$ ozs., was somewhat dumbell shaped, consisted of a nucleus of Uric acid with an outer covering layer of the Phosphates of Ammonia. Unfortunately the patient, an old man, died, and further details regarding his tribe, the area of his permanent residence, and the history of his case, were no longer available when enquiry was made from headquarters.

(b) INFECTIVE DISEASES.

Anthrax.—Seven cases with two deaths. Six of these cases were intestinal infections due to eating diseased meat, and one was due to malignant pustule due to handling hides. The distribution was, Singida, five cases; Mwanza, one; and Dodoma, one;—all cattle supporting districts. From information received, of which accurate data are not available, enquiry elicits the fact that a fair proportion of the cases recover without treatment, so that the disease probably exists in somewhat attenuated form, or there is a certain degree of immunity among the local tribes.

Cerebro-Spinal Fever.

1922	..	..	..	12 cases	..	..	9 deaths
1923	..	..	..	103	..	..	91
1924	..	..	..	5	..	..	2

Musoma, Mwanza, Pangani, Tanga and Songea returned one each. The case mortality rate was low and there is nothing special to note otherwise.

Dengue.

1922	..	..	..	cases nil
1923	..	..	..	9
1924	..	..	..	30

This disease has hitherto been reported only from the costal zone, Dar-es-Salaam apparently is a somewhat highly infective centre, and the monthly incident of cases shews a definite correlation to the rainfall and variation in the mosquito index. European Officials returned 8. European General Population 16. Native Officials 6 cases.

The monthly incidence was as follows:— January, February, March, Nil; April, 1; May, 8; June, 9; July, 3; August, 4; September, 2; and December, 3.

Diphtheria.

1922	..	..	..	2
1923	..	..	..	Nil
1924	..	..	..	1

Dysentery.—See Senior Sanitation Officer's report, page 132.

Encephalitis-Lethargia.

Nil.

Endemic Goitre (10).—A single case has been reported from each of the following stations, Arusha, Bukoba, Dar-es-Salaam, Kigoma, Songea and Tabora, and two each from Mbulu and Morogoro. Details are not available as to which districts the patients actually belonged to, but it is significant that the majority of the cases have been reported from the higher altitudes.

Arusha Township (Mount Meru, which is thickly populated, is several thousand feet higher)	4400 feet.
Mbulu	5600 ..
Tabora	4028 ..
Bukoba (Karagwe Highlands)	4265—4600 ..
Morogoro (Uluguru Range rises to 8,900 feet)	8900 ..

Enteric Fever.—See Senior Sanitation Officer's report. There would appear to be definite foci of infection at Tabora and Kigoma. Cases have occurred year after year at one or other, or both of these places; it could scarcely be the water supply that is at fault, much more likely it is due to a carrier infection, and that some purveyor or cook is responsible.

Glanders.

Nil.

Helminthiasis.—See Senior Sanitation Officer's report. Helminthiasis in all its commoner manifestations is widely distributed throughout the Territory. Schistosomiasis, Hoematobium and Mansonii, are relatively frequent.

Regarding Filariasis an interesting note was included in a report by Sub-Assistant Surgeon Irvine, who worked for several months in the Bacteriological Laboratory, and while there, had made a special study of the Filariæ, under Dr. Butler, and who was later sent to the Liwale area to investigate an outbreak of sleeping sickness.

During the course of blood examinations the following Filarial infections were recorded as due to *Microfilaria Perstans* (Minor).

TOTAL CASES EXAMINED IN THE LIWALE-KILWA AREA.

Cases examined. ..	No.	Trypanosomes.	Microfilaria.	S.T. Parasites.	Crescents.
Men	357	2	112	15	1
Women	45	1	15	7	0
Children (below 12) ..	25	0	0	0	0

CASES IN THE INFECTED AREA ALONG THE MBEMKURU RIVER.

Cases examined. ..	No.	Trypanosomes.	Microfilaria.	S.T. Parasites.	Crescents.
Men	179	2	77	10	1
Women	28	1	4	4	0
Children (below 12) ..	12	0	0	0	0

A *Culicine* mosquito was said to be prevalent in great numbers. No cases of Elephantiasis were seen.

Elephantiasis.—There were 218 cases of Elephantiasis of the Leg, Scrotum and other situations, reported from 23 different stations. The Leg and Scrotum appear to be affected in equal proportion.

Guinea Worm.—Two cases were reported from Mwanza, but no details regarding tribe and habitat of the patients were given. While it is uncertain that the Mwanza district is within the endemic area, it is however near enough not to preclude the probability of infections having been acquired in Uganda. A third example of Guinea Worm was discovered during an operation for Hernia in one of the K.A.R. askaria; there are several Nilotic natives in the Battalion, and presumably it occurred in one of them. (See also page 207, Laboratory Report.)

Malaria and Blackwater Fever.—Malaria returned the largest aggregate of any single disease during the year, *i.e.*, 22,732 cases. Its main foci appear to be at Bukoba, 1,342; Dar-es-Salaam, 6,883; Moshi, 3,471; Tabora, 971; Tanga, 805; and Tukuyu, 741, totalling 14,231. These stations are our main sea and lake ports, and Moshi and Tukuyu are virtually our points of entry from Kenya and Nyasaland respectively. The numbers of infections that occur among new arrivals indicate that special attention should be concentrated on these areas. It is proposed with the view of reducing the reservoir of carriers to introduce Quinine prophylaxis among the School Boys, the King's African Rifles, Police askari, if possible including their children, and Prisoners. Euquinine would be substituted for Quinine for the children.

The appointment of a Sanitary Engineer and a Medical Entomologist should prove of value.

Regarding Blackwater Fever (*see* Senior Sanitation Officer's report, page 138) there has been a decided reduction of incidence.

				Cases.	Deaths.
1921	..	..	..	42	7
1922	..	..	..	47	4
1923	..	..	..	35	7
1924	..	..	..	30	5

There were no unusual features calling for comment, but the importance of Quinine prophylaxis might here again be emphasised.

Mumps.

1922	..	..	..	..	54 cases
1923	..	..	..	..	92 „
1924	..	..	..	..	165 „ with 1 death.

The South-Western area was chiefly affected.

Measles.

1922	..	..	..	..	62 cases
1923	..	..	..	..	17 „
1924	..	..	..	..	27 „

Plague.—(*See* Senior Sanitation Officer's Report.) This disease in all probability will presently be brought into greater prominence owing to the expansion of agriculture, particularly relating to seed cotton and cotton-seed traffic, and the opening up of railway communication.

Plague is endemic in the Mwanza (at Shirati and Musoma), Singida, Kondoa-Irangi and Arusha districts, and outbreaks have occurred in the past from time to time, but not to any serious extent.

Rabies.—No cases have been reported since our occupation of the Territory.

Relapsing (Tick) Fever.

1922	..	..	..	..	44 cases
1923	..	..	..	..	119 „
1924	..	..	..	..	148 „

With wider medical supervision the incidence of this disease in the Territory is becoming increasingly evident. There can be little doubt, reading between the lines of the different returns, that cases are more numerous than are shewn. In well-known Tick areas, a proportion of the cases returned as headache, facial paralysis, and eye affections, might reasonably be regarded as those of *Spirillum* Fever. The South-Western quadrant is far more heavily infected than any other area. Of the 148 cases, Iringa returned 28, Namanyere 24, and Tukuyu 24. There are grounds for the assumption that drafts of troops from Nyasaland, labour recruits and carriers from Tukuyu, Ufipa, Songea and Mahenge districts have been responsible for the spread to the North and North-East.

Ornithodoros Moubata is extensively established along all the main carrier routes, and the problem is therefore a difficult one. When this department is in a better position to examine and treat labourers in transit, some reduction of infectivity might be anticipated. The Ticks are fortunately not heavily infected, and the infection is usually of a benign type. No deaths have been reported hitherto and sequelæ are rare.

Seven-day Fever.—The description of this condition in the 1923 report bears a close similarity to examples of Dengue. Only six cases have been reported during 1924. During January five, and February one, and none others for the remainder of the year; whereas from April onwards, a total of 30 cases of Dengue were reported, but none of seven-day fever. I am inclined to the belief that some if not all the cases described as seven-day fever were in reality Dengue.

Trypanosomiasis.—(See Senior Sanitation Officer's report.) Three fresh areas of Trypanosome infection have been discovered. One below Kigoma on the shores of Lake Tanganyika, due to *T. Gambiense*; the remaining two, one in the Liwale sub-district of Kilwa, the other lying over an extensive Morsitans area stretching from below the Ufipa plateau to the East, North-East, North and North-West, up to within a few miles of Tabora. That is as far as the investigations have gone at present. The fly belt of this area is practically continuous with the vast fly belt which extends Northward through the Tabora district, and terminates within a few miles to the West of Mwanza. We have already two Medical Officers, one of whom Dr. Maclean has had considerable experience of Sleeping Sickness in the Mwanza area, a Sub-Assistant Surgeon, and two qualified Nyasa Dispensers, besides dressers, working in the area; and it is hoped shortly to appoint an additional Medical Officer. The area has perforce had to be quarantined.

Besides quarantining, the usual methods of evacuation of natives from fly areas into fly free areas, clearing around villages, water supplies and main routes, the establishment of segregation camps, where treatment with the latest drugs such as Tryparsamide and Bayer "205," could be carried out have been undertaken. Sufficient time has not elapsed to warrant any arrival at definite conclusions; the area appears to be fairly intensely infected, and systematic persistent work will have to continue for some time, but nothing has transpired up to date to cause undue alarm. I would like however to draw particular attention to the fact that both the Liwale and Ufipa-Tabora sleeping sickness areas border on game reserves, which are heavily infested with *G. Morsitans* and well stocked with game; and that the largest numbers of the cases in the Liwale area have been found in the villages nearest the reserve.

As regards the Liwale and Kigoma areas, see Senior Sanitation Officers' report.

TUBERCULOSIS.

The following data have been taken from the figures available in the past years' Annual Medical Reports. Only the total cases and deaths are available in that of 1922, and the distribution of cases and the total of deaths for 1923.

	1921.		1922.		1923.		1924.				TOTAL.	
	All Forms.		All Forms.		All Forms.		Pulmonary.		All Other Forms.		Cases.	Deaths.
	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.		
Arusha	9	1	—	—	5	—	4	3	3	2	—	—
Bagamoyo	6	—	—	—	5	—	2	1	—	—	—	—
Bukoba	4	1	—	—	5	—	6	2	—	—	—	—
Dar-es-Salaam,	5	—	—	—	1	—	—	—	3	—	—	—
European Hospital	38	11	—	—	29	—	22	3	—	—	—	—
Sewa Hadji Hospital	—	—	—	—	—	—	2	—	—	—	—	—
Medical Officer of Health	—	—	—	—	—	—	3	—	—	—	—	—
Private Practitioners	—	—	—	—	—	—	6	1	—	—	—	—
Dodoma	—	—	—	—	8	—	3	—	—	—	—	—
Iringa	—	—	—	—	2	—	1	—	—	—	—	—
Kigoma	5	—	—	—	7	—	8	4	—	—	—	—
Kasanga	2	—	—	—	—	—	—	—	—	—	—	—
Kilwa	—	—	—	—	3	—	1	1	—	—	—	—
Kondoa-Irangi	1	—	—	—	3	—	10	—	3	—	—	—
Kahama	—	—	—	—	—	—	1	—	—	—	—	—
Kilosa	—	—	—	—	—	—	2	2	—	—	—	—
Lindi	4	—	—	—	5	—	—	—	—	—	—	—
Lushoto	1	1	—	—	3	—	12	—	—	—	—	—
Mafia	1	—	—	—	—	—	1	1	1	—	—	—
Mahenge	2	—	—	—	—	—	5	2	—	—	—	—
Mbulu	—	—	—	—	—	—	4	—	—	—	—	—
Mikindani	—	—	—	—	3	—	3	—	—	—	—	—
Morogoro	9	2	—	—	—	—	18	10	1	—	—	—
Moshi	64	6	—	—	32	—	69	2	—	—	—	—
Musoma	—	—	—	—	—	—	—	—	—	—	—	—
Muhoro	2	—	—	—	—	—	—	—	—	—	—	—
Mwanza	5	2	—	—	5	—	16	7	—	—	—	—
Pangani	4	—	—	—	12	—	41	8	—	—	—	—
Shinyanga	2	—	—	—	—	—	3	—	—	—	—	—
Songea	1	1	—	—	8	—	6	4	—	—	—	—
Singida	—	—	—	—	—	—	—	—	—	—	—	—
Tabora	13	3	—	—	6	—	18	6	6	3	—	—
Tanga	20	5	—	—	9	—	38	8	—	—	—	—
Tunduru	—	—	—	—	—	—	—	—	—	—	—	—
Tukuyu	4	1	—	—	9	—	8	—	—	—	—	—
Ujiji	—	—	—	—	2	—	6	—	—	—	—	—
Utete	—	—	—	—	—	—	—	—	—	—	—	—
TOTAL	202	34	206	23	162	28	316	65	17	5	903	155

* Not included in TABLE XIV.

The position as regards Tuberculosis is disquieting. What the situation is it is not possible to say, but from the table given below it is clear that there has been an increase within the last few years, and the total suffering from all forms was 333 with 70 deaths, as compared with 202 with 34. With increase of staff, we are getting more closely in touch with diseases of all varieties, but the persistency with which certain of our bigger centres return uniformly large numbers of cases indicates permanent foci, and Moshi has consistently shewn itself to be heavily infected. Dar-es-Salaam is a cosmopolitan area, and 22 cases for a large town is not out of the way, nor perhaps of 18 for Tabora, and 16 for Mwanza. The situation as regards Moshi and Pangani are different. The largest tribe in the vicinity of Moshi is the Chagga, and the climate in the slopes of Kili-manjaro, chiefly occupied by these people, is bleak and cold for most of the year, which naturally conduces to overcrowding in ill-ventilated, confined, over-heated huts. The difficulties in overcoming these tendencies are almost insurmountable at the present. The only way that holds out hope, and which it is proposed to put into execution, is to appoint a district Medical Officer for the purpose of getting into touch with the natives, carefully studying the question locally, and, if possible obtaining a Tuberculosis census. His services combined with the improvement of general district hygiene, for which a staff of African district sanitary inspectors will be in the process of training next year, and the introduction of a sanatorium system suitably situated, and modelled on the plan of a native village might possibly bring about segregation by moral suasion. The surroundings could be made pleasant, the patients' families might be allowed to live with them, those who were fit enough could be given facilities for plying their various trades; food, medical aid and particularly supervision would be provided.

It must however be borne in mind, that the combination of the psychology of the chronic phthisical patient, with the natural dislike of the home-loving native to be away from his friends and surroundings, are obstacles which might take years to overcome, before the benefits of sanatorium treatment, and a hygienic environment can be appreciated.

VENEREAL DISEASES AND YAWS.

Yaws.—Up to and including the year 1921, the total number of cases of Yaws treated with the recognised remedies, including Neosalvarsan, was 1,745.

During 1922 the use of Neosalvarsan was largely discontinued, and its place taken by Bismuth, in the form of the soluble salt Bismuth Sodium Potassium Tartrate. (See the Annual Medical Reports, 1921, *et seq.*) During 1922 and 1923, 6,739 cases were treated.

In the April of 1924, a circular was issued to all members of the Medical Staff, and another to the administrative staff; the former detailing the line of treatment to be adopted, and requesting that every endeavour should be made to combat this widespread menace to the health of the African population, and the latter asking Administrative Officers to help by spreading the information that treatment was available, and encouraging natives to take advantage of it.

Table I. is a comparative table, showing figures of all cases treated during the last 4½ years, namely during the period for which statistics are available.

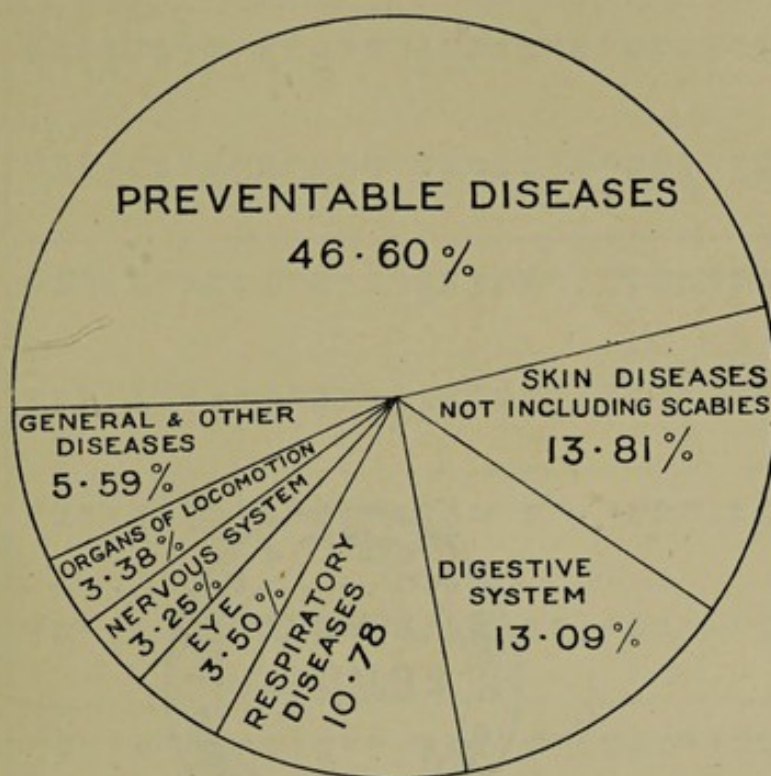
TABLE I.			
April—December	1920 ..	636	
	1921 ..	1109	
	1922 ..	3123	
	1923 ..	3616	
	1924 ..	20751	
TOTAL		29235	

The above table gives some idea of the distribution of Yaws, but its density is difficult to estimate, and until further details are available it would be rash to attempt to arrive at any accurate conclusion in relation to its incidence in the various districts. It is however certainly widely disseminated, and, indeed, in some areas acquires serious proportions.

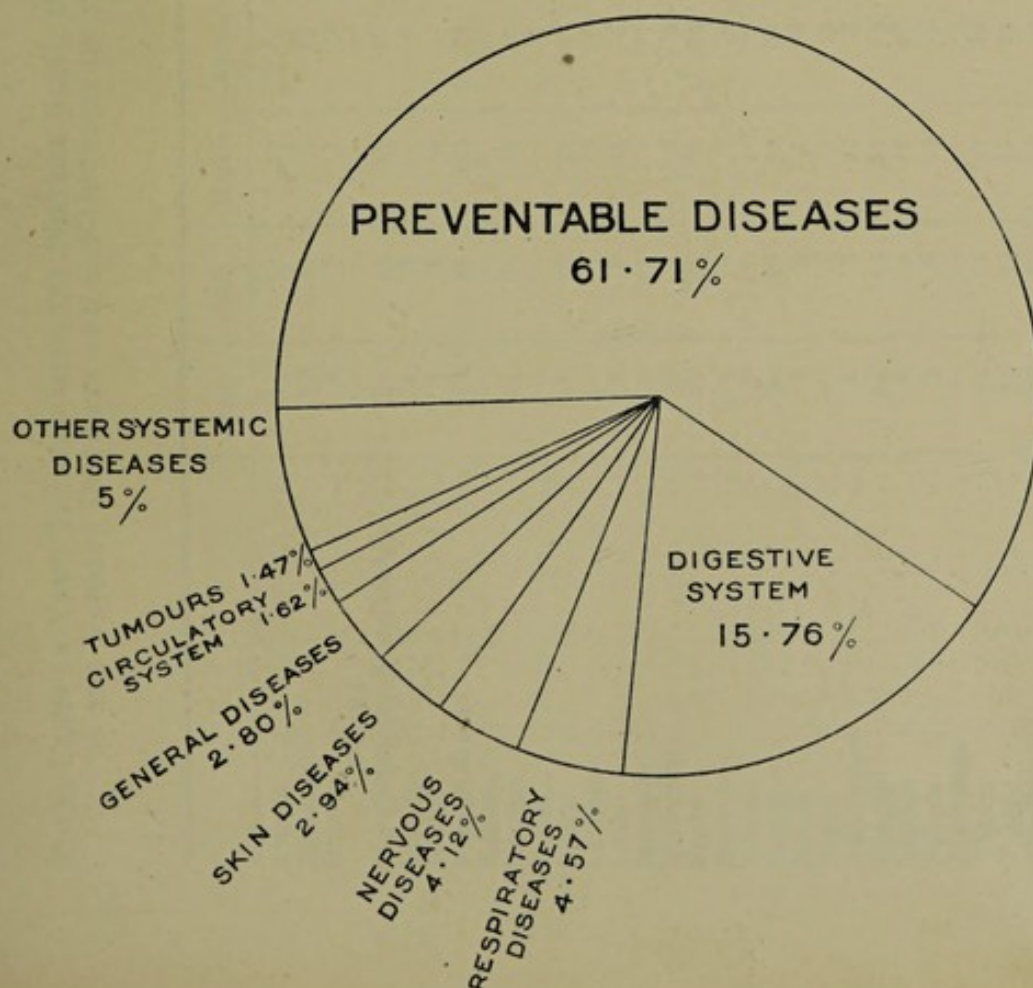
In the Rufiji District, headquarters Utete, with a population of 83,200, the number of cases treated up to the end of the year shews that over 10 % were infected.

GENERAL SYSTEMIC & PREVENTABLE DISEASES.

TOTAL CASES - 168,300.



TOTAL DEATHS - 679



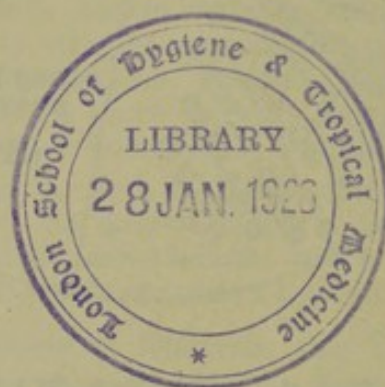


TABLE II.

TOTAL CASES OF YAWS TREATED WITH THE SOLUBLE SALTS, BISMUTH SODIUM POTASSIUM TARTRATE, AND BISMUTH SODIUM TARTRATE, IN THE VARIOUS DISTRICTS AND SUB-DISTRICTS OF THE TERRITORY, ACCORDING TO MONTHS, DURING THE YEAR 1924.

YAWS, 1924.

	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	TOTAL.
Arusha ..	15	15	23	14	16	7	6	2	19	25	17	36	195
Bagamoyo ..	23	17	8	13	20	43	53	52	61	46	59	59	454
Bukoba ..	—	4	3	3	—	1	6	2	—	3	—	—	22
„ District ..	—	—	—	—	—	—	—	—	—	—	—	126	126
Dar-es-Salaam (Sewa Hadji)	31	45	15	26	21	26	28	44	53	41	73	64	467
Dodoma ..	2	4	—	2	5	4	6	10	13	4	11	28	89
Iringa ..	1	1	4	1	1	2	2	—	2	8	8	9	39
Kondoa-Irangi ..	46	34	35	34	36	66	150	141	124	87	131	133	1,017
Kahama ..	—	—	—	—	—	2	4	4	2	12	1	4	29
Kigoma ..	23	65	23	17	29	20	32	42	57	64	37	66	475
Kilosa ..	1	—	—	1	—	—	—	2	3	3	7	6	23
Kilwa ..	18	18	27	28	36	21	10	14	24	29	79	337	641
Lushoto ..	—	—	3	6	10	6	4	—	3	1	1	4	38
Lindi ..	2	6	24	3	4	8	7	3	2	20	27	39	145
Mahenge ..	1	2	1	—	1	—	1	1	—	2	1	2	12
Mikindani ..	8	3	5	3	31	96	84	106	121	137	226	270	1,090
Moshi ..	27	23	26	34	39	37	77	120	46	88	37	175	729
Mwanza ..	4	1	9	4	13	14	24	35	38	61	41	73	317
Musoma ..	1	—	—	—	—	1	—	7	32	74	64	11	190
Morogoro ..	30	40	33	32	20	23	40	25	13	38	15	12	321
Mbulu ..	8	4	1	5	3	3	3	4	1	2	2	8	44
Nzega ..	—	1	2	3	2	—	—	—	—	—	—	10	18
Namanyere ..	6	6	12	7	12	11	9	9	9	13	5	7	106
Pangani ..	14	25	21	23	18	35	30	25	22	18	15	25	271
Singida ..	6	4	18	46	64	22	32	57	65	84	23	13	434
Songea ..	3	6	7	3	2	8	2	5	2	11	22	43	114
Shinyanga ..	—	—	—	—	—	—	—	—	—	3	—	—	3
Tabora ..	22	11	11	16	15	15	7	11	14	15	4	3	144
Tanga ..	53	73	31	23	19	27	35	26	16	42	31	33	409
Tunduru ..	35	17	2	3	4	6	6	7	8	18	25	28	159
Tukuyu ..	99	18	35	15	32	515	644	564	610	274	369	459	3,634
Utete ..	1	4	32	47	699	809	285	433	701	662	687	651	5,011
„ District ..	—	—	—	—	—	—	—	—	*	*	*	—	3,896
Ujiji ..	24	9	—	—	—	2	9	2	11	10	8	13	88
	504	456	411	413	1,152	1,830	1,596	1,753	2,072	1,895	2,026	2,747	20,751

* The Total of 3,896 cases were treated during September, October, and November.

TABLE III.

	Male.	Female.	Total.	Male. %	Female. %
Arusha	122	61	183	66·7	33·3
Bagamoyo	286	154	440	65·0	35·0
Bukoba	11	—	11	100·0	—
Dar-es-Salaam	184	68	252	73·1	26·9
Dodoma	19	8	27	70·4	29·6
Iringa	15	7	22	68·2	31·8
Kondoa-Irangi	311	151	462	67·4	32·6
Kahama	—	—	—	—	—
Kigoma	257	95	352	73·1	26·9
Kilosa	14	3	17	83·4	17·6
Kilwa	304	232	536	46·8	43·2
Lushoto	17	8	25	68·0	32·0
Lindi	70	35	105	66·7	33·3
Mahenge	2	3	5	40·0	60·0
Mikindani	592	402	994	59·6	40·4
Moshi	412	302	714	57·8	42·2
Mwanza	85	47	132	64·4	35·6
Musoma	82	72	154	53·3	46·7
Morogoro	181	82	263	68·5	31·5
Mbulu	22	4	26	84·7	15·3
Nzega	6	2	8	75·0	25·0
Namanyere	24	9	33	72·8	27·2
Pangani	175	65	240	72·2	27·8
Singida	9	14	23	39·1	60·9
Songea	26	27	53	49·0	51·0
Shinyanga	—	—	—	—	—
Tabora	2	1	3	66·7	33·3
Tanga	272	49	326	85·0	15·03
Tunduru	35	14	49	71·5	28·5
Tukuyu	1,491	1,609	3,100	48·5	51·5
Utete	2,499	2,479	4,978	50·2	49·8
Ujiji	76	10	86	88·4	11·6
	7,606	6,013	13,619	55·85	44·15

The facts as regard sex distribution are interesting. Table III indicates that where the indigent district populations have been tapped, as opposed to the floating populations of towns through which large numbers of male labourers, unaccompanied by their wives, pass en route to the various plantations, or at which similar conditions of sex discrepancy prevail in connection with any extensive works, the infection is equally distributed between males and females. Taking the figures for the general native population, male and female out-patients, returned from all districts, a total of 13,619 were treated of which 55·85 were males, and 44·15 females. Whereas in areas representing the former condition such, for example, as Tukuyu where of 3,100 cases treated 48·5 % were males, and 51·5 females, and at Utete of 4,978 cases 50·2 % were males, and 49·9 females.

It would appear therefore, that there are reasonable grounds for assuming that amongst district populations undisturbed to any extent, by external influences the sexes are equally affected.

The following dosage for Howards' Bismuth Sodium Tartrate has been recommended for uniform adoption. For infants and young adults, 1 to 3 grs; for adult females 3 to 5 grs; and for adult males 3 to 6 grs. These doses are administered intramuscularly.

The Administrative Officers have taken a keen interest in the application of this form of treatment, by encouraging the natives to attend at the different medical centres, and I acknowledge gratefully the assistance that has been accorded to me, and my staff, in this respect. I must, however, bring to particular notice the outstanding efforts of Mr. F. W. C. Morgans, Administrative Officer, Rufiji District, who has himself helped on occasions in administering the injections. As a consequence of his energy, and in urging his Sultans to send in cases, a total of 8,907 were treated in his district, 5,011 by the Compounder Mr. Amarnath Verma, during the year, at Utete and 3,896, during a matter of seven weeks, by Senior Sub-Assistant Surgeon Mr. Kelkar specially detailed for duty in that area, both the latter also deserve credit for their work. Amongst the other stations praiseworthy results have been achieved at Tukuyu, Mikindani and Kondoia-Irangi.

It is hoped that during 1925 a great advance will be made in the numbers dealt with. Yaws as a disease is not perhaps a very dangerous one, it is nevertheless incapacitating to a marked degree, and I am confident, if all concerned would make a determined effort, that a rapid reduction of this scourge might be expected, indeed it is felt that within no lengthy space of time, the number of cases will have been so diminished as to become an almost negligible epidemiological factor.

Syphilis.—Sequent on the increased interest and attention that has been drawn to the successful treatment of Yaws with Bismuth, a decided increase in the numbers of patients applying for relief from Syphilis, by the same method, has taken place. Every opportunity has been seized to push the treatment as far as possible in the more densely populated areas, and where this has not been possible all available means have been taken to bring in the patients for treatment. During December of this year a special Medical Officer was appointed to Bukoba for touring the district, and establishing centres for treatment, with Bismuth, leaving dressers, trained in detail, to carry on the work, and over whom he exercised periodic supervision. This system assumed immediate popularity and promises well. Some reflection of the results of propaganda and the demand for treatment might be observed from contrast with the figures recorded during previous years.

SYPHILIS.

	1921	1922	1923	1924
Total cases treated	1775	2145	2667	4348

Bearing on the above, the figures returned for Syphilis by the special Venereal Diseases Medical Officer for the first four months of 1925 were 1,738, and of the Senior Sub-Assistant Surgeon appointed for Yaws and Venereal Diseases work 361 for three months, a total of 2,099 for the Bukoba district alone.

Gonorrhœa.—2,067 cases. Of these 30 % were returned from Bukoba. This district also recorded 63 cases of Stricture and 29 of Fistulæ. Of the total number, 43, of Stricture operated upon in the Territory, 38 were dealt with at Bukoba.

From the above it is clear that the infection at Bukoba is heavy, and it will be necessary to devise more extended facilities for specialised treatment.

In conclusion be it stated that it is hoped ultimately to establish in every district the organisations mentioned below for Medical, Maternity, and Sanitation work.

- (a) District Medical Officers.
- (b) European Sanitary Superintendents.
- (c) District African Sanitary Inspectors.
- (d) Venereal Diseases and Yaws mobile clinics.
- (e) Maternity and Child Welfare centres under the supervision of European Nursing Sisters.
- (f) Qualified Dispensers in charge of district Dispensaries.
- (g) Tuberculosis Sanatoria, at or near our larger towns, as described under Tuberculosis, for purposes of segregation and treatment.
- (h) Mobile Clinics for Surgical work, including its specialised branches, to follow later.

RECOMMENDATIONS.

1. An increase in the staff of European Sanitary Superintendents in numbers sufficient to meet requirements of the different districts, and for the purpose of supervising the work of the African district staff of Sanitary Inspectors, is a necessity that must be kept in mind and facilitated at an early moment. To get the best out of the organisation mentioned European supervision is essential.

2. Medical Officers for special duty connected with certain of the more important infective diseases. The appointment of a special Medical Officer for anti-syphilitic work in the Bukoba district during December has shewn most encouraging results, and an extension of this system whereby the Medical Officer actually tours and works over each area will, I am confident, produce far more effective results than work at one or two larger stationary clinics however well equipped. I do not suggest that the latter are not necessary but the itinerant system is more effective for mass treatment. The Africans in certain districts are so apathetic, especially in the case of a chronic disease such as Syphilis, for which a comparatively long course of treatment is required, that they refrain from applying for treatment even though the distance to be covered in seeking it is trifling.

3. Permanent well built hospitals are still required at several stations.

4. Registration of births and deaths, in all classes, in all townships.

5. A larger percentage of unmarried Medical Officers should in future be selected for duties connected with district work.

6. Extension of piped water in all townships, the provision of well built covered wells with pumps, in all densely populated native centres where clean water supplies are not available.

7. Increased application of drainage, generally, and specially of swamps at and near all townships.

TABLE XI.
TOTAL NUMBERS OF FRESH CASES, IN-PATIENTS AND OUT-PATIENTS, FOR ALL DISEASES DURING THE YEAR 1924.

	Arusha.		Bagamoyo.		Bukoba.		Dar-es-Salaam.				Dodoma.		Iringa.	
	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Europ. Hosp.		Sewa H. Hosp.		Cases.	Deaths.	Cases.	Deaths.
							Cases.	Deaths.	Cases.	Deaths.				
<i>Infective Diseases—</i>														
Anthrax ..	—	—	—	—	—	—	—	—	—	—	1	—	—	—
Beri-Beri ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Cerebro-Spinal Fever ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Chicken-pox ..	61	—	—	—	100	—	—	—	4	—	—	—	5	—
Cholera ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Cancrum Oris ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dengue ..	—	—	—	—	—	—	30	—	1	—	—	—	—	—
Diphtheria ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dysentery (Unclassified)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
" Amoebic ..	10	1	—	—	32	—	4	—	4	2	10	—	16	1
" Bacillary ..	—	—	—	—	—	—	8	—	1	—	5	—	—	—
Endocarditis, Infective ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Enteric Fever ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Erysipelas ..	—	—	—	—	—	—	1	—	—	—	—	—	—	—
Goitre Endemic ..	1	—	—	—	1	—	—	—	—	—	—	—	—	—
Gangosa ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Gonorrhoea ..	74	—	38	—	607	—	1	—	185	—	44	—	26	—
Influenza ..	98	—	—	—	57	—	50	—	14	—	—	—	—	—
Kala Azar ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Leprosy (Unclassified)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
" Anaesthetic ..	1	—	—	—	4	—	—	—	3	—	—	—	—	—
" Nodular ..	—	—	—	—	7	—	—	—	—	—	—	—	—	—
" Mixed ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Malaria (Unclassified)	306	—	331	—	1,313	2	240	1	6,569	5	637	—	690	—
" Tertian ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
" Quartan ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
" Aëstivo, Autumnal ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
" Chronic ..	3	—	2	—	29	—	—	—	44	—	4	—	1	—
" Blackwater ..	1	1	—	—	1	—	4	—	2	—	3	—	3	—
Measles ..	—	—	—	—	13	—	—	—	7	—	1	—	6	—
Mumps ..	—	—	—	—	—	—	—	—	1	—	—	—	—	—
Carried forward ..	556	2	371	—	2,164	2	339	1	6,835	7	705	—	747	1

TABLE XI.—continued.

TOTAL NUMBERS OF FRESH CASES, IN-PATIENTS AND OUT-PATIENTS, FOR ALL DISEASES DURING THE YEAR 1924—continued.

	Kahama.		Kigoma.		Kilosa.		Kilwa.		Kondoa-Irangi.		Lindi.		Lushoto.	
	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
<i>Infective Diseases—</i>														
Anthrax ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Beri-Beri ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Cerebro-Spinal Fever ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Chicken-pox ..	8	—	3	—	—	—	2	—	—	—	1	—	—	—
Cholera ..	—	—	—	—	—	—	—	—	1	—	—	—	—	—
Cancrum Oris ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dengue ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Diphtheria ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dysentery (Unclassified)	—	—	—	—	73	3	8	—	—	—	—	—	—	—
" Amœbic ..	—	—	2	—	—	—	—	—	2	—	—	—	7	—
" Bacillary ..	—	—	5	1	—	—	—	—	39	—	—	—	—	—
Endocarditis, Infective ..	—	—	1	—	—	—	—	—	—	—	—	—	—	—
Enteric Fever ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Erysipelas ..	—	—	1	—	—	—	—	—	—	—	—	—	—	—
Goitre Endemic ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Gangosa ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Gonorrhœa ..	53	—	74	—	11	—	41	—	71	—	11	—	8	—
Influenza ..	—	—	—	—	—	—	—	—	—	—	340	—	62	—
Kala Azar ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Leprosy (Unclassified)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
" Anaesthetic ..	—	—	2	1	—	—	—	—	3	1	—	—	—	—
" Nodular ..	—	—	—	—	—	—	—	—	1	—	—	—	—	—
" Mixed ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Malaria (Unclassified)	188	1	318	—	421	—	168	1	800	—	496	—	54	1
Tertian ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Quartan ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Æstivo, Autumnal ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Chronic ..	—	—	20	—	96	1	—	—	44	—	—	—	61	—
Blackwater ..	—	—	1	1	2	1	1	—	—	—	—	—	—	—
Measles ..	—	—	1	—	—	—	—	—	—	—	—	—	—	—
Mumps ..	1	—	—	—	—	—	—	—	—	—	—	—	—	—
Carried forward ..	250	1	428	3	603	5	220	1	961	1	848	—	192	1

TABLE XI.—continued.
TOTAL NUMBERS OF FRESH CASES, IN-PATIENTS AND OUT-PATIENTS, FOR ALL DISEASES DURING THE YEAR 1924—continued.

	Mafia.		Mahenge.		Mbulu.		Mikindani.		Morogoro.		Moshi.		Musoma.	
	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
<i>Infective Diseases—</i>														
Anthrax ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Beri-Beri ..	1	—	—	—	—	—	—	—	—	—	—	—	—	—
Cerebro-Spinal Fever ..	—	—	—	—	—	—	—	—	—	—	—	—	1	—
Chicken-pox ..	—	—	1	—	—	—	—	—	8	—	—	—	1	—
Cholera ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Cancrum Oris ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dengue ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Diphtheria ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dysentery (Unclassified)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
" Amœbic ..	5	—	8	—	2	—	6	—	101	5	33	—	—	—
" Bacillary ..	—	—	—	—	—	—	—	—	—	—	—	—	23	—
Endocarditis, Infective ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Enteric Fever ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Erysipelas ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Goitre Endemic ..	—	—	—	—	2	—	—	—	2	—	1	—	—	—
Gangosa ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Gonorrhœa ..	—	—	—	—	15	—	—	—	30	—	15	—	—	—
Influenza ..	9	—	14	—	6	—	25	—	—	—	47	—	13	—
Kala Azar ..	—	—	31	—	—	—	59	—	—	—	1	—	46	—
Leprosy (Unclassified)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
" Anaesthetic ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
" Nodular ..	—	—	27	—	—	—	—	—	—	—	—	—	—	—
" Mixed ..	—	—	—	—	1	—	—	—	1	—	4	—	—	—
Malaria (Unclassified)	—	—	—	—	180	—	70	—	357	—	—	—	—	—
Tertian ..	103	—	276	—	—	—	—	—	—	—	3,471	5	223	—
Quartan ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
" Aëstivo, Autumnal ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Chronic ..	—	—	3	—	9	—	2	—	—	—	—	—	—	—
Blackwater ..	—	—	1	1	—	—	—	—	2	—	—	—	1	—
Measles ..	—	—	—	—	1	—	—	—	1	—	7	—	—	—
Mumps ..	—	—	—	—	2	—	—	—	—	—	4	—	—	—
Carried forward ..	118	—	361	1	218	—	162	—	502	5	3,591	5	308	1

TABLE XI.—*continued.*TOTAL NUMBERS OF FRESH CASES, IN-PATIENTS AND OUT-PATIENTS, FOR ALL DISEASES DURING THE YEAR 1924—*continued.*

	Mwanza.		Namanyere.		Pangani.		Shinyanga.		Singida.		Songea.		Tabora.	
	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
<i>Infective Diseases—</i>														
Anthrax ..	1	1	—	—	—	—	—	—	5	1	—	—	—	—
Beri-Beri ..	—	—	—	—	7	1	—	—	—	—	—	—	—	—
Cerebro-Spinal Fever ..	1	—	—	—	1	—	—	—	—	—	1	—	—	—
Chicken-pox ..	—	—	1	—	—	—	—	—	4	—	—	—	4	—
Cholera ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Cancrum Oris ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dengue ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Diphtheria ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dysentery (Unclassified)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
" Amoebic ..	2	—	7	—	7	—	3	—	12	—	11	—	36	2
" Bacillary ..	16	—	8	—	2	—	2	—	—	—	—	—	—	—
Endocarditis, Infective ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Enteric Fever ..	1	—	—	—	—	—	—	—	—	—	—	—	7	1
Erysipelas ..	—	—	2	—	—	—	—	—	1	—	1	—	1	—
Goitre Endemic ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Gangosa ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Gonorrhœa ..	89	—	29	—	25	—	11	—	38	—	80	—	124	—
Influenza ..	15	—	74	—	1	—	4	—	45	—	1,443	1	49	—
Kala Azar ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Leprosy (Unclassified)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
" Anasthetic ..	2	—	—	—	3	—	—	—	—	—	1	—	1	—
" Nodular ..	1	—	—	—	—	—	—	—	—	—	—	—	—	—
" Mixed ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Malaria (Unclassified)	624	3	396	—	165	—	268	—	101	—	494	1	969	4
Tertian ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Quartan ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Æstivo, Autumnal ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Chronic ..	14	—	—	—	15	—	9	—	—	—	—	—	2	—
Blackwater ..	1	1	—	—	—	—	—	—	—	—	—	—	2	—
Measles ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mumps ..	—	—	—	—	1	—	—	—	—	—	—	—	124	1
Carried forward ..	767	5	517	—	227	1	297	—	206	1	2,031	2	1,319	8

TABLE XI.—continued.
TOTAL NUMBERS OF FRESH CASES, IN-PATIENTS AND OUT-PATIENTS, FOR ALL DISEASES DURING THE YEAR 1924—continued.

	Tanga.		Tukuyu.		Tunduru.		Ujiji.		Utete.		TOTAL.	
	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
<i>Infective Diseases—</i>												
Anthrax ..	—	—	—	—	—	—	—	—	—	—	7	2
Beri-Beri ..	27	—	—	—	—	—	—	—	—	—	35	1
Cerebro-Spinal Fever ..	1	1	—	—	—	—	—	—	—	—	5	2
Chicken-pox ..	1	—	—	—	—	—	—	—	—	—	212	—
Cholera ..	—	—	—	—	—	—	—	—	—	—	—	—
Cancrum Oris ..	—	—	—	—	—	—	—	—	—	—	1	—
Dengue ..	5	—	—	—	—	—	—	—	—	—	36	—
Diphtheria ..	1	—	—	—	—	—	—	—	—	—	1	—
Dysentery (Unclassified)	—	—	—	—	—	—	—	—	—	—	81	3
" Amœbic ..	8	—	1	—	2	—	—	—	—	—	323	11
" Bacillary ..	4	—	18	—	—	—	—	—	30	—	169	1
Endocarditis, Infective ..	—	—	—	—	—	—	—	—	—	—	—	—
Enteric Fever ..	—	—	—	—	—	—	—	—	—	—	9	1
Erysipelas ..	—	—	—	—	—	—	—	—	—	—	6	—
Goitre Endemic ..	—	—	—	—	—	—	—	—	—	—	9	—
Gangosa ..	—	—	—	—	—	—	—	—	—	—	15	—
Gonorrhœa ..	142	—	36	—	19	—	—	—	36	—	2,067	—
Influenza ..	136	—	124	6	—	—	—	—	57	—	2,796	7
Kala Azar ..	—	—	—	—	—	—	—	—	—	—	—	—
Leprosy (Unclassified)	—	—	—	—	—	—	—	—	—	—	—	—
" Anasthetic ..	—	—	—	—	—	—	—	—	—	—	45	2
" Nodular ..	—	—	14	—	2	—	—	—	—	—	37	—
" Mixed ..	—	—	—	—	—	—	—	—	—	—	—	—
Malaria (Unclassified)	795	1	741	—	58	—	—	—	293	—	22,338	25
Tertian ..	—	—	—	—	—	—	—	—	—	—	—	—
Quartan ..	—	—	—	—	—	—	—	—	—	—	—	—
" Aëstivo, Autumnal ..	—	—	—	—	—	—	—	—	—	—	—	—
" Chronic ..	10	—	—	—	—	—	—	—	15	—	394	1
" Blackwater ..	—	—	1	—	—	—	—	—	—	—	30	5
" Measles ..	—	—	—	—	—	—	—	—	—	—	27	—
Mumps ..	1	—	25	—	—	—	—	—	—	—	165	1
Carried forward ..	1,131	2	960	6	81	—	362	—	431	—	28,808	62

TABLE XI.—continued.

TOTAL NUMBERS OF FRESH CASES, IN-PATIENTS AND OUT-PATIENTS, FOR ALL DISEASES DURING THE YEAR 1924—continued.

	Arusha.		Bagamoyo.		Bukoba.		Dar-es-Salaam.				Dodoma.		Iringa.	
	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Europ. Cases.	Hosp. Deaths.	Sewa H. Hosp.		Cases.	Deaths.	Cases.	Deaths.
									Cases.	Deaths.				
Brought forward ..	556	2	371	—	2,164	2	339	1	6,835	7	705	—	747	1
<i>Infective Diseases (continued)</i> —														
Mycetoma ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Paratyphoid ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Pellagra ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Phlebotomus Fever ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Plague ..	—	—	—	—	11	6	2	—	64	11	30	5	4	—
Pneumonia, Acute Lobar ..	7	—	—	—	—	—	—	—	—	—	—	—	—	—
Poliomyelitis Anterior Acuta ..	—	—	—	—	—	—	—	—	—	—	1	—	—	—
Pyæmia ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Pyrexia, of uncertain origin ..	59	—	—	—	1	1	21	—	318	—	—	—	—	—
Rabies ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Relapsing Tick Fever ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Rheumatic Fever ..	—	—	1	—	2	—	13	—	18	—	—	—	28	—
Septicæmia ..	—	—	—	—	—	—	—	—	1	—	—	—	3	1
Small-pox ..	—	—	—	—	—	—	—	—	3	3	—	—	—	—
Syphilis (Unclassified) ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Primary ..	3	—	15	—	8	—	3	—	47	—	56	—	43	—
Secondary ..	9	—	15	—	671	—	4	—	92	—	50	1	6	—
Tertiary ..	2	—	—	—	—	—	2	—	—	—	—	—	—	—
Inherited ..	—	—	—	—	33	—	—	—	81	3	5	—	—	—
Tetanus ..	—	—	—	—	1	—	—	—	2	2	—	—	—	—
Trypanosomiasis Rhodesiensis ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
" Gambiænsis ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Tuberculosis, Pulmonary ..	4	3	2	1	6	2	—	—	22	3	6	1	1	—
" Other Forms ..	3	2	—	—	—	—	3	—	—	—	—	—	—	—
Undulant Fever ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Whooping Cough ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Yaws ..	163	—	454	—	23	—	—	—	466	—	89	—	19	—
Yellow Fever ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other Diseases ..	3	—	—	—	—	—	8	—	—	—	—	—	76	—
Intoxications ..	—	—	—	—	—	—	—	—	—	—	1	—	—	—
General Diseases ..	14	—	131	—	7	2	91	—	212	3	29	—	21	—
Carried forward ..	824	7	989	1	2,927	13	486	1	8,161	32	972	7	949	2

TABLE XI.—continued.

TOTAL NUMBERS OF FRESH CASES, IN-PATIENTS AND OUT-PATIENTS, FOR ALL DISEASES DURING THE YEAR 1924—continued.

	Kahama.		Kigoma.		Kilosa.		Kilwa.		Kondoa-Irangi.		Lindi.		Lushoto.	
	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Brought forward ..	250	1	428	3	603	5	220	1	961	1	848	—	192	1
<i>Infective Diseases</i> (continued)—														
Mycetoma ..	—	—	1	—	—	—	—	—	—	—	—	—	—	—
Paratyphoid ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Pellagra ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Phlebotamus Fever ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Plague ..	—	—	—	—	—	—	—	—	13	1	2	—	3	1
Pneumonia, Acute Lobar ..	6	2	8	2	3	1	4	—	—	—	—	—	—	—
Polymyelitis Anterior Acuta ..	—	—	—	—	—	—	—	—	1	1	—	—	—	—
Pyæmia ..	—	—	5	—	4	—	—	—	—	—	—	—	—	—
Pyrexia, of uncertain origin ..	—	—	11	—	1	—	—	—	—	—	—	—	—	—
Rabies ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Relapsing Tick Fever ..	—	—	9	—	—	—	—	—	—	—	—	—	—	—
Rheumatic Fever ..	—	—	—	—	2	—	—	—	—	—	—	—	3	1
Septicæmia ..	—	—	—	—	—	—	—	—	—	—	—	—	1	—
Small-pox ..	1	—	—	—	—	—	—	—	—	—	—	—	—	—
Syphilis (Unclassified) ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Primary ..	17	—	74	—	4	—	5	—	22	—	28	—	4	—
Secondary ..	2	—	48	—	27	—	11	—	43	—	—	—	26	—
Tertiary ..	—	—	—	—	—	—	24	—	16	—	—	—	—	—
Inherited ..	3	1	—	—	5	—	—	—	6	—	—	—	—	—
Tetanus ..	—	—	—	—	—	—	—	—	1	1	—	—	—	—
Trypanosomiasis Rhodesiensis ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Gambiensis ..	—	—	8	2	—	—	—	—	—	—	—	—	—	—
Tuberculosis, Pulmonary ..	1	—	8	4	2	2	1	1	10	—	—	—	12	—
Other Forms ..	—	—	—	—	—	—	—	—	3	—	—	—	—	—
Undulant Fever ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Whooping Cough ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Yaws ..	29	1	479	1	22	—	651	—	1,013	—	145	1	41	—
Yellow Fever ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other Diseases ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Intoxications ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Diseases ..	1	—	16	—	68	1	11	—	12	1	23	3	12	—
Carried forward ..	310	5	1,095	12	741	9	927	2	2,101	5	1,046	4	294	3

TABLE XI.—continued.

TOTAL NUMBERS OF FRESH CASES, IN-PATIENTS AND OUT-PATIENTS, FOR ALL DISEASES DURING THE YEAR 1924—continued.

	Mafia.		Mahenge.		Mbulu.		Mikindani.		Morogoro.		Moshi.		Musoma.	
	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Brought forward ..	118	—	361	1	218	—	162	—	502	5	3,591	5	308	1
<i>Infective Diseases (continued)</i> —														
Mycetoma ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Paratyphoid ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Pellagra ..	—	—	—	—	—	—	—	—	1	—	—	—	—	—
Phlebotomus Fever ..	—	—	—	—	—	—	—	—	—	—	—	—	17	2
Plague ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Pneumonia, Acute Lobar ..	—	—	3	—	3	1	2	—	4	2	11	2	—	—
Poliomyelitis Anterior Acuta ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Pyæmia ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Pyrexia, of uncertain origin ..	—	—	11	—	—	—	—	—	—	—	21	—	—	—
Rabies ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Relapsing Tick Fever ..	—	—	2	—	—	—	—	—	1	—	—	—	4	—
Rheumatic Fever ..	—	—	—	—	1	—	—	—	1	1	2	—	—	—
Septicæmia ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Small-pox ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Syphilis (Unclassified),	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Primary ..	8	—	15	—	11	—	1	—	23	—	—	—	157	—
Secondary ..	—	—	10	—	—	—	55	—	162	—	189	—	25	—
Tertiary ..	—	—	—	—	—	—	4	—	5	—	—	—	277	—
Inherited ..	—	—	—	—	—	—	—	—	2	—	—	—	—	—
Tetanus ..	—	—	—	—	—	—	—	—	—	—	2	—	—	—
Trypanosomiasis Rhodesiensis ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Gambiensis ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Tuberculosis, Pulmonary ..	1	1	5	2	4	—	3	—	18	10	69	2	—	—
Other Forms ..	1	—	—	—	—	—	—	—	1	—	—	—	—	—
Undulant Fever ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Whooping Cough ..	—	—	1	—	—	—	—	—	—	—	—	—	—	—
Yaws ..	—	—	11	—	43	—	1,090	—	322	—	3	—	36	—
Yellow Fever ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other Diseases ..	—	—	15	—	—	—	—	—	—	—	—	—	1	—
Intoxications ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Diseases ..	1	—	7	—	31	—	6	—	33	—	55	1	10	—
Carried forward ..	129	1	441	3	311	1	1,323	—	1,075	18	4,675	10	835	3

TABLE XI.—continued.

TOTAL NUMBERS OF FRESH CASES, IN-PATIENTS AND OUT-PATIENTS, FOR ALL DISEASES DURING THE YEAR 1924—continued.

	Mwanza.		Namanyere.		Pangani.		Shinyanga.		Singida.		Songea.		Tabora.	
	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Brought forward	767	5	517	—	227	1	297	—	206	1	2,031	2	1,319	8
<i>Infective Diseases (continued)</i> —														
Mycetoma ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Paratyphoid ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Pellagra ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Phlebotamus Fever ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Plague ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Pneumonia, Acute Lobar	37	7	36	2	3	2	5	—	1	1	7	1	17	3
Polio-myelitis Anterior Acuta	—	—	—	—	—	—	—	—	—	—	1	—	—	—
Pyæmia ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Pyrexia, of uncertain origin..	—	—	—	—	34	—	—	—	—	—	—	—	—	—
Rabies ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Relapsing Tick Fever ..	7	—	24	—	—	—	3	—	1	—	—	—	8	—
Rheumatic Fever ..	1	—	11	—	—	—	—	—	—	—	—	—	3	—
Septicæmia ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Small-pox ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Syphilis (Unclassified)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Primary ..	121	—	7	—	5	—	10	—	53	—	72	—	18	—
Secondary ..	865	1	69	—	24	—	34	—	41	—	—	—	67	3
Tertiary ..	18	1	—	—	—	—	—	—	1	—	—	—	4	—
Inherited ..	—	—	3	—	2	1	6	—	5	—	—	—	39	4
Tetanus ..	—	—	—	—	3	—	—	—	—	—	—	—	1	—
Trypanosomiasis Rhodesiensis	—	—	—	—	—	—	—	—	—	—	—	—	1	—
Gambiensis ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Tuberculosis, Pulmonary ..	16	7	—	—	41	8	3	—	—	—	6	4	18	6
" Other Forms ..	—	—	—	—	—	—	—	—	—	—	—	—	6	3
Undulant Fever ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Whooping Cough ..	—	—	—	—	—	—	—	—	1	—	1	—	—	—
Yaws ..	328	—	106	—	275	—	4	—	434	2	114	—	144	2
Yellow Fever ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other Diseases ..	1	—	—	—	—	—	—	—	—	—	—	—	—	—
Intoxications ..	—	—	—	—	—	—	1	—	—	—	—	—	2	—
General Diseases ..	115	4	12	—	29	—	8	—	6	—	20	—	34	—
Carried forward ..	2,276	25	785	2	643	12	371	1	749	4	2,252	7	1,681	29

TABLE XI.—continued.

TOTAL NUMBERS OF FRESH CASES, IN-PATIENTS AND OUT-PATIENTS, FOR ALL DISEASES DURING THE YEAR 1924—continued.

	Tanga.		Tukuyu.		Tunduru.		Ujiji.		Utete.		TOTAL.	
	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Brought forward	1,131	2	960	6	81	—	362	—	431	—	28,808	62
<i>Infective Diseases (continued)</i> —												
Mycetoma	—	—	—	—	—	—	—	—	—	—	1	—
Paratyphoid	—	—	—	—	—	—	—	—	—	—	—	—
Pellagra	—	—	—	—	—	—	—	—	—	—	—	—
Phlebotomus Fever ..	1	1	—	—	—	—	—	—	—	—	2	1
Plague	—	—	—	—	—	—	—	—	—	—	17	2
Pneumonia, Acute Lobar	65	8	12	4	2	—	11	1	9	—	385	63
Polymyositis Anterior Acuta	—	—	—	—	—	—	—	—	—	—	—	—
Pyæmia	—	—	—	—	—	—	—	—	—	—	12	1
Pyrexia, of uncertain origin..	1	—	10	1	4	—	—	—	—	—	493	2
Rabies	—	—	—	—	—	—	—	—	—	—	—	—
Relapsing Tick Fever ..	2	—	24	—	—	—	—	—	4	—	148	—
Rheumatic Fever	1	—	—	—	—	—	—	—	—	—	31	6
Septicæmia	—	—	—	—	—	—	—	—	—	—	7	—
Small-pox	—	—	—	—	—	—	—	—	—	—	1	—
Syphilis (Unclassified)	—	—	—	—	—	—	—	—	—	—	—	—
" Primary	50	—	10	—	5	—	13	—	18	—	926	—
" Secondary	51	—	40	—	9	—	4	—	12	—	2,661	5
" Tertiary	14	2	—	—	—	—	120	—	—	—	487	3
" Inherited	46	—	37	—	—	—	—	—	1	—	274	8
Tetanus	—	—	—	—	—	—	—	—	—	—	10	4
Trypanosomiasis Rhodesiensis	—	—	—	—	—	—	—	—	—	—	1	—
" Gambiænsis	—	—	—	—	—	—	—	—	—	—	8	2
Tuberculosis, Pulmonary	38	8	8	—	—	—	6	—	—	—	311	65
" Other Forms	—	—	—	—	—	—	—	—	—	—	—	—
Undulant Fever	—	—	—	—	—	—	—	—	—	—	17	5
Whooping Cough	8	—	—	—	—	—	14	—	—	—	28	—
Yaws	410	—	3,559	1	159	—	91	—	5,011	—	16,463	8
Yellow Fever	—	—	—	—	—	—	—	—	—	—	—	—
Other Diseases	—	—	—	—	—	—	—	—	—	—	104	—
Intoxications	—	—	—	—	—	—	—	—	—	—	4	1
General Diseases	67	3	36	1	16	—	5	—	58	—	1,197	19
Carried forward	1,885	24	4,696	13	276	—	626	—	5,544	1	52,396	257

TABLE XI.—continued.

TOTAL NUMBERS OF FRESH CASES, IN-PATIENTS AND OUT-PATIENTS, FOR ALL DISEASES DURING THE YEAR 1924—continued.

	Arusha.		Bagamoyo.		Bukoba.		Dar-es-Salaam.		Dodoma.		Iringa.	
	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Europ. Hosp. Cases.	Sewa H. Hosp. Deaths.	Cases.	Deaths.	Cases.	Deaths.
Brought forward	824	7	989	1	2,927	13	486	1	972	7	949	2
<i>Local Diseases</i> —												
Diseases of Nervous System	54	—	85	—	117	1	50	—	181	—	626	—
" Eye	286	—	216	—	523	—	22	—	384	—	428	—
" Ear	53	—	77	—	99	—	49	—	81	—	185	—
" Nose	—	—	5	—	1	—	4	—	4	—	—	—
" Circulatory System	3	—	6	—	3	—	1	—	—	—	1	—
" Respiratory	763	2	495	2	899	—	122	1	635	—	1,898	1
" Digestive	578	1	504	1	1,361	3	169	1	768	4	1,486	—
" Lymphatic	11	—	24	—	32	—	9	—	18	—	30	—
" Urinary	11	—	11	—	7	—	7	—	8	—	—	—
" Generative												
Male Organs	59	1	45	—	173	1	9	—	28	—	39	—
Female	21	1	7	—	17	—	139	—	10	—	42	—
Organs of Locomotion	164	—	168	—	417	—	35	—	73	—	786	—
" Connective Tissue	52	—	116	—	122	—	26	—	102	—	79	—
" Skin	740	—	1,064	—	1,847	—	99	—	507	—	1,568	1
Injuries	422	3	305	2	601	3	120	—	517	2	1,155	2
Tumours	8	1	—	—	14	1	3	—	14	—	—	—
Malformations	1	—	—	—	1	—	—	—	—	—	—	—
Poisons	1	—	—	—	7	—	7	2	2	—	—	—
Animal Parasites	—	—	—	—	—	—	—	—	—	—	—	—
Protozoa	—	—	—	—	—	—	—	—	—	—	—	—
Trematoda	—	—	—	—	—	—	1	—	1	—	—	—
Cestoda	2	—	9	—	—	—	5	—	16	—	35	—
Nematoda	668	2	214	2	52	—	10	—	5	—	1	—
Elephantiasis, Leg	—	—	32	—	—	—	—	—	—	—	—	—
" Scrotum	—	—	6	—	10	—	—	—	—	—	1	—
" Other	—	—	1	—	—	—	1	—	—	—	—	—
Insecta	1	—	—	—	—	—	7	—	—	—	—	—
Tunga Penetrans	7	—	128	—	—	—	2	—	24	—	72	—
TOTAL	4,729	18	4,507	8	9,320	22	1,383	5	4,350	13	9,381	6

TABLE XI.—continued.

TOTAL NUMBERS OF FRESH CASES, IN-PATIENTS AND OUT-PATIENTS, FOR ALL DISEASES DURING THE YEAR 1924—continued.

	Kahama.		Kigoma.		Kilosa.		Kilwa.		Kondoa-Irangi.		Lindi.		Lushoto.	
	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Brought forward	310	5	1,095	12	741	9	927	2	2,101	5	1,046	4	294	3
<i>Local Diseases—</i>														
Diseases of Nervous System	22	—	21	2	24	1	80	1	100	1	161	3	142	—
" Eye	19	—	47	—	74	—	90	—	192	—	183	—	21	—
" Ear	8	—	32	—	44	—	50	—	133	—	32	—	47	—
" Nose	1	—	11	—	1	—	5	—	1	—	—	—	12	—
" Circulatory System	—	—	1	—	3	—	1	—	14	—	5	—	6	—
" Respiratory	134	—	290	—	363	—	253	—	820	2	397	—	352	1
" Digestive	123	—	287	2	425	1	352	—	623	—	523	1	529	—
" Lymphatic	—	—	3	—	9	—	12	—	24	—	52	—	5	—
" Urinary	—	—	1	—	—	—	2	1	9	—	3	—	8	—
" Generative	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Male Organs	2	—	5	—	29	—	12	—	11	—	64	—	13	—
Female	—	—	24	—	4	—	4	1	26	—	1	—	4	—
Organs of Locomotion	47	—	211	—	8	—	124	—	367	—	147	—	18	—
" Connective Tissue	20	—	53	—	25	—	81	—	67	—	130	—	20	—
" Skin	100	—	293	—	1,297	—	871	1	690	—	671	—	314	—
Injuries	188	1	475	1	213	—	285	—	293	1	357	3	286	—
Tumours	—	—	2	1	—	—	—	—	4	—	1	—	—	—
Malformations	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Poisons	2	—	4	—	2	—	1	—	4	—	—	—	1	—
Animal Parasites	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Protozoa	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Trematoda	—	—	—	—	—	—	6	—	—	—	—	—	—	—
Cestoda	—	—	8	—	—	—	—	—	20	—	—	—	24	—
Nematoda	—	—	29	8	207	—	203	1	74	—	14	2	36	1
Elephantiasis, Leg	5	1	4	—	1	—	—	—	4	—	2	—	1	—
" Scrotum	—	—	2	—	—	—	3	—	1	—	1	—	—	—
" Other	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Insecta	—	—	—	—	—	—	1	—	—	—	12	—	—	—
Tunga Penetrans	1	—	6	—	1	—	61	—	6	—	—	—	1	—
TOTAL	982	7	2,904	26	3,471	11	3,424	7	5,585	9	3,802	13	2,135	5

TABLE XI.—continued.

TOTAL NUMBERS OF FRESH CASES, IN-PATIENTS AND OUT-PATIENTS, FOR ALL DISEASES DURING THE YEAR 1924—continued.

	Mafia.		Mahenge.		Mbulu.		Mikindani.		Morogoro.		Moshi.		Musoma.	
	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Brought forward ..	129	1	441	3	311	1	1,323	—	1,075	18	4,675	10	835	3
Local Diseases—														
Diseases of Nervous System ..	34	—	52	1	201	—	101	—	88	6	68	3	122	—
" Eye ..	11	—	61	—	67	—	192	—	73	—	199	—	69	—
" Ear ..	8	—	23	—	19	—	44	—	17	—	109	—	40	—
" Nose ..	—	—	4	—	—	—	5	—	—	—	18	—	2	—
" Circulatory System ..	—	—	1	—	2	—	1	—	2	—	19	1	—	—
" Respiratory ..	61	—	345	—	364	1	218	—	295	3	799	4	204	1
" Digestive ..	98	1	310	—	295	2	241	1	751	51	1,443	—	260	3
" Lymphatic ..	—	—	8	—	—	—	15	—	11	—	22	—	7	—
" Urinary ..	—	—	2	—	3	—	—	—	—	—	5	—	1	—
" Generative ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Male Organs ..	5	—	13	—	5	—	14	—	12	—	25	—	2	—
Female " ..	11	—	8	—	7	—	—	—	—	—	36	—	11	—
Organs of Locomotion ..	—	—	132	—	22	—	38	—	151	—	180	—	19	1
Connective Tissue ..	3	—	12	—	7	1	110	—	43	2	114	1	52	—
Skin ..	44	—	272	—	485	—	972	—	637	6	1,833	1	65	—
Injuries ..	107	1	373	—	230	1	351	—	233	5	1,141	3	233	2
Tumours ..	—	—	—	—	—	—	—	—	4	—	23	1	1	—
Malformations ..	—	—	—	—	2	—	—	—	—	—	1	—	—	—
Poisons ..	—	—	1	—	—	—	—	—	2	—	—	—	1	—
Animal Parasites ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Protozoa ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Trematoda ..	—	—	—	—	—	—	—	—	—	—	—	—	2	—
Cestoda ..	—	—	10	—	—	—	33	—	8	—	—	—	3	—
Nematoda ..	—	—	2	—	76	—	31	—	78	11	540	1	13	1
Elephantiasis, Leg ..	—	—	—	—	—	—	—	—	1	—	243	1	1	—
Scrotum ..	—	—	—	—	—	—	—	—	—	—	—	—	1	—
Other ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Insecta ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Tunga Penetrans ..	—	—	3	—	26	—	94	—	1	—	1	—	—	—
TOTAL ..	511	3	2,073	4	2,122	6	3,783	1	3,482	102	11,502	26	1,941	11

TABLE XI.—continued.

TOTAL NUMBERS OF FRESH CASES, IN-PATIENTS AND OUT-PATIENTS, FOR ALL DISEASES DURING THE YEAR 1924—continued.

	Mwanza.		Namanyere.		Pangani.		Shinyanga.		Singida.		Songea.		Tabora.	
	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
<i>Local Diseases—</i>														
Brought forward ..	2,276	25	785	2	643	12	371	1	749	4	2,252	7	1,681	29
Diseases of Nervous System ..	315	6	372	—	39	1	79	—	44	—	25	—	119	1
" " Eye ..	166	—	253	—	63	—	47	—	94	—	205	—	219	—
" " Ear ..	100	—	61	—	22	—	38	—	36	—	115	—	73	—
" " Nose ..	7	—	2	—	—	—	4	—	3	—	—	—	14	—
" " Circulatory System ..	7	1	2	—	26	1	4	2	1	—	3	—	10	2
" " Respiratory ..	511	—	827	—	220	1	403	2	187	—	582	4	268	2
" " Digestive ..	858	9	577	—	253	3	426	1	210	—	755	2	1,745	6
" " Lymphatic ..	18	—	32	1	10	—	8	—	7	—	5	—	60	—
" " Urinary ..	10	1	3	—	9	—	—	—	2	1	—	—	11	2
" " Generative ..	82	—	13	—	19	—	10	—	4	—	31	—	69	1
Male Organs ..	17	2	66	1	10	—	3	—	2	—	3	—	30	—
Female ..	158	—	129	—	39	—	132	—	49	—	309	—	517	—
Organs of Locomotion ..	173	—	70	—	32	—	62	—	40	—	37	—	89	1
Connective Tissue ..	1,154	1	600	—	599	—	552	—	430	—	1,433	1	482	5
Skin ..	616	3	468	1	250	8	376	—	292	3	145	—	1,407	1
Injuries ..	14	1	3	—	1	—	1	—	1	—	5	—	13	—
Tumours ..	1	—	—	—	—	—	—	—	—	—	—	—	1	—
Malformations ..	4	—	3	—	—	—	—	—	—	—	—	—	16	—
Poisons ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Animal Parasites ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Protozoa ..	2	—	7	—	2	—	5	—	—	—	—	—	—	—
Trematoda ..	1	—	—	—	—	—	—	—	—	—	—	—	—	—
Cestoda ..	2	—	—	—	—	—	—	—	—	—	—	—	—	—
Nematoda ..	9	—	33	—	358	12	1	—	18	—	11	—	4	—
Elephantiasis, Leg ..	27	1	1	—	9	—	4	—	2	—	5	—	6	—
Scrotum ..	6	—	—	—	3	—	2	—	2	—	1	—	3	—
Other ..	3	—	—	—	—	—	1	—	—	—	—	—	14	1
Insecta ..	2	—	—	—	86	—	—	—	—	—	—	—	3	—
Tunga Penetrans ..	—	—	—	—	—	—	—	—	—	—	—	—	4	—
TOTAL ..	6,539	50	4,307	5	2,694	38	2,529	6	2,173	8	5,922	14	6,862	51

TABLE XI.—*continued.*
TOTAL NUMBERS OF FRESH CASES, IN-PATIENTS AND OUT-PATIENTS, FOR ALL DISEASES DURING THE YEAR 1924—*continued.*

	Tanga.		Tukuyu.		Tunduru.		Ujiji.		Utete.		TOTAL.	
	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Brought forward ..	1,885	24	4,696	13	276	—	626	—	5,544	1	52,396	257
<i>Local Diseases—</i>												
Diseases of Nervous System ..	164	1	184	—	41	—	35	—	123	—	5,483	28
" Eye ..	222	—	489	—	54	—	96	—	113	—	5,903	—
" Ear ..	126	1	230	—	13	—	51	—	19	—	2,261	1
" Nose ..	2	—	—	—	—	—	—	—	—	—	114	—
" Circulatory System ..	12	1	5	1	—	—	—	—	2	—	153	11
" Respiratory ..	1,136	—	1,000	1	210	—	377	—	285	—	18,150	31
" Digestive ..	1,687	9	1,851	2	233	—	387	—	548	—	23,492	107
" Lymphatic ..	47	1	97	—	9	—	6	—	1	—	679	2
" Urinary ..	45	2	5	—	2	—	2	—	4	—	180	8
" Generative ..												
Male Organs ..	167	1	20	—	12	—	4	—	34	—	1,309	4
Female ..	23	—	31	2	3	—	4	—	7	—	603	9
Organs of Locomotion ..	394	1	546	—	36	—	96	—	35	—	5,696	3
" Connective Tissue ..	396	1	219	—	12	—	66	—	56	—	3,231	7
" Skin ..	1,377	5	1,190	—	528	—	1,183	—	401	—	26,663	20
Injuries ..	531	4	931	5	146	—	191	—	212	—	15,465	61
Tumours ..	7	1	31	—	—	—	1	—	—	—	162	10
Malformations ..	—	—	—	—	—	—	—	—	—	—	7	—
Poisons ..	3	—	1	—	—	—	—	—	16	—	78	2
Animal Parasites ..	—	—	—	—	—	—	—	—	—	—	—	—
Protozoa ..	—	—	—	—	—	—	—	—	—	—	—	—
Trematoda ..	107	—	41	—	—	—	—	—	—	—	219	—
Cestoda ..	16	—	120	—	4	—	—	—	16	—	1,014	2
Nematoda ..	1,366	50	22	—	56	1	—	—	43	—	4,091	110
Elephantiasis, Leg ..	7	1	2	—	—	—	—	—	—	—	85	2
" Scrotum ..	17	1	—	—	—	—	—	—	2	—	92	3
" Other ..	1	—	3	—	—	—	—	—	—	—	41	1
Insecta ..	7	—	—	—	—	—	—	—	—	—	40	—
Tunga Penetrans ..	12	—	22	—	—	—	—	—	—	—	693	—
TOTAL ..	9,757	104	11,736	24	1,635	1	3,200	—	7,521	1	168,300	679

TABLE XII.

SUMMARY OF CASES, IN AND OUT-PATIENTS, TREATED AT THIRTY-THREE GOVERNMENT HOSPITALS AND DISPENSARIES
IN 1924, SHOWING DENOMINATIONS OF PATIENTS.

STATIONS.	IN-PATIENTS.				OUT-PATIENTS.				TOTALS.
	E.O.	E.G.P.	N.O.	N.G.P.	Deaths.	E.O.	E.G.P.	N.O.	N.G.P.
Arusha ..	14	35	323	447	18	7	102	448	3,381
Bagamoyo ..	1	2	85	110	8	9	1	445	3,801
Bukoba ..	12	6	175	742	22	15	7	601	7,825
Dar-es-Salaam, European Hospital ..	244	180	120	87	5	317	284	83	80
" Sewa Hadji Hospital ..	24	2	3,472	1,302	74	9	—	10,197	7,172
Dodoma ..	26	4	255	593	13	52	30	893	2,512
Iringa ..	5	15	127	254	6	16	22	1,748	7,212
Kahama ..	1	—	39	146	7	2	—	301	497
Kigoma ..	26	54	169	370	26	61	70	629	1,525
Kilosa ..	8	3	26	175	11	53	9	568	2,640
Kilwa ..	4	—	43	260	7	6	1	304	2,814
Kondoa-Irangi ..	2	5	24	704	9	20	33	480	4,319
Lindi ..	18	10	96	270	13	18	23	1,329	2,055
Lushoto ..	2	7	9	93	5	11	12	182	1,821
Mafia ..	—	—	10	32	3	2	1	145	322
Mahenge ..	7	6	124	119	4	2	8	670	1,145
Mbulu ..	1	—	4	125	6	5	3	73	1,914
Mikindani ..	2	—	42	203	1	—	4	143	3,393
Morogoro ..	13	—	165	638	102	4	—	1,034	1,653
Moshi ..	14	97	103	459	26	42	192	1,502	9,111
Musoma ..	3	2	9	182	11	2	1	312	1,442
Mwanza ..	22	57	286	1,009	50	43	62	1,578	3,538
Namanyere ..	1	5	7	269	5	7	4	605	3,431
Pangani ..	2	1	34	231	38	4	5	199	2,227
Shinyanga ..	7	—	54	128	6	—	1	275	2,068
Singida ..	2	2	18	743	8	2	—	187	1,246
Songea ..	3	—	178	293	14	23	5	843	4,590
Tabora ..	78	33	1,347	850	51	98	126	3,306	1,099
Tanga ..	36	44	170	1,071	104	69	66	911	7,476
Tukuyu ..	12	3	88	941	24	11	42	612	10,068
Tunduru ..	—	1	20	220	1	—	2	154	1,239
Ujiji ..	—	—	21	8	—	—	—	394	2,777
Utete ..	1	1	98	201	1	17	—	815	6,388
TOTALS ..	591	575	7,741	13,275	679	927	1,116	31,966	112,841
									169,032

E.O.—European Officials. E.G.P.—European General Population. N.O.—Asiatic and Native Officials.
N.G.P.—General Asiatic and Native Population.

TABLE XIII.

RETURN OF DISEASES AND DEATHS (IN-PATIENTS), AND OF DISEASES
(OUT-PATIENTS) FOR THE YEAR 1924.

Diseases.	In-Patients.					Out-Patients.			Total Cases In and Out-Patients.
	Remain- ing in Hospital at the end of 1923.	Yearly Total.		Total Cases Treated.	Remain- ing in Hospital at the end of 1924.	Males.	Females.	Total.	
		Admis- sions.	Deaths.						
(a) <i>Infective Diseases</i> —									
Anthrax	—	7	2	7	—	—	—	—	7
Beri Beri	—	29	1	29	4	6	—	6	35
Cancrumoris	—	—	—	—	—	—	1	1	1
Cerebro-spinal Fever ..	—	5	2	5	—	—	—	—	5
Chicken-pox	5	195	—	200	1	15	1	16	216
Cholera	—	—	—	—	—	—	—	—	—
Dengue	—	30	—	30	—	1	5	6	36
Diphtheria	—	—	—	—	—	—	1	1	1
Dysentery—									
(a) Amœbic	4	135	11	139	8	176	11	187	326
(b) Bacillary	1	48	1	49	—	99	22	121	170
(c) Unclassified	—	18	3	18	—	60	3	63	81
Endocarditis—infective	—	—	—	—	—	—	—	—	—
Enteric Fever	1	9	1	10	—	—	—	—	10
Erysipelas	—	4	—	4	3	1	1	2	6
Gangosa	1	—	—	1	—	11	3	14	15
Gonorrhœa	26	470	—	496	38	1,467	132	1,599	2,095
Influenza	7	388	7	395	6	1,505	905	2,410	2,805
Kala Azar	—	—	—	—	—	—	—	—	—
Leprosy—									
(a) Nodular	1	5	—	6	—	20	11	31	37
(b) Anæsthetic	5	9	2	14	1	33	4	37	51
Malaria—									
(a) Tertian	19	1,719	17	1,738	12	7,692	1,725	9,417	11,155
(b) Quartan	—	143	2	143	—	27	19	46	189
(c) <i>Æstivo</i> —									
autumnal	8	2,839	6	2,847	9	7,059	1,109	8,168	11,015
(d) Chronic Malaria	1	70	1	71	2	282	52	334	405
(e) Blackwater	1	29	5	30	2	1	—	1	31
Measles	—	23	—	23	—	3	1	4	27
Mycetoma	1	—	—	1	—	—	—	—	1
Mumps	4	138	1	142	1	18	10	28	170
Pellagra	—	—	—	—	—	—	—	—	—
Plague	—	44	2	44	1	4	6	10	54
Pneumonia, Acute									
Lobar	3	289	63	292	3	45	15	60	352
Pyogenic Infection—									
(a) Abscess	2	2	—	4	1	6	—	6	10
(b) Osteomyelitis	—	2	—	2	1	—	—	—	2
(c) Pyæmia	—	1	1	1	—	—	—	—	1
Rabies	—	—	—	—	—	—	—	—	—
Relapsing (Tick) Fever	2	91	—	93	6	43	14	57	150
Rheumatic Fever	2	11	—	13	1	15	5	20	33
Sand-fly Fever	—	2	1	2	—	—	—	—	2
Septicæmia	—	6	6	6	—	2	—	2	8
Trypanosomiasis (Sleeping Sickness)	—	6	2	6	5	1	1	2	8
Small-pox	—	1	—	1	1	—	—	—	1
Syphilis—									
(a) Primary	14	345	—	359	21	423	159	582	941
(b) Secondary	38	635	5	673	66	1,404	619	2,023	2,696
(c) Inherited	29	148	11	177	10	403	211	614	791
Tetanus	—	9	4	9	—	1	—	1	10
Tuberculosis	7	160	70	167	6	133	33	166	333
Carried forward ..	182	8,065	227	8,247	209	20,956	5,079	26,035	34,282

TABLE XIII.—*continued.*

RETURN OF DISEASES AND DEATHS (IN-PATIENTS), AND OF DISEASES
(OUT-PATIENTS) FOR THE YEAR 1924—*continued.*

Diseases.	In-Patients.					Out-Patients.			Total Cases In and Out-Patients.
	Remain- ing in Hospital at the end of 1923.	Yearly Total.		Total Cases Treated.	Remain- ing in Hospital at the end of 1924.	Males.	Females.	Total.	
		Admis- sions.	Deaths.						
Brought forward ..	182	8,065	227	8,247	209	20,956	5,079	26,035	34,282
<i>Infective Diseases—contd.</i>									
Undulant Fever ..	—	—	—	—	—	—	—	—	—
Whooping Cough ..	—	—	—	—	—	21	7	28	28
Yaws	88	3,031	8	3,119	163	7,513	5,893	13,406	16,525
Yellow Fever ..	—	—	—	—	—	—	—	—	—
P.U.O.	3	375	2	378	5	100	18	118	496
Others	—	11	—	11	—	78	18	96	107
(b) <i>Intoxications—</i>									
Alcoholism	—	3	1	3	—	1	—	1	4
Morphinism	—	—	—	—	—	—	—	—	—
Others	—	—	—	—	—	—	—	—	—
(c) <i>General Diseases—</i>									
Anæmia	9	109	9	118	5	422	141	563	681
Anæmia—Pernicious ..	—	2	1	2	—	2	1	3	5
Diabetes	1	—	—	1	—	15	1	16	17
Exophthalmic Goitre ..	—	—	—	—	—	5	4	9	9
Gout	1	4	1	5	—	4	—	4	9
Leucocythæmia	—	1	—	1	—	—	—	—	1
Hodgkin's Disease ..	—	—	—	—	—	—	1	1	1
Myxœdema	—	—	—	—	—	—	—	—	—
Purpura	1	1	—	2	—	—	—	—	2
Rickets	—	—	—	—	—	4	2	6	6
Scurvy	1	3	—	4	—	8	1	9	13
Other General Diseases	4	83	8	87	6	342	50	392	479
(d) <i>Local Diseases—</i>									
(1) <i>Nervous System—</i>									
Neuritis	1	25	—	26	1	546	121	667	693
Meningitis	—	5	5	5	—	1	—	1	6
Myelitis	—	1	1	1	—	6	—	6	7
Hydrocephalus	—	—	—	—	—	—	—	—	—
Encephalitis	—	1	—	1	—	—	—	—	1
Abscess of Brain ..	—	—	—	—	—	—	—	—	—
Congestion of Brain ..	—	—	—	—	—	2	—	2	2
Other Diseases ..	—	30	8	30	2	55	10	65	95
Apoplexy	—	3	2	3	—	1	—	1	4
Paralysis	3	27	2	30	1	13	3	16	46
Chorea	—	2	—	2	—	2	—	2	4
Epilepsy	5	68	3	73	4	53	20	73	146
Neuralgia	1	131	—	132	4	1,441	183	1,624	1,756
Hysteria	—	4	—	4	—	3	10	13	17
Headache	—	25	—	25	—	2,090	321	2,411	2,436
Neurasthenia	—	9	—	9	3	24	11	35	44
Other Diseases ..	2	19	2	21	4	135	15	150	171
(2) <i>Mental Diseases—</i>									
Idiocy	—	3	—	3	1	1	—	1	4
Mania	1	15	1	16	1	8	2	10	26
Melancholia	—	3	1	3	—	—	—	—	3
Dementia	—	2	1	2	—	1	1	2	4
Delusional Insanity ..	—	7	—	7	1	4	6	10	17
Other Mental Diseases	—	9	2	9	2	7	—	7	16
(2) <i>Diseases of the Eye—</i>									
Conjunctivitis	9	228	—	237	4	3,350	1,311	4,661	4,898
Keratitis	—	6	—	6	—	23	4	27	33
Ulceration of Cornea ..	1	22	—	23	—	100	26	126	149
Carried forward ..	313	12,333	285	12,646	416	37,337	13,260	50,637	63,243

TABLE XIII.—*continued.*

RETURN OF DISEASES AND DEATHS (IN-PATIENTS), AND OF DISEASES
(OUT-PATIENTS) FOR THE YEAR 1924—*continued.*

Diseases.	In-Patients.					Out-Patients.			Total Cases In and Out-Patients.
	Remain- ing in Hospital at the end of 1923.	Yearly Total.		Total Cases Treated.	Remain- ing in Hospital at the end of 1924.	Males.	Females.	Total.	
		Admis- sions.	Deaths.						
Brought forward ..	313	12,333	285	12,646	416	37,337	13,260	50,957	63,243
Iritis	1	23	—	24	3	80	54	134	158
Optic Neuritis	—	—	—	—	—	3	—	3	3
Cataract	1	13	—	14	—	34	19	53	67
Other Eye Diseases ..	8	62	—	70	3	448	99	547	617
(3) Diseases of the Ear—									
Inflammation of Ext.									
Ear	1	12	1	13	—	754	264	1,018	1,031
Inflammation of									
Middle Ear	—	18	—	18	1	706	240	946	964
Inflammation of Mas-									
toid	—	6	—	6	2	23	8	31	37
Other Diseases	—	9	—	9	—	161	60	221	230
(4) Diseases of the Nose	1	8	—	9	—	88	18	106	115
(5) Circulatory System—									
Pericarditis	—	3	2	3	—	3	1	4	7
Endocarditis	—	3	3	3	—	4	—	4	7
Valvular, Mitral	—	20	4	20	—	23	4	27	47
„ Aortic	—	1	—	1	—	2	1	3	4
„ Tricuspid	—	—	—	—	—	1	—	1	1
„ Pulmonary	—	—	—	—	—	—	—	—	—
Arterio-Sclerosis	—	—	—	—	—	—	—	—	—
Aneurism	—	—	—	—	—	—	—	—	—
Other Diseases	1	17	2	18	1	56	16	72	90
(6) Respiratory System—									
Laryngitis	2	10	1	12	—	142	54	196	208
Bronchitis	4	421	6	425	8	11,894	2,688	14,582	15,007
Asthma	1	52	2	53	—	307	83	390	443
Broncho-Pneumonia ..	1	51	16	52	1	39	16	55	107
Abscess of Lung	—	1	1	1	—	—	—	—	1
Gangrene of Lung	—	—	—	—	—	—	—	—	—
Emphysema	—	2	—	2	1	—	—	—	2
Pleurisy	2	49	1	51	4	75	10	85	136
Empyema	—	3	1	3	—	1	1	2	5
Other Respiratory									
Diseases	2	56	3	58	1	1,776	420	2,196	2,254
(7) Digestive System—									
Stomatitis	—	5	—	5	—	296	75	371	376
Caries of Teeth	—	22	—	22	—	2,870	1,265	4,135	4,157
Sore Throat	—	25	—	25	—	1,378	239	1,617	1,642
Inflammation of Tonsils	2	137	—	139	1	885	120	1,005	1,144
Gastritis	1	56	—	57	—	210	84	294	351
Ulceration of Stomach	—	3	—	3	—	—	—	—	3
Hæmatemesis	—	4	—	4	—	6	—	6	10
Dilatation of Stomach	—	—	—	—	—	6	—	6	6
Stricture of Stomach	1	—	—	1	—	2	1	3	4
Dyspepsia	2	31	—	33	3	471	129	600	633
Enteritis	—	19	3	19	—	17	4	21	40
Appendicitis	—	8	—	8	—	4	—	4	12
Colitis	1	46	1	47	—	101	10	111	158
Ulceration of Intestines	—	1	1	1	—	1	—	1	2
Sprue	—	1	1	1	—	—	1	1	2
Hernia	16	134	7	150	12	46	1	47	197
Diarrhœa	15	596	65	611	8	2,774	559	3,333	3,944
Carried forward ..	376	14,261	406	14,637	465	63,024	19,804	98,812	97,440

TABLE XIII.—*continued.*

RETURN OF DISEASES AND DEATHS (IN-PATIENTS), AND OF DISEASES
(OUT-PATIENTS) FOR THE YEAR 1924—*continued.*

Diseases.	In-Patients.					Out-Patients.			Total Cases In and Out-Patients.
	Remain- ing in Hospital at the end of 1923.	Yearly Total.		Total Cases Treated.	Remain- ing in Hospital at the end of 1924.	Males.	Females.	Total.	
		Admis- sions.	Deaths.						
Brought forward ..	376	14,261	406	14,637	465	63,024	19,804	98,812	97,440
Constipation	1	125	—	126	2	5,852	1,222	7,074	7,200
Colic	2	210	1	212	3	2,206	406	2,612	2,824
Hæmorrhoids	1	28	—	29	1	66	7	73	102
Pancreatitis	—	—	—	—	—	—	—	—	—
Hepatitis—									
(a) Acute	2	27	—	29	—	48	8	56	85
(b) Abscess	1	3	3	4	—	—	3	3	7
Cirrhosis of Liver ..	3	15	8	18	—	19	1	20	38
Jaundice	1	22	3	23	1	98	14	112	135
Peritonitis	—	8	4	8	—	3	1	4	12
Ascites	2	25	8	27	1	10	4	14	41
Other Diseases Digest. System	1	55	2	56	—	303	59	362	418
(8) Lymphatic System—									
Inflammation, Lym- phatic Gland ..	2	83	1	85	—	305	33	338	423
Suppuration, Lym- phatic Gland ..	1	44	1	45	3	64	6	70	115
Lymphangitis	1	3	—	4	—	14	5	19	23
Other Diseases ..	—	17	—	17	1	52	56	108	125
(9) Urinary System—									
Acute Nephritis ..	2	2	—	4	—	6	1	7	11
Bright's Disease ..	—	9	4	9	1	15	3	18	27
Pyelitis	—	—	—	—	—	—	—	—	—
Calculus	—	—	—	—	—	2	1	3	3
Cystitis	3	21	3	24	—	43	9	52	76
Vesical Calculus ..	—	5	1	5	—	5	—	5	10
Suppression	—	3	—	3	—	2	—	2	5
Hæmaturia	—	6	—	6	—	12	—	12	18
Chyluria	—	—	—	—	—	—	—	—	—
Others, Urinary System	2	17	—	19	—	17	2	19	38
(10) Generative System—									
Male Organs—									
Urethritis	—	30	—	30	—	106	—	106	136
Gleet	—	1	—	1	—	15	—	15	16
Stricture	5	63	1	68	4	44	—	44	112
Prostatitis	—	—	—	—	—	1	—	1	1
Soft Chancre	2	49	—	51	3	99	—	99	150
Condyloma	—	6	—	6	—	17	—	17	23
Inflammation of Scrotum	1	4	—	5	—	19	—	19	24
Hydrocele	11	141	1	152	15	78	—	78	230
Orchitis	6	147	—	153	12	294	—	294	447
Epididymitis	—	19	—	19	2	23	—	23	42
Other Diseases ..	1	94	2	95	17	58	—	58	153
Female Organs—									
Ovaritis	—	2	—	2	—	—	21	21	23
Ovarian Cyst	—	1	—	1	1	—	1	1	2
Endometritis	—	3	—	3	—	—	5	5	8
Displacement of Uterus	2	5	—	7	—	—	5	5	12
Vaginitis	—	1	—	1	—	—	9	9	10
Carried forward ..	429	15,555	449	15,984	532	72,920	21,686	94,606	110,590

TABLE XIII.—*continued.*

RETURN OF DISEASES AND DEATHS (IN-PATIENTS), AND OF DISEASES
(OUT-PATIENTS) FOR THE YEAR 1924—*continued.*

Diseases.	In-Patients					Out-Patients.			Total Cases In and Out-Patients.
	R main- ing in Hospital at the end of 1923.	Yearly Total.		Total Cases Treated.	Remain- ing in Hospital at the end of 1924.	Males.	Females.	Total.	
		Admis- sions.	Deaths.						
Brought forward ..	429	15,555	449	15,984	532	72,920	21,686	94,606	110,590
Amenorrhœa ..	—	2	—	2	—	—	23	23	25
Dysmenorrhœa ..	—	1	—	1	—	—	69	69	70
Menorrhagia ..	—	3	—	3	—	—	17	17	20
Leucorrhœa ..	—	1	—	1	—	—	39	39	40
Abortion ..	—	21	1	21	1	—	10	10	31
Delayed Labour ..	—	10	2	10	1	—	4	4	14
Postpartum									
Hæmorrhage ..	—	—	—	—	—	—	3	3	3
Retained Placenta ..	—	8	1	8	—	—	2	2	10
Premature Birth ..	—	4	2	4	—	—	1	1	5
Puerperal Septicæmia ..	—	3	2	3	—	—	3	3	6
Mastitis ..	1	10	—	11	—	—	55	55	66
Abscess of Breast ..	—	3	—	3	—	—	25	25	28
Other Diseases ..	1	60	1	61	5	—	174	174	235
(11) Organs of Loco- motion—									
Osteitis ..	2	20	—	22	2	59	37	96	118
Arthritis ..	2	80	3	82	—	594	144	738	820
Bursitis ..	—	—	—	—	—	15	1	16	16
Lumbago ..	—	16	—	16	—	147	12	159	175
Myalgia ..	—	37	—	37	3	2,000	344	2,344	2,381
Rheumatism ..	—	94	—	94	1	1,173	264	1,437	1,531
Other Diseases ..	4	170	—	174	12	436	55	491	665
(12) Connective Tissue—									
Cellulitis ..	5	129	—	134	3	732	97	829	963
Abscess ..	10	310	6	320	13	1,000	168	1,168	1,488
Other Diseases ..	49	149	1	198	4	574	27	601	799
(13) Diseases of Skin—									
Urticaria ..	—	6	—	6	5	54	14	68	74
Eczema ..	1	68	—	69	1	572	126	698	767
Boil ..	2	79	—	81	1	944	104	1,048	1,129
Carbuncle ..	—	10	—	10	1	8	3	11	21
Horpes ..	1	2	—	3	—	27	5	32	35
Psoriasis ..	1	9	—	10	—	14	6	20	30
Oriental Sore ..	—	2	—	2	—	29	6	35	37
Tinea ..	—	2	—	2	—	137	35	172	174
Scabies ..	4	123	1	127	7	4,147	893	5,040	5,167
Acne ..	—	—	—	—	—	18	1	19	19
Prickly Heat ..	—	—	—	—	—	23	3	26	26
Ulcer ..	90	1,913	19	2,003	192	14,186	2,760	16,946	18,949
Other Diseases ..	1	82	—	83	6	252	48	300	383
(e) Injuries—									
General ..	3	66	5	69	2	584	66	650	719
Local ..	58	1,268	56	1,326	57	12,229	1,266	13,495	14,821
(f) Tumours ..	8	93	10	101	7	53	17	70	171
Pappiloma ..	1	—	—	1	—	—	—	—	1
Cancer of Breast ..	—	—	—	—	—	—	2	2	2
(g) Malformations ..	—	—	—	—	—	4	4	8	8
(h) Poisons ..	—	10	2	10	—	20	6	26	36
Snake Bite ..	1	20	—	21	1	16	2	18	39
Ptomaine ..	—	1	—	1	—	—	—	—	1
(i) Parasites, Animal ..	—	1	—	1	—	—	—	—	1
(1) Protozoa ..	—	—	—	—	—	—	—	—	—
Carried forward ..	674	20,441	561	21,115	857	112,967	28,627	141,594	162,709

TABLE XIII.—*continued.*

RETURN OF DISEASES AND DEATHS (IN-PATIENTS), AND OF DISEASES
(OUT-PATIENTS) FOR THE YEAR 1924—*continued.*

Diseases.	In-Patients.					Out-Patients.			Total Cases In and Out-Patients.
	Remain- ing in Hospital at the end of 1923.	Yearly Total.		Total Cases Treated.	Remain- ing in Hospital at the end of 1924.	Males.	Females.	Total.	
		Admis- sions.	Deaths.						
Brought forward ..	674	20,441	561	21,115	857	112,967	28,627	141,594	162,709
(2) Trematoda (Flukes)	—	—	—	—	—	—	—	—	—
(a) Schist. hæmatobium	2	44	—	46	1	133	3	136	182
(b) „ mansoni ..	—	3	—	3	—	2	1	3	6
(c) Bilharziasis ..	—	1	—	1	—	30	2	32	33
(3) Cestoda—									
Tænia Solium.. ..	—	11	—	11	—	144	27	171	182
Tænia Saginata ..	1	95	1	96	2	582	155	737	833
(4) Nematoda—									
Ascaris	—	11	1	11	—	649	436	1,085	1,096
Triccocephalus Dispar	—	—	—	—	—	—	—	—	—
Filaria (a) m.f. Ban- crofti	1	9	—	10	1	18	6	24	34
(i) Elephantiasis of Leg	2	19	2	21	1	58	8	66	87
(ii) Elephantiasis, Scrotum	13	88	3	101	22	26	—	26	127
(iii) Other	—	14	1	14	1	5	—	5	19
(b) f. medinensis (Guinea Worm) ..	—	1	—	1	—	1	—	1	2
(c) f. loa	—	—	—	—	—	—	—	—	—
Strongylus	—	1	1	1	—	2	1	3	4
Ankylostomiasis ..	26	461	109	487	34	2,035	452	2,487	2,974
Oxyuris	—	—	—	—	—	9	—	9	9
(5) Insecta	—	—	—	—	—	3	—	3	3
Myiasis	—	3	—	3	—	18	4	22	25
Jigger (T. penetrans) ..	—	24	—	24	1	574	106	680	704
Scorpion's Sting ..	—	—	—	—	—	1	1	2	2
N.Y.D.	—	1	—	1	1	—	—	—	1
	*13								
	732	21,227	679	21,946	921	117,257	29,829	147,086	169,032

* Omitted from last year's return.

TABLE XIV.
RETURN OF DISEASES (IN- AND OUT-PATIENTS) FOR THE YEAR 1924, BY STATIONS.

Disease.	Arusha.	Bagamoyo.	Bukoba.	European Hospital, Dar-es-Salaam.	Sewa Hadji Hospital, Dar-es-Salaam.	Dodoma.	Iringa.	Kahama.	Kigoma.	Kilosa.	Kilwa.	Kondea-Irangi.	Lindi.	Lushoto.	Mafia.	Mahenge.	Mbulu.
(a) Infective Diseases—																	
Anthrax ..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	1	..	..
Beri-Beri ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Cancrumoris ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Cerebro-spinal Fever ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Chicken-pox ..	62	..	100	30	4	..	5	8	3	..	2	..	1	..	..	1	..
Dengue ..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..
Diphtheria ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Dysentery—	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
(a) Amoebic ..	11	..	32	4	5	10	16	..	2	..	..	2	..	7	5	8	2
(b) Bacillary ..	..	..	..	8	1	6	..	..	5	..	..	39	..	..	..	..	..
(c) Unclassified ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Endocarditis—infective ..	..	..	..	1	..	..	..	..	1	..	..	..	..	..	..	..	..
Enteric Fever ..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..
Erysipelas ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Gangosa ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Gonorrhoea ..	74	38	614	1	193	46	27	53	74	11	41	71	11	8	9	15	15
Influenza ..	98	..	57	50	14	..	..	..	..	..	..	..	340	62	..	31	7
Kala Azar ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Leprosy—	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
(a) Nodular ..	..	..	7	..	..	..	..	..	2	..	..	1	..	..	..	27	1
(b) Anæsthetic ..	1	..	5	..	3	..	..	..	..	..	..	3	..	..	..	..	..
Malaria—	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
(a) Tertian ..	271	..	70	17	229	208	691	189	..	34	168	800	496	52	103	226	180
(b) Quartan ..	..	2	95	51	5	..	..	..	..	..	..	..	..	1	..	..	..
(c) Aëstivo—autumnal ..	36	329	1,152	169	6,337	429	..	..	318	387	..	..	..	1	..	51	..
(d) Chronic Malaria ..	3	2	29	7	44	4	..	..	20	96	..	44	..	61	..	3	9
(e) Blackwater ..	1	..	1	5	2	3	1	..	1	2	1	..	..	..	..	1	1
Measles ..	1	..	13	..	7	1	3	..	..	..	..	..	..	..	..	..	2
Mumps ..	..	..	..	..	1	..	8	1	..	..	..	..	..	..	..	..	..
Carried forward ..	558	371	2,175	344	6,846	708	751	251	427	603	220	961	848	192	118	363	217

TABLE XIV.—continued.
RETURN OF DISEASES (IN- AND OUT-PATIENTS) FOR THE YEAR 1924, BY STATIONS—continued.

Disease.	Mikindani.	Morogoro.	Moshi.	Musoma.	Mwanza.	Namanyere.	Pangani.	Shinyanga.	Singida.	Songea.	Tabora.	Tanga.	Tukuyu.	Tunduru.	Ujiji.	Utete.	Total.
(a) Infective Diseases—																	
Anthrax ..	..	..	..	..	..	..	..	..	5	..	..	..	..	..	..	..	7
Beri-Beri ..	..	..	..	..	..	..	7	..	..	..	..	27	..	..	..	..	35
Cancrumoris ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
Cerebro-spinal Fever ..	..	..	..	1	1	..	1	..	..	1	6	..	..	..	..	..	5
Chicken-pox ..	..	8	8	1	..	1	..	..	4	1	..	..	..	..	..	..	216
Dengue ..	..	..	..	..	..	..	..	..	..	..	..	5	..	..	..	..	36
Diphtheria ..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	1
Dysentery—																	
(a) Amoebic ..	6	101	33	..	2	7	7	3	12	11	37	8	1	2	..	..	326
(b) Bacillary ..	..	..	..	23	16	8	2	2	..	..	..	4	18	..	..	30	170
(c) Unclassified ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	81
Endocarditis—infective ..	..	..	..	..	..	..	..	..	..	..	7	..	..	..	..	..	10
Enteric Fever ..	..	..	..	..	1	2	..	..	1	..	1	..	..	..	..	..	6
Erysipelas ..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	15
Gangosa ..	..	..	15	..	..	..	25	11	38	83	128	142	37	19	41	36	2,095
Gonorrhoea ..	25	30	47	13	90	29	..	..	..	..	..	..	125	..	84	57	2,805
Influenza ..	59	..	1	46	15	74	1	4	45	1,443	55	137	..	..	..	..	..
Kala Azar ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Leprosy—																	
(a) Nodular ..	..	1	4	..	1	..	8	..	..	1	1	..	14	2	4	..	37
(b) Anasthetic ..	..	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	51
Malaria—																	
(a) Tertian ..	70	360	3,473	224	630	396	134	162	101	495	232	792	1	58	..	293	11,155
(b) Quartan ..	..	..	..	..	..	..	31	106	..	..	738	1	2	..	1	..	189
(c) Aëstivo—autumnal ..	..	..	..	..	..	..	..	..	..	..	..	2	738	..	222	..	11,015
(d) Chronic Malaria ..	2	2	..	..	17	..	15	9	..	..	2	11	1	..	10	15	403
(e) Blackwater ..	..	1	7	1	1	..	..	..	..	..	2	..	..	..	..	31	..
Measles ..	..	..	4	..	..	..	..	..	..	..	127	..	..	..	..	..	27
Mumps ..	..	..	..	..	..	..	1	..	..	..	..	1	25	..	..	..	170
Carried forward ..	162	503	3,593	309	777	517	232	297	206	2,035	1,336	1,133	962	81	362	431	28,889

TABLE XIV.—*continued.*
 RETURN OF DISEASES (IN- AND OUT-PATIENTS) FOR THE YEAR 1924, BY STATIONS—*continued.*

Disease.	Arusha.	Bagamoyo.	Bukoba.	European Hospital, Dar-es-Salaam.	Sewa Hadji Hospital, Dar-es-Salaam.	Dodoma.	Iringa.	Kahama.	Kigoma.	Kilosa.	Kilwa.	Kondea-Irangi.	Lindi.	Lushoto.	Mafia.	Mahenge.	Mbulu.
Brought forward	558	371	2,175	344	6,846	708	751	251	427	603	220	961	848	192	118	363	217
Mycetoma ..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..
Pellagra ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Plague ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Pneumonia, acute lobar	7	..	12	2	65	30	4	6	8	3	4	13	2	3	..	3	3
Pyogenic Infection—	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
(a) Abscess ..	..	..	..	..	..	1	..	..	5	4	..	..	..	..	..	..	..
(b) Osteomyelitis ..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..
(c) Pyæmia ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Rabies ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Relapsing (Tick) Fever	..	..	..	..	18	..	28	..	9	..	..	..	..	3	..	2	1
Rheumatic Fever ..	..	1	2	13	1	..	4	..	..	2	..	..	..	..	..	..	..
Sand-fly Fever ..	..	..	..	..	..	..	1	..	..	..	..	..	..	1	..	..	..
Septicæmia ..	1	..	..	..	3	..	..	..	8	..	..	..	..	..	..	..	..
Trypanosomiasis (S. Sick.)	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..
Small-pox ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Syphilis—	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
(a) Primary ..	3	15	8	3	50	57	45	18	74	4	6	22	29	4	8	15	11
(b) Secondary ..	9	15	682	4	94	50	6	2	48	28	11	43	..	26	..	11	..
(c) Inherited ..	2	..	33	2	101	6	..	3	..	5	24	22	..	..	..	..	..
Tetanus ..	..	..	1	..	2	8	1	1	8	2	1	10	..	12	3	5	4
Tuberculosis ..	8	2	6	3	24	..	..	..	..	..	..	..	..	..	..	..	..
Undulant Fever..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..
Whooping Cough	..	..	..	..	..	80	20	29	479	22	653	1,013	149	41	..	11	44
Yaws ..	165	454	23	..	473	..	..	..	..	..	..	..	..	..	..	..	..
Yellow Fever ..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	11	..
P.U.O. ..	59	..	1	21	321	..	76	..	11	..	..	3	..	..	..	15	..
Others ..	3	..	..	8	..	..	..	..	..	..	..	..	..	..	..	..	..
(b) Intoxications—	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Alcoholism ..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..
Morphinism ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Others ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Carried forward ..	815	858	2,943	400	7,900	950	936	311	1,078	674	910	2,000	1,028	282	129	437	280

TABLE XIV.—continued.

RETURN OF DISEASES (IN- AND OUT-PATIENTS) FOR THE YEAR 1924, BY STATIONS—continued.

Disease.	Mikindani.	Moregoro.	Moshi.	Musoma.	Mwanza.	Namanyere.	Pangani.	Shinyanga.	Singida.	Songea.	Tabora.	Tanga.	Tukuyu.	Tunduru.	Ujiji.	Utele.	Total.
Brought forward	162	593	3,593	309	777	517	232	297	206	2,035	1,336	1,133	962	81	362	431	28,889
Mycetoma	1
Pellagra
Plague	17	37	..	..	..	..	..	..	..	..	..	..	..	54
Pneumonia, acute lobar	11	..	..	36	3	5	1	7	17	65	13	2	11	9	352
Pyrogenic Infection—
(a) Abscess	10
(b) Osteomyelitis	1	1	..	..	..	..	..	2
(c) Pyæmia	1
Rabies
Relapsing (Tick) Fever
Rheumatic Fever	1	2	4	7	24	..	3	1	..	8	2	26	..	..	4	150
Sand-fly Fever	1	..	..	2	11	..	..	..	..	3	1	..	..	..	..	33
Septicæmia	1	..	..	..	..	..	..	..	..	1	..	..	..	..	..	2
Trypanosomiasis (S. Sick.)	8
Small-pox	8
Syphilis—	1
(a) Primary ..	1	23	..	157	125	7	5	10	53	73	18	50	10	6	13	18	941
(b) Secondary ..	55	162	191	25	870	70	24	34	43	..	74	53	41	9	4	12	2,696
(c) Inherited ..	4	7	..	282	18	3	2	6	6	..	47	60	37	..	120	1	791
Tetanus	2	..	..	..	3	..	..	..	1	..	..	..	..	..	10
Tuberculosis	19	69	..	17	..	41	3	..	6	24	38	9	..	6	..	333
Undulant Fever
Whooping Cough	3	..	..	..	..	..	1	1	..	8	..	..	14	..	28
Yaws ..	1,090	323	735	36	330	108	276	4	436	115	158	411	3,577	159	91	5,011	16,525
Yellow Fever
P.U.O.	21	..	..	..	34	..	..	..	..	1	10	4	..	..	496
Others	1	1	..	..	..	..	..	..	..	..	..	..	..	107
(b) Intoxications—
Alcoholism
Morphinism
Others	4
Carried forward	1,317	1,044	4,627	831	2,184	776	620	363	747	2,238	1,690	1,823	4,685	261	621	5,486	51,412

TABLE XIV.—continued.
RETURN OF DISEASES (IN- AND OUT-PATIENTS) FOR THE YEAR 1924, BY STATIONS—continued.

Disease.	Arusha.	Bagamoyo.	Bukoba.	European Hospital, Dar-es-Salaam.	Sewa Hadji Hospital, Dar-es-Salaam.	Dodoma.	Iringa.	Kahama.	Kigoma.	Kilosa.	Kilwa.	Kondea-Irangi.	Lindi.	Lushoto.	Mafia.	Mahenge.	Mbulu.
Brought forward	815	858	2,943	400	7,999	950	936	311	1,078	674	919	2,090	1,028	282	129	437	280
(c) General Diseases—																	
Anæmia	14	131	3	2	154	25	18	1	15	11	5	6	20	5	—	7	—
Anæmia—Pernicious ..	—	—	—	—	4	1	2	—	—	2	—	1	4	—	—	—	—
Diabetes	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Exophthalmic Goitre ..	1	—	1	1	1	2	—	—	1	—	—	—	1	—	—	—	2
Gout	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1
Leucocythæmia	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hodgkin's Disease ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Myxædema	—	—	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Purpura	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	10
Rickets	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	20
Scurvy	—	—	3	90	59	2	—	—	1	55	6	4	—	7	1	—	—
Other General Diseases	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
(d) Local Diseases—																	
(1) Nervous System—																	
Neuritis	1	—	1	3	381	59	—	—	1	—	9	—	17	—	5	—	—
Meningitis	—	—	1	—	6	—	—	—	—	—	—	1	—	—	1	—	—
Myelitis	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hydrocephalus	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Encephalitis	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Abscess of Brain ..	—	—	—	—	—	—	—	—	—	—	—	—	—	2	—	—	—
Congestion of Brain	—	—	—	8	—	—	—	—	—	—	—	3	50	—	1	1	3
Other Diseases	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sub-section 1.																	
Apoplexy	—	—	1	—	—	—	—	—	—	—	1	4	—	1	—	1	—
Paralysis	—	—	6	4	6	4	—	—	3	1	—	—	—	—	—	—	—
Chorea	—	—	—	—	—	—	—	—	—	2	—	—	—	—	—	—	—
Epilepsy	4	9	7	2	15	6	3	3	—	—	2	25	2	1	—	4	1
Neuralgia	1	—	33	10	916	94	25	1	4	3	47	60	3	84	—	7	1
Hysteria	—	2	—	—	1	—	—	—	—	—	—	—	—	—	—	—	1
Carried forward ..	838	1,000	3,001	520	9,542	1,143	985	316	1,103	746	991	2,195	1,125	382	137	457	319

TABLE XIV.—continued.
RETURN OF DISEASES (IN- AND OUT-PATIENTS) FOR THE YEAR 1924, BY STATIONS—continued.

Disease.	Mikindani.	Moregoro.	Moshi.	Musoma.	Mwanza.	Namanyere.	Pangani.	Shinyanga.	Singida.	Songea.	Tabora.	Tanga.	Tukuyu.	Tunduru.	Ujiji.	Ute.	Total.
Brought forward	1,317	1,044	4,627	831	2,184	776	620	363	747	2,238	1,690	1,823	4,685	261	621	5,486	51,442
(c) General Diseases—																	
Anæmia	6		52		54	8	12	3	4	1	29	13	34	12	4	32	681
Anæmia—Pernicious							1										5
Diabetes			2			1				1				2			17
Exophthalmic Goitre		2						1				1		2			9
Gout																	9
Leucocythæmia					1						1						1
Hodgkin's Disease																	1
Myxœdema																	2
Purpura																	6
Rickets						3						3			1		13
Scurvy							16	4	2	19	2	52	2			26	479
Other General Diseases		34	1	10	63												
(d) Local Diseases—																	
(1) Nervous System—																	
Neuritis			1		1	161					8	11	17	7	11		693
Meningitis			2														6
Myelitis			1														7
Hydrocephalus																	
Encephalitis																	1
Abscess of Brain																	2
Congestion of Brain																	2
Other Diseases	1	1		7	7	1				1		10				2	95
Apoplexy					2	1				1	3		4	1		1	46
Paralysis							5										4
Chorea					1												4
Epilepsy		2	5	1	8	1		2	4	4	13	3	19				146
Neuralgia		5	10	113	23	27	7	36	25		15	73	44	8	3	52	1,756
Hysteria			1		1						3	1				7	17
Carried forward	1,350	1,088	4,702	962	2,345	978	661	499	782	2,265	1,766	1,990	4,805	293	640	5,606	55,442

Sub-section 1. Sub-section 2.

TABLE XIV.—continued.
RETURN OF DISEASES (IN- AND OUT-PATIENTS) FOR THE YEAR 1924, BY STATIONS—continued.

Disease.	Arusha.	Bagamoyo.	Bukoba.	European Hospital, Dar-es-Salaam.	Sewa Hadji Hospital, Dar-es-Salaam.	Dodoma.	Iringa.	Kahama.	Kigoma.	Kilosa.	Kilwa.	Kondea-Irangi.	Lindi.	Lushoto.	Mafia.	Mahenge.	Mbulu.
Brought forward	838	1,000	3,001	520	9,542	1,143	985	316	1,103	746	991	2,195	1,125	382	137	457	319
Headache ..	45	72	58	—	288	15	597	18	8	19	11	—	87	50	23	36	190
Neurasthenia ..	1	—	—	24	1	—	—	—	1	1	8	—	1	2	—	—	—
Other Diseases ..	—	2	10	—	1	2	—	—	1	—	—	—	—	—	—	—	—
Mental Diseases	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—
{ Idiocy ..	—	—	—	—	1	—	—	—	—	—	—	6	2	—	—	2	5
{ Mania ..	—	—	—	1	—	1	—	—	—	—	—	—	—	—	—	—	—
{ Melancholia ..	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—
{ Dementia ..	—	—	—	—	—	—	—	—	2	—	—	—	—	—	—	—	—
{ Delusional Insanity ..	—	—	—	—	3	—	1	—	—	—	—	1	—	—	4	—	—
{ Other Mental Diseases	—	—	1	—	2	—	—	—	—	—	—	—	—	—	—	—	—
(2) Diseases of the Eye—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Conjunctivitis ..	278	168	471	7	482	308	425	19	42	65	76	151	128	19	8	54	52
Keratitis ..	—	—	—	—	—	1	—	—	—	—	2	8	1	—	—	2	—
Ulceration of Cornea	1	6	12	—	40	6	—	—	—	5	7	—	4	—	—	3	—
Iritis ..	—	—	1	—	13	3	—	—	1	3	—	—	32	—	—	1	—
Optic Neuritis ..	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—
Cataract ..	—	5	1	—	8	9	3	—	—	—	1	1	1	—	—	—	—
Other Eye Diseases ..	7	37	41	15	190	59	1	—	4	1	4	31	17	2	3	1	13
(3) Diseases of the Ear—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Inflammation of Ext. Ear ..	31	16	2	1	26	49	119	4	14	42	41	50	3	25	2	21	14
" of Middle Ear ..	19	60	93	29	197	31	66	1	18	2	6	—	27	21	—	1	—
" of Mastoid ..	1	1	—	—	4	1	—	—	—	—	—	81	2	1	6	1	5
Others ..	2	—	5	19	8	4	—	3	11	1	5	1	—	12	—	4	—
(4) Diseases of the Nose	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
(5) Circulatory System—	—	—	—	—	—	—	—	—	—	—	—	—	2	—	—	—	—
Pericarditis ..	—	—	—	—	1	—	—	—	—	—	—	1	—	—	—	—	2
Endocarditis ..	—	—	—	—	6	—	1	—	—	1	—	9	—	1	—	—	—
Valvular, Mitral ..	2	5	1	—	—	—	—	—	1	—	—	—	—	—	—	—	—
" Aortic ..	—	1	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—
" Tricuspid ..	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—
Carried forward	1,225	1,378	3,699	620	10,813	1,632	2,198	362	1,207	886	1,155	2,539	1,433	517	183	585	602

TABLE XIV.—continued.
RETURN OF DISEASES (IN- AND OUT-PATIENTS) FOR THE YEAR 1924, BY STATIONS—continued.

Disease.	Mikindani.	Morogoro.	Moshi.	Musoma.	Mwanza.	Namanyere.	Pangani.	Shinyanga.	Singida.	Songea.	Tabora.	Tanga.	Tukuyu.	Tunduru.	Ujiji.	Utele.	Total.
Brought forward	1,350	1,088	4,702	962	2,345	978	661	409	782	2,265	1,766	1,900	4,805	293	640	5,606	55,442
Headache ..	74	80	40	1	147	175	21	37	11	19	62	52	97	25	21	58	2,436
Neurasthenia ..	—	—	6	—	—	1	1	—	—	—	1	4	—	—	—	—	44
Other Diseases ..	—	—	—	—	117	—	3	1	4	—	15	4	—	—	—	—	171
Mental Diseases	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sub-sect. 3 {	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Idiocy ..	—	—	—	—	—	1	—	—	—	—	1	1	—	—	—	—	4
Mania ..	—	—	—	—	2	—	—	1	—	—	—	4	—	—	—	1	26
Melancholia ..	—	—	—	—	—	—	2	—	—	—	—	—	—	—	—	—	3
Dementia ..	—	—	—	—	2	—	—	—	—	—	—	—	—	—	—	2	4
Delusional Insanity	—	—	—	—	—	5	—	2	—	—	—	—	3	—	—	—	17
Other Mental Diseases	—	—	2	—	5	—	—	—	—	—	—	1	—	—	—	—	16
(2) Diseases of the Eye—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Conjunctivitis ..	179	69	180	67	139	237	44	40	92	201	180	142	372	47	94	62	4,808
Keratitis ..	—	—	—	—	—	5	—	—	—	—	3	12	—	1	—	—	33
Ulceration of Cornea	2	—	7	—	5	1	5	—	—	—	2	14	26	—	2	—	149
Iritis ..	8	—	1	—	1	1	—	—	—	—	5	3	80	3	—	—	158
Optic Neuritis ..	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3
Cataract ..	—	1	—	—	2	1	4	4	—	4	1	7	11	2	—	1	67
Other Eye Diseases ..	3	3	11	2	21	8	10	3	2	—	29	46	2	1	—	50	617
(3) Diseases of the Ear—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Inflammation of Ext. Ear ..	1	2	2	—	19	2	4	28	16	114	7	86	228	—	44	18	1,031
" " of Middle Ear ..	28	13	98	40	55	56	14	2	20	—	53	33	—	—	—	1	964
" " of Mastoid ..	—	—	—	—	—	3	—	—	—	1	1	3	—	—	—	—	37
Others ..	15	2	9	—	26	—	4	8	3	—	12	4	2	13	7	—	230
(4) Diseases of the Nose	5	—	18	2	7	2	—	4	—	—	15	2	—	—	—	—	115
(5) Circulatory System—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Pericarditis ..	—	—	—	—	—	—	—	—	—	—	—	1	2	—	—	2	7
Endocarditis ..	—	1	—	—	1	—	—	1	—	—	—	—	—	—	—	—	7
Valvular, Mitral ..	1	—	5	—	3	—	1	—	1	2	—	4	3	—	—	—	47
Aortic ..	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	4
" Tricuspid ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1
Carried forward	1,666	1,260	5,082	1,074	2,897	1,476	774	540	931	2,606	2,153	2,413	5,631	385	808	5,801	66,531

TABLE XIV.—continued.
RETURN OF DISEASES (IN- AND OUT-PATIENTS) FOR THE YEAR 1924, BY STATIONS—continued.

Disease.	Arusha.	Bagamoyo.	Bukoba.	European Hospital, Dar-es-Salaam.	Sewa Hadji Hospital, Dar-es-Salaam.	Dodoma.	Iringa.	Kahama.	Kigoma.	Kilosa.	Kilwa.	Kondoa-Irangi.	Landi.	Lushoto.	Mafia.	Mahenge.	Mbulu.
Brought forward	1,225	1,378	3,699	620	10,813	1,632	2,198	362	1,207	886	1,155	2,539	1,433	517	183	585	602
Valvular, Pulmonary	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Arterio-Sclerosis	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Aneurism	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Other Diseases	1	..	2	1	6	..	..	..	..	2	1	3	2	5	..	..	..
(6) Respiratory System—																	
Laryngitis	..	3	..	11	..	..	114	133	283	312	236	5	5	..	..	..	1
Bronchitis	68	471	893	56	2,199	592	450	133	7	..	15	785	349	333	52	339	328
Asthma	4	13	7	14	161	30	29	..	..	3	..	19	27	6	7	4	2
Broncho-Pneumonia	9	4	..	5	14	3	5	1	..	1	..	3	..	1	1	1	12
Abscess of Lung	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Gangrene of Lung	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Emphysema	..	..	..	..	1	6	10	..	..	1	2	4	..	6	..	..	3
Pleurisy	..	3	..	..	3	..	..	..	..	..	..	..	..	..	..	..	..
Empyema	..	..	..	1	..	..	..	..	..	46	..	1	..	6	1	1	18
Other Respiratory Diseases..	683	1	..	35	63	4	1,291	..	..	..	..	3	16	6	..	..	..
(7) Digestive System—																	
Stomatitis	..	19	43	..	54	12	6	4	3	4	4	9	2	17	6	1	..
Caries of Teeth	156	100	103	7	247	111	326	19	80	97	151	62	112	43	24	25	21
Sore Throat	12	14	78	..	425	21	67	15	16	1	1	8	3	137	6	12	25
Inflammation of Tonsils	38	2	111	2	180	19	19	7	12	11	6	13	1	8	..	14	4
Gastritis	..	4	..	10	2	8	24	..	9	1	..	..	23	8	..	4	..
Ulceration of Stomach	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Haematemesis	..	5	..	..	2	..	..	..	..	1	..	..	..	..	..	..	..
Dilatation of Stomach	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Stricture of Stomach	..	..	..	..	..	..	..	..	..	..	..	..	..	..	6	44	1
Dyspepsia	9	25	31	47	57	23	7	..	4	20	5	138	6	26	..	..	..
Enteritis	2	..	..	3	7	..	..	..	5	..	..	3	4	..	..	..	..
Appendicitis	..	..	..	6	4	..	..	..	..	..	..	..	..	..	..	..	23
Colitis	..	..	..	..	106	7	..	..	..	..	1	..	7	..	..	..	..
Ulceration of Intestines	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..
Sprue..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Hernia	1	..	34	2	35	5	..	1	2	..	..	..	7	..	4	2	3
Carried forward	2,208	2,042	5,001	821	14,379	2,473	4,546	542	1,628	1,386	1,579	3,595	1,997	1,113	290	1,032	1,043

TABLE XIV.—continued.

RETURN OF DISEASES (IN- AND OUT-PATIENTS) FOR THE YEAR 1924, BY STATIONS—continued.

Disease.	Mikindani.	Morogoro.	Moshi.	Musoma.	Mwanza.	Namanyere.	Pangani.	Shinyanga.	Singida.	Songea.	Tabora.	Tanga.	Tukuyu.	Tunduru.	Uji.	Ute.	Total.
Brought forward	1,666	1,260	5,082	1,074	2,897	1,476	774	540	931	2,606	2,153	2,413	5,631	385	808	5,801	66,531
Valvular, Pulmonary	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Arterio-Sclerosis	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Aneurism	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Other Diseases	..	1	13	..	3	2	25	3	..	1	12	7	..	..	..	..	90
(6) Respiratory System—																	
Laryngitis	..	..	27	2	8	7	..	..	..	1	1	2	12	8	..	1	208
Bronchitis	212	282	751	196	469	805	196	393	162	570	248	1,079	943	197	377	248	15,007
Asthma	6	2	..	..	2	..	12	2	..	..	4	34	7	1	..	25	443
Broncho-Pneumonia	..	..	6	4	4	..	4	4	..	7	3	5	5	3	..	2	107
Abscess of Lung	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	1
Gangrene of Lung	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Emphysema	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Pleurisy	..	..	8	..	2	14	4	5	3	3	10	12	27	1	..	9	136
Empyema	..	..	2	..	1	..	..	..	..	..	..	..	..	..	..	..	5
Other Respiratory Diseases	..	12	5	2	25	2	3	..	23	2	2	4	6	..	..	..	2,254
(7) Digestive System—																	
Stomatitis	..	1	11	6	19	16	1	19	10	50	11	17	19	..	6	6	376
Caries of Teeth	89	115	141	23	99	66	110	15	12	309	112	270	806	57	99	150	4,157
Sore Throat	..	7	25	..	31	11	9	56	..	51	129	463	2	10	2	5	1,642
Inflammation of Tonsils	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Gastritis	5	12	35	1	52	1	5	19	9	5	435	24	24	..	65	5	1,144
Ulceration of Stomach	..	..	9	..	14	22	5	..	2	..	12	28	156	9	..	1	351
Hematemesis	..	..	..	..	..	..	..	..	..	..	1	2	..	..	..	..	3
Dilatation of Stomach	..	..	..	..	2	6	..	..	..	..	..	..	..	..	..	..	10
Stricture of Stomach	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	6
Dyspepsia	..	..	12	1	14	..	1	29	23	33	20	32	1	..	..	3	4
Enteritis	1	..	..	..	2	..	..	3	..	..	..	3	..	4	..	14	633
Appendicitis	..	..	..	..	..	2	..	..	..	..	..	..	..	8	..	..	40
Colitis	..	..	..	..	2	4	3	..	..	..	2	1	2	..	..	..	12
Ulceration of Intestines	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	158
Sprue	..	..	..	1	..	..	..	..	..	1	..	..	..	..	..	..	2
Hernia	1	..	..	..	11	1	1	..	2	11	13	39	8	3	4	5	197
Carried forward	1,980	1,692	6,128	1,310	3,657	2,436	1,154	1,088	1,177	3,650	3,168	4,435	7,649	686	1,361	6,275	93,531

TABLE XIV.—continued.
RETURN OF DISEASES (IN- AND OUT-PATIENTS) FOR THE YEAR 1924, BY STATIONS—continued.

Disease.	Arusha.	Bagamoyo.	Bukoba.	European Hospital, Dar-es-Salaam.	Sewa Hadji Hospital, Dar-es-Salaam.	Dodoma.	Iringa.	Kahama.	Kigoma.	Kilosa.	Kilwa.	Kondoa-Irangi.	Lindi.	Lushoto.	Mafia.	Mahenge.	Mbulu.
Brought forward	2,208	2,042	5,001	821	14,379	2,473	4,546	542	1,628	1,386	1,579	3,595	1,997	1,113	290	1,032	1,943
Diarrhoea ..	140	88	109	26	224	166	331	23	49	123	43	97	151	26	5	59	70
Constipation ..	36	155	822	1	439	263	641	40	53	115	116	181	178	241	32	139	114
Colic ..	175	77	3	8	957	76	55	12	46	46	18	62	4	14	7	5	15
Hæmorrhoids ..	1	6	1	4	34	13	10	2	2	—	2	3	1	—	—	—	1
Pancreatitis ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hepatitis—																	
(a) Acute ..	2	1	10	1	14	13	—	—	3	—	—	1	3	4	1	—	—
(b) Abscess ..	1	—	—	—	10	2	—	—	—	1	—	—	1	1	1	—	—
Cirrhosis of Liver ..	—	—	2	—	41	3	—	—	—	—	1	3	—	—	—	—	—
Jaundice ..	1	2	2	1	—	—	—	—	—	—	—	—	—	—	5	2	—
Peritonitis ..	1	4	—	1	—	2	—	—	—	—	—	2	—	—	—	—	—
Ascites ..	1	2	9	—	1	4	—	—	2	—	—	6	1	2	—	—	—
Other Diseases, Digestive System ..	5	1	4	50	8	19	—	—	1	5	2	34	22	2	1	4	18
(8) Lymphatic Gland—																	
Inflammation of Lymphatic Gland ..	9	17	—	2	88	11	25	—	2	9	10	17	43	4	—	7	—
Suppuration of Lymphatic Gland ..	2	7	32	2	1	4	5	—	1	—	2	4	—	1	—	1	—
Lymphangitis ..	—	—	—	5	—	—	—	—	—	—	—	3	8	—	—	—	—
Other Diseases ..	—	—	—	—	—	4	—	—	—	—	—	—	1	—	—	—	—
(9) Urinary System—																	
Acute Nephritis ..	—	—	—	—	—	1	—	—	—	—	—	2	—	—	—	—	—
Bright's Disease ..	—	3	—	—	—	—	—	—	1	—	1	5	—	3	—	1	—
Pyelitis ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Calculus ..	—	1	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—
Cystitis ..	—	1	1	6	5	4	—	—	—	—	1	—	1	1	—	1	—
Vesical Calculus ..	3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Suppression ..	1	2	—	—	3	1	—	—	—	—	—	—	—	—	—	—	—
Hæmaturia ..	4	4	3	—	2	—	—	—	—	—	—	—	2	—	—	—	—
Chyluria ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Others, Urinary System ..	3	—	5	1	—	1	—	—	—	—	—	2	—	4	—	—	3
Carried forward	2,593	2,413	6,004	929	16,207	3,062	5,613	619	1,788	1,685	1,775	4,018	2,413	1,416	342	1,251	1,264

TABLE XIV.—*continued*.
RETURN OF DISEASES (IN- AND OUT-PATIENTS) FOR THE YEAR 1924, BY STATIONS.—*continued*.

Disease.	Mikindani.	Morogoro.	Moshi.	Musoma.	Mwanza.	Namanyere.	Pangani.	Shinyanga.	Singida.	Songea.	Tabora.	Tanga.	Tukuyu.	Tunduru.	Ujiji.	Uteje.	Total.
Brought forward	1,980	1,692	6,128	1,310	3,657	2,436	1,154	1,088	1,177	3,650	3,168	4,435	7,649	686	1,361	6,275	93,521
Diarrhoea	31	484	135	94	194	215	27	91	51	104	208	144	269	55	28	84	3,944
Constipation	69	141	432	128	391	199	78	139	74	100	657	431	434	66	119	176	7,200
Colic	27	1	598	1	2	25	5	46	16	77	63	184	27	20	64	88	2,824
Hæmorrhoids	1	—	—	1	1	—	—	2	—	2	5	6	2	—	—	—	102
Pancreatitis	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hepatitis—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
(a) Acute	—	—	15	1	2	—	1	2	—	—	7	4	—	—	—	—	85
(b) Abscess	—	—	—	—	—	2	—	1	—	—	—	—	—	—	—	—	7
Cirrhosis of Liver	—	—	1	—	3	—	3	—	4	—	—	5	1	—	—	4	38
Jaundice	—	—	1	—	6	6	1	—	1	1	50	5	—	1	—	2	135
Peritonitis	—	—	—	—	—	—	—	—	—	—	—	2	—	—	—	—	12
Ascites	1	1	1	1	3	—	3	—	1	2	—	—	—	—	—	—	41
Other Diseases, Digestive System	16	—	26	2	12	—	—	4	5	9	21	41	101	—	—	5	418
(8) Lymphatic Gland—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Inflammation, Lymphatic Gland	9	7	18	4	4	23	—	7	—	3	31	38	26	2	6	1	423
Suppuration, Lymphatic Gland	5	—	4	2	5	1	10	1	—	—	13	7	9	7	—	—	115
Lymphangitis	—	—	—	—	—	—	—	—	—	—	—	2	—	—	—	—	23
Other Diseases	1	4	—	2	10	9	—	—	7	2	15	—	62	—	—	—	125
(9) Urinary System—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Acute Nephritis	—	—	1	—	1	—	—	—	—	—	1	4	—	—	1	—	11
Bright's Disease	—	—	—	—	2	—	3	—	1	—	2	4	1	—	—	—	27
Pyelitis	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Calculus	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	3
Cystitis	—	—	1	1	1	2	5	—	1	—	6	33	3	2	1	—	76
Vesical Calculus	—	—	—	—	—	—	—	—	—	—	—	2	—	—	—	—	10
Suppression	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5
Hæmaturia	—	—	—	—	—	1	—	—	—	—	2	—	—	—	—	—	18
Chyluria	—	—	—	—	2	—	—	—	—	—	—	—	—	—	—	—	—
Others, Urinary System	—	—	3	1	3	—	1	—	—	—	1	5	1	—	—	4	38
Carried forward	2,140	2,330	7,364	1,548	4,300	2,921	1,291	1,381	1,338	3,950	4,251	5,352	8,585	839	1,580	6,639	109,201

TABLE XIV.—continued.
RETURN OF DISEASES (IN- AND OUT-PATIENTS) FOR THE YEAR 1924, BY STATIONS—continued.

Disease.	Arusha.	Bagamoyo.	Bukoba.	European Hospital, Dar-es-Salaam.	Sewa Hadji Hospital, Dar-es-Salaam.	Dodoma.	Iringa.	Kahama.	Kigoma.	Kilosa.	Kilwa.	Kondea-Irangi.	Lindi.	Lushoto.	Mafia.	Mahenge.	Mbulu.
Brought forward ..	2,593	2,413	6,004	929	16,207	3,062	5,613	619	1,788	1,685	1,775	4,018	2,413	1,416	342	1,251	1,264
(10) Generative System—																	
Male Organs—																	
Urethritis ..	1	—	1	—	102	6	12	—	—	—	1	—	2	2	—	—	—
Gleet ..	—	—	—	—	—	—	2	—	1	9	—	—	—	—	—	1	—
Stricture ..	3	1	68	2	4	1	—	—	—	—	—	1	—	—	—	1	—
Prostatitis ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Soft Chancre ..	12	4	42	—	20	1	12	—	1	5	3	—	10	1	2	3	—
Condyloma ..	—	—	1	—	1	2	3	—	—	7	4	—	—	—	—	1	—
Inflammation of Scrotum ..	—	2	—	—	—	—	7	—	—	—	—	—	—	—	—	—	—
Hydrocele ..	—	11	18	—	13	3	1	1	—	1	2	3	3	1	—	—	—
Orchitis ..	19	20	18	3	125	8	3	1	3	6	2	2	43	6	3	3	3
Epididymitis ..	2	2	—	2	4	6	—	—	—	1	—	—	4	1	—	—	—
Other Diseases ..	22	5	32	2	13	1	—	—	—	—	—	5	2	2	—	4	2
Female Organs—																	
Ovaritis ..	—	—	—	3	8	2	—	—	—	—	—	6	—	—	—	—	—
Ovarian Cyst ..	1	—	—	1	—	1	—	—	—	—	—	—	—	—	—	—	—
Endometritis ..	—	—	—	1	—	—	—	—	1	—	—	1	—	—	—	—	—
Displacement of Uterus ..	—	—	3	—	—	—	1	—	3	—	—	—	—	—	—	2	1
Vaginitis ..	—	—	1	—	—	—	4	—	—	—	—	—	1	—	—	1	—
Amenorrhœa ..	—	—	—	5	—	1	4	—	—	—	—	2	—	—	—	3	—
Dysmenorrhœa ..	—	—	—	4	1	—	4	—	—	—	—	1	—	—	—	1	—
Menorrhagia ..	—	—	2	1	1	—	3	—	1	—	1	3	—	—	—	—	—
Leucorrhœa ..	4	1	3	1	14	—	13	—	—	—	—	—	—	—	—	—	—
Abortion ..	2	—	3	5	3	2	1	—	4	—	—	3	—	—	—	1	—
Delayed Labour ..	—	1	—	1	1	1	2	—	—	—	1	—	—	—	—	—	—
Postpartum Hæmorrhage ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Retained Placenta ..	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—
Premature Birth ..	—	—	—	—	3	—	—	—	1	—	—	—	—	—	—	—	—
Puerperal Septicæmia ..	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mastitis ..	2	1	5	6	—	2	11	—	3	4	1	1	—	—	—	—	—
Abscess of Breast ..	—	4	—	—	—	—	3	—	—	—	—	1	—	—	—	—	—
Other Diseases ..	11	—	1	59	12	—	—	—	2	—	—	7	—	3	—	—	5
Carried forward ..	2,673	2,465	6,202	1,079	16,532	3,100	5,695	621	1,817	1,718	1,791	4,055	2,478	1,433	347	1,272	1,276

TABLE XIV.—continued.
RETURN OF DISEASES (IN- AND OUT-PATIENTS) FOR THE YEAR 1924, BY STATIONS—continued.

Disease.	Mikindani.	Morogoro.	Moshi.	Musoma.	Mwanza.	Namanyere.	Pangani.	Shinyanga.	Singida.	Songea.	Tabora.	Tanga.	Tukuyu.	Tunduru.	Ujiji.	Ute.	Total.
Brought forward	2,140	2,330	7,364	1,548	4,300	2,921	1,291	1,381	1,338	3,950	4,251	5,352	8,585	839	1,580	6,639	109,201
Urethritis	1	..	..	1	..	..	..	1	2	..	..	4	..	..	136
Gleet	3	..	..	..	..	..	..	..	..	..	..	16
Stricture	1	1	7	2	..	..	1	..	3	15	1	..	..	..	112
Prostatitis	1
Soft Chancre	3	..	1	2	..	..	..	4	4	11	1	4	..	..	150
Condyloma ..	4	..	..	..	..	..	1	..	..	..	..	2	..	1	..	1	23
Inflammation of Scrotum	5	..	..	..	..	..	..	..	..	1	..	9	24
Hydrocele	2	..	36	1	10	..	..	1	21	66	9	3	..	24	230
Orchitis	12	14	1	8	4	6	8	..	25	23	61	4	..	2	..	447
Epididymitis ..	11	..	..	..	4	..	2	2	1	..	2	8	1	..	2	..	42
Other Diseases	4	..	21	..	2	..	2	..	16	15	3	..	..	..	153
Female Organs—
Ovaritis	3	..	..	..	1	..	..	..	..	..	23
Ovarian Cyst	2
Endometritis	1	2	..	..	..	..	2	..	..	..	..	..	8
Displacement of Uterus	2	..	..	..	..	..	..	..	..	..	..	..	..	..	12
Vaginitis	1	..	..	..	..	..	..	..	..	1	1	..	..	..	10
Amenorrhœa	3	..	1	..	2	..	..	..	..	..	1	..	..	3	25
Dysmenorrhœa	4	1	32	4	1	..	..	..	6	9	1	..	2	70
Menorrhagia	2	1	2	..	1	..	..	2	1	..	..	..	2	20
Leucorrhœa	2	..	..	..	..	..	..	..	..	1	..	..	..	1	40
Abortion	2	1	1	2	..	..	..	..	1	..	..	..	..	..	31
Delayed Labour	1	..	1	..	..	..	..	1	..	3	2	..	1	14
Postpartum Hæmorrhage	3
Retained Placenta	1	1	1	..	..	1	..	1	..	..	..	..	..	10
Premature Birth	1	2	..	..	..	..	..	..	..	..	..	..	5
Puerperal Septicæmia	1	11	..	1	..	..	..	..	..	..	..	..	6
Mastitis	1	1	1	8	..	..	1	..	4	..	10	..	..	..	66
Abscess of Breast	1	..	..	..	..	1	1	..	2	..	..	..	28
Other Diseases	25	1	8	5	1	..	..	3	8	14	2	..	4	..	235
Carried forward	2,155	2,342	7,425	1,561	4,399	3,001	1,320	1,394	1,344	3,985	4,352	5,553	8,636	854	1,588	6,680	111,143

TABLE XIV.—*continued.*
RETURN OF DISEASES (IN- AND OUT-PATIENTS) FOR THE YEAR 1924, BY STATIONS—*continued.*

Disease.	Arusha.	Bagamoyo.	Bukoba.	European Hospital, Dar-es-Salaam.	Sewa Hadji Hospital, Dar-es-Salaam.	Dodoma.	Iringa.	Kahama.	Kigoma.	Kilosa.	Kilwa.	Kondoa-Irangi.	Lindi.	Lushoto.	Mafia.	Mahenge.	Mbulu.
Brought forward ..	2,673	2,465	6,202	1,079	16,532	3,100	5,695	621	1,817	1,718	1,791	4,055	2,478	1,433	347	1,272	1,276
(11) Organs of Locomotion—																	
Osteitis ..	1	13	12	—	4	3	—	—	—	—	13	2	—	—	—	—	—
Arthritis ..	2	—	7	3	20	—	258	—	204	—	45	43	19	—	—	26	—
Bursitis ..	—	—	—	1	—	1	—	—	—	—	—	1	—	1	—	—	—
Myalgia ..	—	63	308	6	—	9	526	20	3	—	58	—	—	—	—	100	—
Lumbago ..	—	4	32	5	—	—	1	24	—	—	—	14	4	3	—	—	—
Rheumatism ..	130	86	53	—	21	21	—	3	—	—	2	285	111	—	11	1	—
Other Diseases ..	34	2	6	20	94	39	1	—	4	8	6	22	13	14	—	1	22
(12) Connective Tissue—																	
Cellulitis ..	4	61	65	4	33	30	13	1	11	1	72	7	95	7	—	4	—
Abscess ..	49	46	55	10	220	57	67	19	42	21	10	36	35	7	3	8	6
Other Diseases ..	—	9	2	12	500	16	—	—	—	3	—	24	—	6	—	—	1
(13) Diseases of Skin—																	
Urticaria ..	1	3	12	1	—	1	3	—	5	3	—	—	—	—	—	1	—
Eczema ..	7	23	24	18	130	31	51	4	7	—	26	39	8	5	8	14	2
Boil ..	33	41	20	11	232	33	79	27	7	16	39	23	3	12	18	33	11
Carbuncle ..	—	—	3	3	—	—	—	—	—	1	1	—	—	1	—	—	5
Herpes ..	—	2	—	1	1	1	2	—	—	—	1	1	1	—	—	2	7
Psoriasis ..	1	2	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—
Oriental Sore ..	—	—	—	—	—	—	—	—	—	—	—	—	9	—	1	2	—
Tinea ..	1	—	8	2	19	5	1	—	3	—	40	19	2	—	3	2	—
Scabies ..	7	40	468	4	355	56	718	53	73	28	136	248	104	40	13	177	197
Acne ..	—	4	—	6	—	—	—	—	1	1	—	—	3	—	—	—	—
Prickly Heat ..	—	4	—	7	4	—	—	—	—	—	—	—	—	—	1	—	—
Ulcer ..	693	942	1,325	11	1,563	347	714	16	194	1,254	624	303	469	252	—	35	261
Other Diseases ..	6	4	—	35	18	33	—	—	3	4	7	57	72	5	—	5	2
(e) Injuries, General ..	—	83	37	42	389	—	4	—	6	—	—	15	—	23	—	—	1
Local ..	427	222	567	78	1,636	520	1,157	190	469	213	285	280	360	264	107	377	230
Carried forward ..	4,069	4,119	9,206	1,359	21,771	4,363	9,290	978	2,849	3,271	3,155	5,474	3,788	2,073	512	2,065	2,021

TABLE XIV.—continued.

RETURN OF DISEASES (IN- AND OUT-PATIENTS) FOR THE YEAR 1924, BY STATIONS—continued.

Disease.	Mikindani.	Morogoro.	Moshi.	Musoma.	Mwanza.	Namanyere.	Pangani.	Shinyanga.	Singida.	Songea.	Tabora.	Tanga.	Tukuyu.	Tunduru.	Ujiji.	Utete.	Total.
Brought forward ..	2,155	2,342	7,425	1,561	4,399	3,001	1,320	1,394	1,344	3,985	4,352	5,553	8,636	854	1,588	6,680	111,143
(11) Organs of Locomotion—																	
Osteitis ..	—	4	1	—	5	44	1	1	1	—	—	2	11	—	—	—	118
Arthritis ..	1	—	4	1	—	—	6	1	—	7	8	141	10	6	6	2	820
Bursitis ..	1	—	—	—	—	—	—	—	—	1	4	220	5	1	—	—	16
Myalgia ..	13	105	91	—	—	—	—	128	—	—	245	220	475	—	—	11	2,381
Lumbago ..	10	—	24	—	—	—	—	—	4	18	11	2	—	—	3	12	175
Rheumatism ..	—	44	34	11	44	85	21	—	14	235	193	—	—	29	87	10	1,531
Other Diseases ..	13	—	26	7	109	—	11	2	30	48	58	29	46	—	—	—	665
(12) Connective Tissue—																	
Cellulitis ..	8	3	56	25	13	53	7	33	15	2	24	169	97	4	6	40	963
Abscess ..	102	39	59	20	81	17	25	29	24	35	54	106	123	8	59	16	1,488
Other Diseases ..	—	1	—	7	80	—	—	—	2	—	13	122	—	—	1	—	799
(13) Diseases of Skin—																	
Urticaria ..	—	—	7	—	3	—	1	1	—	—	4	6	21	—	1	—	74
Eczema ..	2	7	38	11	35	20	17	37	13	—	25	32	96	13	13	11	767
Boil ..	9	10	29	3	44	53	2	33	9	74	61	66	11	3	—	84	1,129
Carbuncle ..	—	—	—	—	—	—	—	—	—	—	5	—	1	1	—	1	21
Herpes ..	—	—	5	—	—	5	—	—	—	—	1	—	2	—	—	3	35
Psoriasis ..	3	—	—	—	—	1	17	—	—	—	3	2	—	—	—	—	30
Oriental Sore ..	—	—	—	—	—	—	10	11	—	—	—	—	—	—	—	—	37
Tinea ..	6	—	4	—	3	24	10	14	—	6	—	13	3	—	—	—	174
Scabies ..	144	60	106	51	122	201	20	259	99	374	66	87	419	39	325	78	5,167
Acne ..	—	—	—	—	—	1	—	—	—	—	—	3	—	—	—	—	19
Prickly Heat ..	—	—	—	—	—	—	—	—	—	—	—	4	—	—	—	2	26
Ulcer ..	802	561	1,643	—	924	307	532	188	322	982	309	1,182	607	468	844	275	18,949
Other Diseases ..	7	—	6	—	30	—	—	11	1	1	11	17	37	4	—	7	383
(e) Injuries, General	—	—	7	—	15	1	—	—	—	78	5	—	—	—	—	13	719
Local ..	352	236	1,138	234	604	467	250	377	294	67	1,413	538	933	146	191	199	14,821
Carried forward ..	3,628	3,412	10,703	1,931	6,511	4,280	2,240	2,519	2,172	5,913	6,867	8,294	11,533	1,576	3,124	7,444	162,450

TABLE XIV.—continued.
RETURN OF DISEASES (IN- AND OUT-PATIENTS) FOR THE YEAR 1924, BY STATIONS—continued.

Disease.	Arusha.	Bagamoyo.	Bukoba.	European Hospital, Dar-es-Salaam.	Sewa Hadji Hospital, Dar-es-Salaam.	Podoma.	Iringa.	Kahama.	Kigoma.	Kilosa.	Kilwa.	Kondea-Irangi.	Lindi.	Lushoto.	Maha.	Mahenge.	Mbulu.
Brought forward	4,069	4,119	9,206	1,359	21,771	4,303	9,290	978	2,849	3,271	3,155	5,474	3,788	2,073	512	2,065	2,021
(f) Tumours	8		17	2	14	14			2			4	1				
Papillomata				1													
Cancer, Breast																	
(g) Malformations	1		1														2
Genu Valgum																	
Torticollis																	
(h) Poisons						2			2		1					1	
Snake Bite	1		7	7					1	2		4		1			
Ptomaine									1								
(i) Parasites, Animal—																	
(1) Protozoa																	
(2) Trematoda (Flukes)																	
(a) Schist. haematobium					13	1					6						
(b) "mansoni				1													
(c) Bilharziasis																	
(3) Cestoda—																	
Taenia Solium		9	90	3	54	14	35		2			20		24		10	
"Saginata	2			2		2			6								
(4) Nematoda—																	
Ascaris	656	6	48		10				1		5	6	3	26			76
Tricocephalus Dispar																	
Filaria (a) m.f. Bancrofti				1	3				6				5				
(i) Elephantiasis of Leg		32			1					1		4	2	1			
(ii) " of Scrotum		6	10		24		1		4			1	1				
(iii) Other		1		1					2		3						
(b) f. medinensis (Guinea Worm)																	
(c) f. loa																	
Strongylus					1				3								
Carried forward	4,737	4,173	9,379	1,377	21,891	4,336	9,326	978	2,879	3,274	3,170	5,513	3,800	2,126	512	2,076	2,099

TABLE XIV.—continued.

RETURN OF DISEASES (IN- AND OUT-PATIENTS) FOR THE YEAR 1924, BY STATIONS—continued.

Disease.	Mikindani.	Morogoro.	Moshi.	Musoma.	Mwanza.	Namanyere.	Pangani.	Shinyanga.	Singida.	Songea.	Tabora.	Tanga.	Tukuyu.	Tunduru.	Ujiji.	Utete.	Total.
Brought forward ..	3,628	3,412	10,703	1,931	6,511	4,280	2,240	2,519	2,172	5,913	6,867	8,294	11,533	1,576	3,124	7,444	162,450
(f) Tumours ..	—	4	21	1	17	3	2	1	2	5	13	7	32	—	1	—	171
Papillomata ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1
Cancer, Breast ..	—	—	2	—	—	—	—	—	—	—	—	—	—	—	—	—	2
(g) Malformations ..	—	—	1	—	2	—	—	—	—	—	1	—	—	—	—	—	8
Genu Valgum ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Torticollis ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
(h) Poisons ..	—	1	—	—	3	—	—	—	—	—	16	2	1	—	—	—	36
Snake Bite ..	—	1	—	1	1	3	—	—	—	—	—	1	—	—	—	16	39
Ptomaine ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1
(i) Parasites, Animal ..	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	1
(1) Protozoa ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
(2) Trematoda (Flukes) ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
(a) Schist. hematobium ..	—	—	—	1	—	5	2	5	—	—	—	107	42	—	—	—	182
(b) " mansoni ..	—	—	—	1	2	2	—	—	—	—	—	—	—	—	—	—	6
(c) Bilharziasis ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	33
(3) Cestoda—	33	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Tænia Solium ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	182
" Saginata ..	—	8	540	3	1	—	—	—	19	11	4	16	120	4	—	16	833
(4) Nematoda—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Ascaris ..	—	—	200	—	—	8	2	—	—	—	2	—	21	26	—	—	1,096
Trichocephalus Dispar ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Filaria (a) m.f. Bancrofti ..	—	—	—	—	—	—	—	—	—	—	—	—	—	19	—	—	34
(i) Elephantiasis of Leg ..	—	1	1	1	10	1	9	4	2	1	3	7	2	—	—	—	87
(ii) " of Scrotum ..	—	—	—	1	35	—	3	2	3	—	15	18	—	—	—	2	127
(iii) Other ..	—	—	—	—	6	—	—	1	2	—	3	1	3	—	—	—	19
(b) f. medinensis (Guinea Worm) ..	—	—	—	—	2	—	—	—	—	—	—	—	—	—	—	—	2
(c) f. loa ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strongylus ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4
Carried forward ..	3,661	3,427	11,468	1,940	6,590	4,302	2,259	2,532	2,200	5,930	6,924	8,453	11,754	1,625	3,125	7,478	165,314

TABLE XIV.—continued.

RETURN OF DISEASES (IN- AND OUT-PATIENTS) FOR THE YEAR 1924, BY STATIONS—continued.

Disease.	Arusha.	Bagamoyo.	Bukoba.	European Hospital, Dar-es-Salaam.	Sewa Hadji Hospital, Dar-es-Salaam.	Dodoma.	Iringa.	Kahama.	Kigoma.	Kilosa.	Kilwa.	Kondoa-Irangi.	Lindi.	Lushoto.	Maha.	Mahenge.	Mbuni.
Brought forward	4,737	4,173	9,379	1,377	21,891	4,336	9,326	978	2,879	3,274	3,170	5,513	3,800	2,126	512	2,076	2,099
Ankylostomiasis	12	213	—	9	233	5	1	5	19	206	200	68	7	10	—	2	—
Oxyuris	—	—	4	—	—	—	—	—	—	1	—	—	—	—	—	—	—
(5) Insecta—																	
Myiasis	1	—	—	7	2	—	—	—	—	—	1	—	—	—	—	—	—
Jigger (T. penetrans)	7	128	—	2	52	24	72	1	6	1	61	6	12	1	—	3	26
Scorpion's Sting	—	—	—	—	—	—	—	2	—	—	—	—	—	—	—	—	—
Insect Bite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
TOTAL	4,757	4,514	9,383	1,395	22,178	4,365	9,399	986	2,904	3,482	3,432	5,587	3,819	2,137	512	2,081	2,125

TABLE XIV.—*continued.*RETURN OF DISEASES (IN- AND OUT-PATIENTS) FOR THE YEAR 1924, BY STATIONS—*continued.*

Disease.	Mikindani.	Morogoro.	Moshi.	Musoma.	Mwanza.	Namanyere.	Pangani.	Shinyanga.	Singida.	Songea.	Tabora.	Tanga.	Tukuyu.	Tunduru.	Ujiji.	Utete.	TOTAL.
Brought forward ..	3,661	3,427	11,468	1,940	6,590	4,302	2,259	2,532	2,200	5,930	6,924	8,453	11,754	1,625	3,125	7,478	165,314
Ankylostomiasis ..	30	79	43	13	—	27	357	1	—	5	5	1,370	—	11	—	43	2,974
Oxyuris ..	2	—	—	—	—	—	—	—	—	—	—	1	1	—	—	—	9
(5) Insecta ..	—	—	—	—	3	—	—	—	—	—	—	—	—	—	—	—	3
Myiasis ..	—	1	1	—	—	—	1	—	—	—	4	7	—	—	—	—	25
Jigger (T. penetrans) ..	94	—	8	—	2	—	86	—	—	—	4	12	22	—	75	—	705
Scorpion's Sting ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2
Insect Bite ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
TOTAL ..	3,787	3,507	11,520	1,953	6,595	4,329	2,703	2,533	2,200	5,935	6,937	9,843	11,777	1,636	3,200	7,521	169,032

TABLE XV.
SURGICAL OPERATIONS, 1924.

	Total.	Successful.	Improved.	Unsuccessful.	Died.	Remaining.	Remarks.
Abscess ..	74	74	—	—	—	—	
Alveolar ..	1	1	—	—	—	—	
" Breast ..	5	5	—	—	—	—	
" Extraperitoneal ..	1	1	—	—	—	—	
" Ischio-Rectal ..	5	5	—	—	—	—	
" Liver ..	4	3	—	—	1	—	Opened and drained. One case was operated on twice.
" Mastoid ..	4	2	—	—	—	2	
" Periuethral ..	3	3	—	—	—	—	
" Perineal ..	1	1	—	—	—	—	
" Psoas ..	1	1	—	—	—	—	
" Subphrenic ..	1	1	—	—	—	—	
" Other situations ..	26	26	—	—	—	—	
Adhesion of Joints ..	1	1	—	—	—	—	
Amputations—							
Finger ..	19	19	—	—	—	—	The majority of amputations were for gangrene following injuries.
Hand ..	1	1	—	—	—	—	One for a supernumerary digit.
Forearm ..	1	1	—	—	—	—	
Arm ..	6	6	—	—	—	—	
Toe ..	8	8	—	—	—	—	
Foot ..	3	3	—	—	—	—	
Leg ..	9	9	—	—	—	—	One Neurosis of Tibia.
Thigh ..	4	3	—	—	1	—	
Anthrotomy ..	1	1	—	—	—	—	
Ankle ..	1	—	—	1	—	—	Invalided.
Wrist Joint ..	1	—	1	—	—	—	
Elbow ..	2	1	1	—	—	—	
Knee ..	1	1	—	—	—	—	
Carbuncle ..	1	1	—	—	—	—	
Curettage ..	9	9	—	—	—	—	
Cyst, Hypoglossal ..	1	1	—	—	—	—	
" Dermoid ..	1	1	—	—	—	—	
" Other situations ..	5	5	—	—	—	—	
Carried forward	201	194	2	1	2	2	

TABLE XV.—*continued.*
SURGICAL OPERATIONS, 1924—*continued.*

	Total.	Successful.	Improved.	Unsuccessful.	Died.	Remaining.	Remarks.
Brought forward	489	475	3	1	7	3	
Hæmatoma	1	1	—	—	—	—	
Hæmatocele, Excision of Sac ..	5	5	—	—	—	—	
Hernia Inguinal, Radical Cure ..	56	53	—	—	3	—	One died of Pneumonia, one Malignant Growth of Liver, one Peritonitis.
" " Reduction	1	1	—	—	—	—	
" " Strangulated	5	2	—	—	3	—	Two strangulated Gangrenous Hernia with artificial anus—both died. Strangulated Hernia of Cæcum and Appendix—Appendix removed and Hernia reduced.
" Ventral	1	1	—	—	—	—	
Hydroceles, Tapping	3	—	3	—	—	—	
" " Radical Cure	79	79	—	—	—	—	
" " Ingrowing Toenail	1	1	—	—	—	—	
Laparotomy, Exploratory	1	1	—	—	—	—	
" " for Ovaritis	1	1	—	—	—	—	
" " Tubercular Peritonitis ..	1	1	—	—	—	—	
" " for Neoplasm	4	4	—	—	—	—	
" " Gastric Ulcer	1	—	—	—	1	—	Pus drained. One Tumour attached region of Pancreas and contained material sebaceous in character. One invalided for Inoperable Tumour of Pylorus. One Cystic Tumour connected with Liver. One Ovarian Cyst. One Ruptured Gastric Ulcer, died.
Laparotomy for Wounds	1	1	—	—	—	—	
Lumbar Puncture	1	1	—	—	—	—	
Mastitis Schwartz Operation ..	1	1	—	—	—	—	
Minor Operations	44	44	—	—	—	—	
Neoplasms, Excision, Epithelioma ..	1	1	—	—	—	—	One of Lip.
" " Fibroma	11	11	—	—	—	—	
" " Fibrochondroma, Neck ..	1	1	—	—	—	—	
" " Sarcoma	3	3	—	—	—	—	
" " Melanotic Sarcoma	1	1	—	—	—	—	
" " Malignant, involving Scrotum ..	1	—	1	—	—	—	Eye excised in two cases for recurrent Sarcoma. One, a child, died nine months later.
Carried forward	714	689	7	1	14	3	

TABLE XV.—*continued.*SURGICAL OPERATIONS, 1924.—*continued.*

	Total.	Successful.	Improved.	Unsuccessful.	Died.	Remaining.	Remarks.
Brought forward	714	689	7	1	14	3	
Neoplasms, Excision, Lipoma ..	7	7	—	—	—	—	
" " Bursa of Knee ..	1	1	—	—	—	—	
" " Other forms ..	20	20	—	—	—	—	One Malignant Tumour, L. Male Breast. Others were mostly for Keloids.
Necrosis of Bone, Tibia ..	2	2	—	—	—	—	
" " Femur ..	2	2	—	—	—	—	
Paracentesis Abdominis ..	6	—	6	—	—	—	Laparotomy and Drainage.
Pyosalpinx ..	1	1	—	—	—	—	Old Gunshot Wound.
Resection, Clavicle ..	1	1	—	—	—	—	Incision and Drainage.
Suppuration of Knee ..	1	1	—	—	—	—	
Sequestrectomy ..	2	2	—	—	—	—	
" Metacarpus ..	1	1	—	—	—	—	
" Metatarsus ..	1	1	—	—	—	—	
" Superior Maxilla ..	1	1	—	—	—	—	
" Tibia ..	5	5	—	—	—	—	
" Osalsis ..	2	2	—	—	—	—	
" Urethra, Dilatation ..	41	41	—	—	—	—	One Urinary Fistula stitched; four with Extravasation. No less than 38 cases recorded for the Bukoba district.
" " External Urethrotomy ..	2	2	—	—	—	—	
Tenotomy ..	1	1	—	—	—	—	Double Congenital Talipes Equinus-Varus.
Ulcers, Curetting ..	70	70	—	—	—	—	Chiefly for Callous Ulcers.
" Grafts ..	1	1	—	—	—	—	Leg.
Wounds ..	30	28	—	—	2	—	One required suture of Tendo-Achillis; one, cut throat, died; one due to crocodile bite; one due to leopard bite; four required removal of foreign bodies.
" " Extension of Abdominal Viscera ..	1	1	—	—	—	—	Exploration and suture.
" " Arrow-head embedded in L. Temporal Region.	1	1	—	—	—	—	Removed.
" Right Lung ..	1	—	—	—	1	—	Stab wound.
GRAND TOTAL ..	915	881	13	1	17	3	

APPENDIX I.

GOVERNMENT DENTAL SURGEON'S REPORT FOR 1924, BY H. M. FISHER, ESQ., L.D.S., R.C.S.

The writer returned from leave on January 4th, 1924, from that date to the end of the year the following dental operations were performed, the list below refers to the European Officials and their families only of the Territory.

Attendances	..	..	..	..	1,440
Fillings, crowns, etc.	..	..	..	..	616
Extractions	..	..	..	..	371
Pulp treatment	..	..	..	..	89
Scaling, etc.	..	..	..	..	118
Dentures	..	..	..	..	42
Repairs to dentures	..	..	..	..	57

Comparing this list with those of previous years, it will be seen that the work has increased considerably. Mechanical work occupies a great deal of the writer's time; much time out of Official hours has been spent in doing it.

Eighty-four days were spent in travelling and visiting out-stations, the following were visited :—

In May	..	..	..	Tanga, Lushoto
June	..	..	..	Arusha, Moshi
August	..	..	..	Dodoma, Kigoma, Tabora
September	..	..	..	Mwanza
October	..	..	..	Zanzibar

A number of Zanzibar Officials have attended here for treatment during the year, the list below shows the work done for them here, and during the visit to Zanzibar :—

Attendances	..	..	..	..	70
Fillings	..	..	..	..	46
Extractions	..	..	..	..	9
Pulp treatment	..	..	..	..	11
Scalings	..	..	..	..	17
Repairs to dentures	..	..	..	..	3

The Asiatic Officials have been treated on those occasions on which they have presented themselves for treatment.

A number of natives from the K.A.R., Police and various Government Departments have been treated and also some of the native population.

About fifty children from the School have been attended to, and also some of the children from the K.A.R. lines, although most of the work for these children consisted of extractions and scalings, some conservative work was done for them.

It will be seen from the Government Dentist's report that a great increase in the work has taken place since his first report for the year 1921.

	1921.	1924.
Attendances	.. .. 580	1,440
Fillings, crowns, etc.	.. .. 278	616
Extractions	.. .. 189	371
Scaling, etc.	.. .. 90	118
Pulp Treatment	.. .. 53	89
Dentures	.. .. 36	42
Repairs to Dentures	.. .. 40	57

A gratifying feature to which I attach importance is the attention that has been given to dental work in connection with African schoolboys and children generally. In order to provide better facility for both the European communities, at Dar-es-Salaam and Zanzibar, and the African native, an assistant dental surgeon has been asked for in the estimates for 1925-26.

J. O. S.

APPENDIX II.
REPORT ON PRISONS BY STATIONS.

	Arusha.	Bagamoyo.	Bukoba.
1. Number of Prisoners in Prison on 31/12/23	49	44	135
2. Number of Persons committed to Prison during 1924	277	191	412
3. Number of Prisoners in Prison on 31/12/24	84	19	112
4. Daily average number of Prisoners, 1924	36	32	117
5. Number admitted to Prison Sick-bay, 1924	—	11	—
6. Number admitted to Native Hospital, 1924	93	1	96
7. Daily average on Sick List ..	2.6	1.8	21
8. Number of Deaths of Prisoners, 1924	1	Nil	3
9. (a) Cause of Death in each case (i) ..	Mediastinal-Tumour Fibroma	—	Phthisis
(ii) ..	—	—	Dysentery
(iii) ..	—	—	Gonorrhœal Cystitis
(iv) ..	—	—	—
(v) ..	—	—	—
(vi) ..	—	—	—
(vii) ..	—	—	—
(viii) ..	—	—	—
(ix) ..	—	—	—
(x) ..	—	—	—
(xi) ..	—	—	—
(xii) ..	—	—	—
(xiii) ..	—	—	—
(xiv) ..	—	—	—
9. (b) Period of detention in Prison prior to date of Death (i) ..	252 days	Nil	—
(ii) ..	—	—	—
(iii) ..	—	—	—
(iv) ..	—	—	—
(v) ..	—	—	—
(vi) ..	—	—	—
(vii) ..	—	—	—
(viii) ..	—	—	—
(ix) ..	—	—	—
(x) ..	—	—	—
(xi) ..	—	—	—
(xii) ..	—	—	—
(xiii) ..	—	—	—
(xiv) ..	—	—	—

APPENDIX II.—*continued.*
REPORT ON PRISONS BY STATIONS—*continued.*

	Arusha.	Bagamoyo.	Bukoba.
10. Prisoners released on medical grounds, 1924. Cause of release in each instance	Nil	Nil	—
11. System of confinement—Association Cells (A.C.) or Single Cells (S.C.)	A.C.	A.C.	A.C. & S.C.
12. Cubic space available at night per Prisoner, taking average number	320 cub. ft.	468.8 cub. ft.	—
13. Floor space in square feet per Prisoner, taking average number of Prisoners	28 sq. ft.	39.4 sq. ft.	—
14. Labour on which Prisoners are employed, and hours of work ..	Wood cutting, mending roads, sanitary work in gaol, water carrying, from 6 a.m. to 5 p.m. Sat., 6 a.m. to 12 a.m. No work on Sundays. Break of one hour each mid-day.	Road making, wood cutting, white washing, agricultural work, sewing clothes, etc., 6 a.m. to 12 noon, and 2 p.m. to 4 p.m.	—
15. Sanitary condition of Prison ..	Very good	Very good	—
16. Are floors of Cells cemented? ..	In course of construction	Yes	—
17. Prevailing Diseases	Bronchitis 11 cases, Influenza 11 cases, Bronchial catarrh 4 cases, Dysentery (amoebic) 1 case, Diarrhoea 15, Colic 6, Malaria B.T. 3, and Ulcer 4.	Malaria, ulcers, etc.	—
18. Rules as to diet and hours of meals. What variety is provided—green food? meat?	According to Prison Ordinance.	5.30 a.m., 12.30 p.m., 4.30 p.m., mealie-meal, beans, mtama, mohogo, ghee, salt, fish, sometimes green vegetables.	—

APPENDIX II—*continued.*
REPORT ON PRISONS BY STATIONS—*continued.*

	Arusha.	Bagamoyo.	Bukoba.
19. Vaccinations : number vaccinated, 1924	102	12	—
Results—Successful	47	5	—
Modified	—	3	—
Failures	55	4	—
Number excused vaccination on account of previous small-pox or successful recent vaccination	—	—	—
Number not protected against small-pox	—	—	—
20. Infective Diseases : number of cases of	—	Nil.	—
Chicken-pox	1, Death nil.	—	—
Dysentery	1 (amœbic), Death nil.	—	—
Influenza	11, Deaths nil.	—	—
Other	—	—	—
21. Insect and other Pests in Prison—			
Lice	There have been no complaints as to	Nil.	—
Bugs	Lice, Bugs, etc.	—	—
Fleas	—	—	—
Ornithodoros Moubata ..	—	—	—
Rats	Rats and mice	—	—
Mice	fairly numerous.	—	—
22. Suggestions by Medical Officer in charge as to improvements required, and date when made ..	—	Nil.	—
(a) Accommodation, ventilation, etc.	Nil.	—	—
(b) Diet	—	—	—
(c) Sanitation	Nil.	Nil.	—
(d) Other matters	Nil.	—	—
23. Action taken by Prison Authorities as a result of 22 (a)	Carried out, viz., Medical Returns for 1923.	Nil.	—
(b)	—	—	—
(c)	—	—	—
(d)	—	—	—
24. What sanitary arrangements are there in the cells for use at night ?	Sanitation buckets in each cell at night.	Latrine bucket for each cell for night soil.	—
25. Is drinking water provided for use at night ?	Yes.	Yes.	—
26. Is there a weight register, and is it up to date ?	Yes.	Yes.	—
27. What number of blankets is provided for each Prisoner ?	Three.	One blanket and one mat.	—
Is the clothing sufficient ? ..	Yes.	Yes.	—
28. Further remarks and suggestions..	Nil.	Nil.	—

APPENDIX II—*continued.*
REPORT ON PRISONS BY STATIONS—*continued.*

	Dar-es-Salaam.	Dodoma.	Iringa.
1. Number of Prisoners in Prison on 31/12/23	146	79	57
2. Number of Persons committed to Prison during 1924	940	366	280
3. Number of Prisoners in Prison on 31/12/24	197	120	40
4. Daily average number of Prisoners, 1924	208	92.6	39.33
5. Number admitted to Prison Sick-bay, 1924	126	160	—
6. Number admitted to Native Hospital, 1924	54 (Included 10 to Isolation Hospital)	—	2
7. Daily average on Sick List ..	7	3.90	0.04
8. Number of Deaths of Prisoners, 1924	6	Nil.	Nil.
9. (a) Cause of Death in each case (i) ..	Ankylostomiasis & Heart Failure.	—	—
(ii) ..	Ankylostomiasis.	—	—
(iii) ..	Ankylostomiasis II Filariasis.	—	—
(iv) ..	Chronic Bronchitis.	—	—
(v) ..	Ankylostomiasis & Heart Failure.	—	—
(vi) ..	Dysentery, Ankylostomiasis & Heart Failure.	—	—
(vii) ..	—	—	—
(viii) ..	—	—	—
(ix) ..	—	—	—
(x) ..	—	—	—
(xi) ..	—	—	—
(xii) ..	—	—	—
(xiii) ..	—	—	—
(xiv) ..	—	—	—
9. (b) Period of detention in Prison prior to date of death (i) ..	1 year, 23 days.	—	—
(ii) ..	1 yr., 7 mths., 3 days	—	—
(iii) ..	3 yrs., 6 mths., 5 days	—	—
(iv) ..	7 mths., 10 days.	—	—
(v) ..	1 yr., 4 mths., 23 days	—	—
(vi) ..	6 mths., 23 days.	—	—
(vii) ..	—	—	—
(viii) ..	—	—	—
(ix) ..	—	—	—
(x) ..	—	—	—
(xi) ..	—	—	—
(xii) ..	—	—	—
(xiii) ..	—	—	—
(xiv) ..	—	—	—
10. Prisoners released on medical grounds, 1924. Cause of release in each instance	2	1	Nil.

APPENDIX II—*continued.*REPORT ON PRISONS BY STATIONS—*continued.*

	Dar-es-Salaam.	Dodoma.	Iringa.
11. System of confinement—Association Cells (A.C.) or Single Cells (S.C.)	With exception of 2 cells for solitary confinement, all are Association Wards.	A. Wards.	Separate system.
12. Cubic space available at night per Prisoner, taking average number	500 cub. ft.	360 cub. ft.	784 cub. ft.
13. Floor space in square feet per Prisoner, taking average number of Prisoners	—	38.63 sq. ft.	60 sq. ft.
14. Labour on which Prisoners are employed, and hours of work	Wood cutting, tailoring, carpentry, stone quarrying, mat-weaving, 6.30 a.m. to 12 noon, 1 p.m. to 4 p.m. Saturday 6.30 a.m. to 12 noon.	Township improvements, erection of buildings, lime burning & carrying water and firewood.	Prison shamba work, cutting firewood and cooking, 6.30 a.m. to 12 noon, 1 p.m. to 4 p.m.
15. Sanitary condition of Prison ..	Good.	Good.	Good.
16. Are floors of Cells cemented? ..	Yes.	Yes.	Yes.
17. Prevailing Diseases	Bronchial catarrh, Malaria, superficial cuts, and Venereal.	Malaria, Diarrhoea and Cough.	Bronchial catarrh, Malaria, & Injuries.
18. Rules as to diet and hours of meals. What variety is provided—green food? meat?	3 meals daily in accordance with Prison Regulations—6 a.m., 12 noon, 5 p.m.—maize, meal, mtama, sweet potatoes, meat (long term prisoners).	Mon., Wed., Fri., Sat.—Morning, ugali; noon, mtama, meal, with beans & ghee; evening ditto. Tues., Thurs., Sun.—Morning, mohogo; noon, beans, with ghee; evening, mohogo, with meat and green vegetables.	Rice and beans are given daily, besides mealie-meal, mohogo and salt. Meat 3 times a week. For long term prisoners ghee every day or meat. Green vegetables are supplied when available. Hours of meals, 6 a.m., 12 noon, and 5 p.m.
19. Vaccinations: number vaccinated, 1924	Nil.	437	280
Results—Successful	—	350	118
Modified	—	87	141
Failures	—	—	21
Number excused vaccination on account of previous small-pox or successful recent vaccination	Nil.	—	—
Number not protected against small-pox	Nil.	—	—

APPENDIX II.—*continued.*
REPORT ON PRISONS BY STATIONS—*continued.*

	Dar-es-Salaam.	Dodoma.	Iringa.
20. Infective Diseases, Number of cases of	—	—	Nil.
Chicken-pox	—	—	—
Dysentery	—	3 (Amœbic)	—
Influenza	—	—	—
Other	10 cases admitted to Isolation Hospital suffering from Mumps.	Pneumonia 6, Gonorrhœa 3, Syphilis II 2, T.B. Lungs 2, and Yaws 3.	—
21. Insect and other Pests in Prison —			
Lice	No.	—	No.
Bugs	—	—	—
Fleas	—	—	—
Ornithodoros Moubata ..	—	—	—
Rats	—	—	—
Mice	—	—	—
22. Suggestions by Medical Officer in charge as to improvements required, and date when made	—	—	Nil.
(a) Accommodation, ventilation, etc.	—	—	—
(b) Diet	—	—	—
(c) Sanitation	Straw under roof of cutting room recommended to be taken away.	—	—
(d) Other matters	—	—	—
23. Action taken by Prison Authorities as a result of 22—(a) ..	—	—	Nil.
(b)	—	—	—
(c)	Carried out.	—	—
(d)	—	—	—
24. What sanitary arrangements are there in the Cells for use at night ?	Latrine buckets are placed in wards & cells every night.	Urine drums and pans.	Buckets.
25. Is drinking water provided for use at night ?	Yes.	Yes.	Yes.
26. Is there a weight register, and is it up to date ?	Yes.	Yes.	Yes.
27. What number of blankets is provided for each Prisoner ?	One blanket, one sleeping mat.	One blanket and cocoanut matting, which is insufficient in cold seasons, should be provided with 2 each in the night time.	One; and, in certain cases, two.
Is the clothing sufficient ? ..	Yes.	—	Yes.
28. Further remarks and suggestions. .	—	I have usually found convicts in dirty clothing on account of insufficient supply of soap.	Nil.

APPENDIX II.—*continued.*
REPORT ON PRISONS BY STATIONS—*continued.*

	Kahama.	Kigoma.	Kilosa.
1. Number of Prisoners in Prison on 31/12/23	—	362	8
2. Number of Persons committed to Prison during 1924	76	260	309
3. Number of Prisoners in Prison on 31/12/24	20	105	9
4. Daily average number of Prisoners, 1924	17·3	87·56	10.
5. Number admitted to Prison Sick-bay, 1924	—	45	Nil.
6. Number admitted to Native Hospital, 1924	—	5	1
7. Daily average on Sick List ..	0·3	1·49	0·001
8. Number of Deaths of Prisoners, 1924	Nil.	—	Nil.
9. (a) Cause of Death in each case (i) ..	—	—	—
(ii) ..	—	—	—
(iii) ..	—	—	—
(iv) ..	—	—	—
(v) ..	—	—	—
(vi) ..	—	—	—
(vii) ..	—	—	—
(viii) ..	—	—	—
(ix) ..	—	—	—
(x) ..	—	—	—
(xi) ..	—	—	—
(xii) ..	—	—	—
(xiii) ..	—	—	—
(xiv) ..	—	—	—
9. (b) Period of detention in Prison prior to date of death (i) ..	—	—	Nil.
(ii) ..	—	—	—
(iii) ..	—	—	—
(iv) ..	—	—	—
(v) ..	—	—	—
(vi) ..	—	—	—
(vii) ..	—	—	—
(viii) ..	—	—	—
(ix) ..	—	—	—
(x) ..	—	—	—
(xi) ..	—	—	—
(xii) ..	—	—	—
(xiii) ..	—	—	—
(xiv) ..	—	—	—
10. Prisoners released on medical grounds, 1924. Cause of release in each instance	Nil.	—	Nil.
11. System of confinement—Association Cells (A.C.) or Single Cells (S.C.)	A.C., women and juveniles occupy separate cells.	A.C.	A.C.
12. Cubic space available at night per Prisoner, taking average number	650 cub. ft.	498·22 cub. ft.	449 cub. ft.

APPENDIX II.—*continued.*
REPORT ON PRISONS BY STATIONS—*continued.*

	Kahama.	Kigoma.	Kilosa.
13. Floor space in square feet per Prisoner, taking average number of Prisoners	50 sq. ft.	55 sq. ft.	60 sq. ft.
14. Labour on which Prisoners are employed, and hours of work	Supplying prison with wood & water. Repairs to the jails, etc. Cleaning roads in township, and sanitary labour generally.	Wood cutting, road making, sanitary work, township improvements, grass and bush cutting, upkeep of station. Hours, 6.30 to noon and 1 p.m. to 4 p.m.	Carrying wood and water for European Officials, & clearing grass, etc., from 6.30 a.m. to 12 noon and 1 p.m. to 4 p.m.
15. Sanitary condition of Prison ..	Good.	Good.	Good.
16. Are floors of Cells cemented? ..	No.	Yes, completed this year.	Yes.
17. Prevailing Diseases	Slight malarial attacks.	Malaria, Bronchitis, Injuries, Coughs, Constipation, Scabies, rheumatic pains in joints and muscles, and Digestive derangements.	Nil.
18. Rules as to diet and hours of meals. What variety is provided—green food? meat?	3 meals per day—6.30 a.m., 12 noon, 6 p.m. Food issued in accordance with dietary scale laid down for all prisoners.	3 meals per day—6 a.m., 12 noon, 4.30 p.m. Diets are changed on Tues., Thurs., and Suns. Mealie-meal, manioc flour, germinated beans, Uncooked manioc, sweet potatoes, salt and limejuice. Machicha (native spinach), recommended and provided. Meat, long-term prisoners $\frac{1}{2}$ lb. twice a week, short-term prisoners none.	$\frac{1}{2}$ lb. of maize, $\frac{1}{2}$ lb. of mealie meal, and $\frac{1}{2}$ lb. of beans and $\frac{1}{4}$ oz. salt, maize and mtama issued alternative days. No meat is given. One cocoanut per head per week.
19. Vaccinations: number vaccinated, 1924	Nil.	179	65
Results—Successful	—	84%	45
Modified	—	5%	8
Failures	—	11%	12
Number excused vaccination on account of previous small-pox or successful recent vaccination	N.A.	128	179
Number not protected against small-pox	N.A.	—	Nil.
20. Infective Diseases, Number of cases of	Nil.	—	—
Chicken-pox	—	—	—
Dysentery	—	—	—
Influenza	—	3	—
Other	—	Syphilis 3, Yaws 2, and Pyogen, Abscess 1.	—

APPENDIX II.—*continued.*
REPORT ON PRISONS BY STATIONS—*continued.*

	Kahama.	Kigoma.	Kilosa.
21. Insect and other Pests in Prison—			
Lice	No.	Lice, bugs & fleas, which are occasionally present, are dealt with in clothing by washing, boiling, & frequent exposing to sun; in cells by swamping of the floor with water and Jeyes and whitewashing. The heads & bodies are regularly shaved. Lower portion of the walls are painted with coal tar.	Bugs only; walls are washed with disinfectant.
Bugs			
Fleas			
Ornithodorus Moubata ..			
Rats			
Mice			
22. Suggestions by Medical Officer in charge as to improvements required, and date when made	Everything satisfactory; nothing for suggestion.	Additional accommodation & ventilation *has been recommended, and has been completed.	Nil.
(a) Accommodation, ventilation, etc.	—	—	—
(b) Diet	—	The regular setting of mice traps, January, 1924.	—
(c) Sanitation	—	Additional drains and soakage pit, January, 1924.	—
(d) Other matters	—	—	—
23. Action taken by Prison Authorities as a result of 22—(a) ..	—	Taken.	Nil.
(b)	—	Taken.	—
(c)	—	Taken.	—
(d)	—	—	—
24. What sanitary arrangements are there in the Cells for use at night?	Ample for purposes of relieving nature.	Sufficient buckets in each cell.	Soil bin is placed in each occupied cell at night.
25. Is drinking water provided for use at night?	Yes.	Yes.	Yes.
26. Is there a weight register, and is it up to date?	No weight register is kept.	Yes.	No.
27. What number of blankets is provided for each Prisoner? ..	One.	One.	One blanket per prisoner.
Is the clothing sufficient? ..	Yes.	Yes.	Yes.
28. Further remarks and suggestions..	Nil.	A large jail should be built at Kigoma, in order to give this township the benefit of prison labour, and thereby improve the sanitation of Kigoma, which has a big European & Asiatic population, out of all comparison to Ujiji.	The roofs of the prison may be raised to the height of 12 to 15 ft. if possible and practicable. (2) The register of diet and nominal roll and register of daily labour should be kept in the jail.

APPENDIX II.—*continued.*
REPORT ON PRISONS BY STATIONS—*continued.*

	Kilwa.	Kondea-Irangi.	Lindi.
1. Number of Prisoners in Prison on 31/12/23	28	46	50
2. Number of Persons committed to Prison during 1924	176	79	264
3. Number of Prisoners in Prison on 31/12/24	25	33	50
4. Daily average number of Prisoners, 1924	30	30·4	47·06
5. Number admitted to Prison Sick- bay, 1924	Nil.	—	50
6. Number admitted to Native Hos- pital, 1924	3.	170	44
7. Daily average on Sick List ..	2	3·7	10·3
8. Number of Deaths of Prisoners, 1924	Nil.	1	2
9. (a) Cause of Death in each case (i) ..	—	Lobar-Pneumonia.	Anæmia.
(ii) ..	—	—	Mania.
(iii) ..	—	—	—
(iv) ..	—	—	—
(v) ..	—	—	—
(vi) ..	—	—	—
(vii) ..	—	—	—
(viii) ..	—	—	—
(ix) ..	—	—	—
(x) ..	—	—	—
(xi) ..	—	—	—
(xii) ..	—	—	—
(xiii) ..	—	—	—
(xiv) ..	—	—	—
9. (b) Period of detention in Prison prior to date of death (i) ..	Nil.	—	22/2/24 to 1/3/24.
(ii) ..	—	—	26/8/23 to 9/1/24.
(iii) ..	—	—	—
(iv) ..	—	—	—
(v) ..	—	—	—
(vi) ..	—	—	—
(vii) ..	—	—	—
(viii) ..	—	—	—
(ix) ..	—	—	—
(x) ..	—	—	—
(xi) ..	—	—	—
(xii) ..	—	—	—
(xiii) ..	—	—	—
(xiv) ..	—	—	—

APPENDIX II.—*continued.*
REPORT ON PRISONS BY STATIONS—*continued.*

	Kilwa.	Kondoa-Irangi.	Lindi.
10. Prisoners released on medical grounds, 1924. Cause of release in each instance	Nil.	1	Nil.
11. System of confinement—Association Cells (A.C.) or Single Cells (S.C.)	A.C.	A.C.	A.C.
12. Cubic space available at night per Prisoner, taking average number	643 cub. ft.	—	844 cub. ft.
13. Floor space in square feet per Prisoner, taking average number of Prisoners	75 sq. ft.	—	61 sq. ft.
14. Labour on which Prisoners are employed, and hours of work	Prison shamba station and town improvements, wood cutting, lime burning, and roads, from 6 a.m. to 12 noon, and 2 p.m. to 4.30 p.m.	—	Tailoring, grass and wood cutting, building operations.
15. Sanitary condition of Prison ..	Good.	—	Satisfactory.
16. Are floors of Cells cemented ? ..	Yes.	Yes.	Yes.
17. Prevailing Diseases	Malaria, Bronchitis, and minor injuries.	—	Malaria, Influenza, Iritis, Bronchitis, Conjunctivitis, Diarrhoea, Ulcers & Constipation.
18. Rules as to diet and hours of meals. What variety is provided—green food ? meat ?	As per Prison Ordinance of 1921—3 meals a day at regular hours. Green food and fish are provided. Meat not available at Kilwa.	—	3 per diem—6 a.m., 12 noon, 5.30 p.m. Meat, nil; mealie-meal, fish, ghee, limes, mohogo.
19. Vaccinations : number vaccinated, 1924	Nil.	—	97
Results—Successful	—	—	—
Modified	—	—	—
Failures	—	—	—
Number excused vaccination on account of previous small-pox or successful recent vaccination	202	—	All prisoners vaccinated on admission if not previously protected.
Number not protected against small-pox	—	—	—

APPENDIX II.—*continued.*
REPORT ON PRISONS BY STATIONS—*continued.*

	Kilwa.	Kondoa-Irangi.	Lindi.
20. Infective Diseases, Number of cases of	Nil.	—	—
Chicken-pox	—	—	—
Dysentery	—	—	—
Influenza	—	—	51
Other	—	—	—
21. Insect and other Pests in Prison—			
Lice	Nil.	—	No.
Bugs	—	—	—
Fleas	—	—	—
Ornithodorus Moubata ..	—	—	—
Rats	—	—	—
Mice	—	—	—
22. Suggestions by Medical Officer in charge as to improvements required, and date when made	Nil.	—	Relaying floor and cementing walls of cells.
(a) Accommodation, ventilation, etc.	—	—	—
(b) Diet	Nil.	—	—
(c) Sanitation	Nil.	—	—
(d) Other matters	Nil.	—	—
23. Action taken by Prison Authorities as a result of 22—(a) ..	Nil.	General improvements effected during the year.	These are in process of completion.
(b)	—	—	—
(c)	—	—	—
(d)	—	—	—
24. What sanitary arrangements are there in the Cells for use at night?	There are sanitary arrangements in the cells for use at night.	—	Latrine is at hand.
25. Is drinking water provided for use at night?	Yes.	—	Yes.
26. Is there a weight register, and is it up to date?	Yes.	—	No.
27. What number of blankets is provided for each Prisoner? ..	One blanket and sleeping mat.	—	One, and ground sheet.
Is the clothing sufficient? ..	Yes.	—	Yes.
28. Further remarks and suggestions..	Nil.	—	—

APPENDIX II.—*continued.*
REPORT ON PRISONS BY STATIONS—*continued.*

	Lushoto.	Mafia.	Mahenge.
1. Number of Prisoners in Prison on 31/12/23	27	—	9
2. Number of Persons committed to Prison during 1924	90	52	89
3. Number of Prisoners in Prison on 31/12/24	30	—	13
4. Daily average number of Prisoners, 1924	21	15.61	14.13
5. Number admitted to Prison Sick-bay, 1924	20	—	5
6. Number admitted to Native Hospital, 1924	1	Nil.	None.
7. Daily average on Sick List ..	0.04	0.5	2.36 owing to daily excuse duty of 2 criminal lepers.
8. Number of Deaths of Prisoners, 1924	1	—	None.
9. (a) Cause of Death in each case (i) ..	Ankylostomiasis.	—	—
(ii) ..	—	—	—
(iii) ..	—	—	—
(iv) ..	—	—	—
(v) ..	—	—	—
(vi) ..	—	—	—
(vii) ..	—	—	—
(viii) ..	—	—	—
(ix) ..	—	—	—
(x) ..	—	—	—
(xi) ..	—	—	—
(xii) ..	—	—	—
(xiii) ..	—	—	—
(xiv) ..	—	—	—
9. (b) Period of detention in Prison prior to date of death (i)	In prison for some time before he was transferred to hospital.	—	—
(ii) ..	—	—	—
(iii) ..	—	—	—
(iv) ..	—	—	—
(v) ..	—	—	—
(vi) ..	—	—	—
(vii) ..	—	—	—
(viii) ..	—	—	—
(ix) ..	—	—	—
(x) ..	—	—	—
(xi) ..	—	—	—
(xii) ..	—	—	—
(xiii) ..	—	—	—
(xiv) ..	—	—	—
10. Prisoners released on medical grounds, 1924. Cause of release in each instance	Nil.	—	None.

APPENDIX II.—*continued.*REPORT ON PRISONS BY STATIONS—*continued.*

	Lushoto.	Mafia.	Mahenge.
11. System of confinement—Association Cells (A.C.) or Single Cells (S.C.)	A.C.	—	A.C.
12. Cubic space available at night per Prisoner, taking average number	765 cub. ft.	—	500 cub. ft.
13. Floor space in square feet per Prisoner, taking average number of Prisoners	63 sq. ft.	—	113 sq. ft.
14. Labour on which Prisoners are employed, and hours of work	(1) Cleaning of drains and forests. (2) Draining of swamps. (3) Cutting wood. (4) Conveying water. (5) Cleaning roads, prison shambas.	—	Grass cutting and shamba cultivation. Owing to small number of prisoners, considerable wood & water carrying for the prison is necessary, as both these commodities, but especially the firewood, are some distance away. Stocks of firewood also have to be laid in for the rainy season.
15. Sanitary condition of Prison ..	Satisfactory.	—	Quite satisfactory.
16. Are floors of Cells cemented? ..	Yes.	—	No, lime and sand.
17. Prevailing Diseases	Nil.	—	Minor injuries, coughs, constipation, muscular pains and slight ailments.
18. Rules as to diet and hours of meals. What variety is provided—green food? meat?	Those laid down under Section 81 of Prison Ordinance, 1921.—(1) Green food, bananas, etc., daily. (2) Long-term prisoners, meat once a week. (3) Simple diet, maize. Food hours, 12 and 4 p.m.	—	As laid down in the diet scale of the Prison Ordinance of 1921. Fish is available, and considerable quantities of European vegetables are sent to the Prison from time to time. Meal hours, 6 a.m. to noon, and 1 p.m. to 4 p.m.
19. Vaccinations: number vaccinated, 1924	118	—	—
Results—Successful	54	—	—
Modified	50	—	—
Failures	14	—	—
Number excused vaccination on account of previous small-pox or successful recent vaccination	18	—	—
Number not protected against small-pox	14	—	—

APPENDIX II.—*continued.*
REPORT ON PRISONS BY STATIONS—*continued.*

	Lushoto.	Mafia.	Mahenge.
20. Infective Diseases, Number of cases of			
Chicken-pox	—	—	—
Dysentery	1	—	—
Influenza	—	—	5
Other	Malaria 4, Tuberculosis 2, and Gonorrhœa 1.	—	—
21. Insect and other Pests in Prison—			
Lice	Nil.	—	There is no evidence of pests.
Bugs	—	—	—
Fleas	—	—	—
Ornithodoros Moubata ..	—	—	—
Rats	—	—	—
Mice	—	—	—
22. Suggestions by Medical Officer in charge as to improvements required, and date when made	(1) The light is not enough; windows should be larger and at lower level. 14/6/24.	—	Windows were recommended in the west side of the cells.
(a) Accommodation, ventilation, etc.	—	—	—
(b) Diet	—	—	None.
(c) Sanitation	(2) Drain should be cemented, chimney should be raised. 12/7/24.	—	Small details from time to time.
(d) Other matters	Kitchen should be cemented. 1/11/24.	—	—
23. Action taken by Prison Authorities as a result of 22—(a) ..	Not taken.	—	Windows constructed.
(b) ..	—	—	—
(c) ..	Yes.	—	Attended to.
(d) ..	—	—	—
24. What sanitary arrangements are there in the Cells for use at night?	Native latrine pans and buckets.	—	Each cell is provided with covered sanitary pail.
25. Is drinking water provided for use at night?	Yes.	—	Yes.
26. Is there a weight register, and is it up to date?	Yes.	—	Yes; yes.
27. What number of blankets is provided for each Prisoner?	Two during cold, and one during hot, weather.	—	Two per prisoner, and a sleeping mat.
Is the clothing sufficient? ..	—	—	Sufficient.
28. Further remarks and suggestions..	Nil.	—	—

APPENDIX II.—*continued.*
REPORT ON PRISONS BY STATIONS—*continued.*

	Mbulu.	Mikindani.	Morogoro.
1. Number of Prisoners in Prison on 31/12/23	16	15	182
2. Number of Persons committed to Prison during 1924	74	396	336
3. Number of Prisoners in Prison on 31/12/24	10	19	114
4. Daily average number of Prisoners, 1924	12	26	130
5. Number admitted to Prison Sick-bay, 1924	Nil.	Nil.	—
6. Number admitted to Native Hospital, 1924	113 (Out-patients).	1	119
7. Daily average on Sick List ..	Nil.	2	5
8. Number of Deaths of Prisoners, 1924	Nil.	Nil.	34
9. (a) Cause of Death in each case (i) ..	—	—	Pneumonia, 1.
(ii) ..	—	—	Ankylostomiasis, 4.
(iii) ..	—	—	Tuberculosis of Lung, 12.
(iv) ..	—	—	Diarrhœa, 16.
(v) ..	—	—	Senility, 1.
(vi) ..	—	—	—
(vii) ..	—	—	—
(viii) ..	—	—	—
(ix) ..	—	—	—
(x) ..	—	—	—
(xi) ..	—	—	—
(xii) ..	—	—	—
(xiii) ..	—	—	—
(xiv) ..	—	—	—

APPENDIX II.—*continued.*
REPORT ON PRISONS BY STATIONS—*continued.*

	Mbulu.	Mikindani.	Morogoro.
9. (b) Period of detention in Prison prior to date of death (i) ..	Nil.	N.A.	—
(ii) ..	—	—	—
(iii) ..	—	—	—
(iv) ..	—	—	—
(v) ..	—	—	—
(vi) ..	—	—	—
(vii) ..	—	—	—
(viii) ..	—	—	—
(ix) ..	—	—	—
(x) ..	—	—	—
(xi) ..	—	—	—
(xii) ..	—	—	—
(xiii) ..	—	—	—
(xiv) ..	—	—	—
10. Prisoners released on medical grounds, 1924. Cause of release in each instance	Nil.	Nil.	—
11. System of confinement—Association Cells (A.C.) or Single Cells (S.C.)	A.C.	A.C. as well as S.C.	A.C.
12. Cubic space available at night per Prisoner, taking average number	350 cub. ft.	206 cub. ft.	—
13. Floor space in square feet per Prisoner, taking average number of Prisoners	24 sq. ft.	29 sq. ft. approximately.	—
14. Labour on which Prisoners are employed, and hours of work ..	Prison shamba and station work, etc., from 6.30 a.m. to 12 noon, and from 1 p.m. to 4 p.m.	Pumping water, fuel cutting, sometimes road-making & repairing, 6 a.m. to noon, and 1 p.m. to 4 p.m. on weekdays, and Saturdays 6 a.m. to noon.	—
15. Sanitary condition of Prison ..	Fair.	Good.	—
16. Are floors of Cells cemented? ..	Nil.	No, plastered with lime.	—
17. Prevailing Diseases	Nil.	Ulcers, Injuries, Bronchitis, & other minor ailments.	—
18. Rules as to diet and hours of meals. What variety is provided—green food? meat?	12 a.m. and 4 p.m., potatoes and maize flour. Long-term also get meat.	$\frac{1}{2}$ lb. of mtama, $\frac{1}{2}$ lb. beans, and 1 oz. salt twice a day, 12 noon and 5 p.m., according to Prison Ordinance Dietary scale.	—

APPENDIX II.—*continued.*
REPORT ON PRISONS BY STATIONS—*continued.*

	Mbulu.	Mikindani.	Morogoro.
19. Vaccinations: number vaccinated, 1924	Nil.	96	—
Results—Successful	—	47	—
Modified	—	21	—
Failures	—	24 and 4 not seen again.	—
Number excused vaccination on account of previous small-pox or successful recent vaccination	—	Some were released before the supply of lymph was received, and some were protected with distinct marks, and consequently not vaccinated.	—
Number not protected against small-pox	—	—	—
20. Infective Diseases, Number of cases of—			
Chicken-pox	—	—	—
Dysentery	—	—	—
Influenza	—	10, and no deaths.	—
Other	—	—	—
21. Insect and other Pests in Prison—			
Lice	Nil.	—	—
Bugs	—	Bugs.—Blankets & clothing kept in sun daily.	—
Fleas	—	Rooms disinfected.	—
Ornithodorus Moubata ..	—	—	—
Rats	—	—	—
Mice	—	—	—
22. Suggestions by Medical Officer in charge as to improvements required, and date when made	Nil.	Nil.	—
(a) Accommodation, ventilation, etc.	—	—	—
(b) Diet	—	—	—
(c) Sanitation	—	—	—
(d) Other matters	—	—	—
23. Action taken by Prison Authorities as a result of 22—(a) ..	—	Nil.	—
(b)	—	—	—
(c)	—	—	—
(d)	—	—	—
24. What sanitary arrangements are there in the Cells for use at night?	Night guard askari when required take the prisoners to latrine.	Buckets kept.	Each cell is provided with a bucket.
25. Is drinking water provided for use at night?	Night askari gives if required.	Water supplied.	—
26. Is there a weight register, and is it up to date?	Nil.	No.	—
27. What number of blankets is provided for each Prisoner? ..	Two.	One blanket supplied.	—
Is the clothing sufficient? ..	Yes.	Yes.	—
28. Further remarks and suggestions..	Nil.	—	—

APPENDIX II.—*continued.*REPORT ON PRISONS BY STATIONS—*continued.*

	Moshi.	Musoma.	Mwanza.
1. Number of Prisoners in Prison on 31/12/23	43	28	139
2. Number of Persons committed to Prison during 1924	490	305	650
3. Number of Prisoners in Prison on 31/12/24	67	75	234
4. Daily average number of Prisoners, 1924	45.4	42.45	156.4
5. Number admitted to Prison Sick-bay, 1924	Nil.	5	54
6. Number admitted to Native Hospital, 1924	3	Nil.	9
7. Daily average on Sick List	3.04	3.25	19
8. Number of Deaths of Prisoners, 1924	Nil.	2	14
9. (a) Cause of Death in each case (i)	—	Ankylostomiasis.	Tubercular Peritonitis.
(ii)	—	Cerebro-Spinal Fever.	Acute Cystitis and Peritonitis.
(iii)	—	—	Dementia.
(iv)	—	—	Pneumonia.
(v)	—	—	Pneumonia.
(vi)	—	—	Pneumonia.
(vii)	—	—	Chronic Bronchitis.
(viii)	—	—	Heart Failure and Chronic Bright's Disease.
(ix)	—	—	Debility & Cystitis.
(x)	—	—	Heart Disease.
(xi)	—	—	Heart Disease.
(xii)	—	—	Cirrhosis of Liver.
(xiii)	—	—	Chronic Bronchitis & General Debility.
(xiv)	—	—	Colitis and General Debility.
9. (b) Period of detention in Prison prior to date of death (i)	N.A.	6 days.	2 years.
(ii)	—	27 days.	3 "
(iii)	—	—	2 "
(iv)	—	—	17 days.
(v)	—	—	49 "
(vi)	—	—	18 "
(vii)	—	—	3 yrs., 2 mths.
(viii)	—	—	10 months.
(ix)	—	—	2 yrs., 3 mths.
(x)	—	—	15 months.
(xi)	—	—	7 "
(xii)	—	—	7 "
(xiii)	—	—	3 yrs., 2 mths.
(xiv)	—	—	2 " 2 "
10. Prisoners released on medical grounds, 1924. Cause of release in each instance	Nil.	Nil.	Nil.
11. System of confinement—Association Cells (A.C.) or Single Cells (S.C.)	7 A.C. and 4 S.C.	A.C.	A.C.
12. Cubic space available at night per Prisoner, taking average number	484.6 cub. ft.	300 cub. ft.	400 cub. ft.
13. Floor space in square feet per Prisoner, taking average number of Prisoners	51.4 sq. ft.	30 sq. ft.	40 sq. ft.

APPENDIX II—*continued.*
REPORT ON PRISONS BY STATIONS—*continued.*

	Moshi.	Musoma.	Mwanza.
14. Labour on which Prisoners are employed, and hours of work ..	Maize crushing, sanitation, wood fuel cutting, water carrying, lime burning, cultivation, stone breaking, grass cutting, road cleaning, 6.30 a.m. to 12 noon, 1 p.m. to 4 or 4.30 p.m.	General, 6.30 to 12 noon, 2 to 4 p.m.	Road making, stone breaking, manufacturing departmental clothing, mat making, etc.
15. Sanitary condition of Prison ..	Satisfactory.	Good.	Good.
16. Are floors of Cells cemented? ..	Yes.	Cemented.	Yes.
17. Prevailing Diseases	Malaria, Local Injuries, Intestinal & Helminthic Diseases.	Nil.	Ordinary.
18. Rules as to diet and hours of meals. What variety is provided—green food? meat?	Meal hours 6 a.m., 12 noon, 5.30 p.m. Maize, beans, or mealie-meal, beans, plantains, mohogo, sweet potatoes, sweet bananas, pawpaw from prison shamba, ghee and salt. Meat is given to long-sentenced prisoners.	Green food is used when available, meat also.	The prisoners are amply fed, and the food is well cooked. They get the food they are accustomed to as far as possible. No green stuffs are given, as they are not easy to obtain in sufficient quantities. Hours of meals, 6 a.m., 12 a.m., and 5.30 p.m.
19. Vaccinations: number vaccinated, 1924	—	None have been vaccinated during the year.	All unvaccinated prisoners were vaccinated in December.
Results—Successful	—	—	—
Modified	—	—	—
Failures	—	—	—
Number excused vaccination on account of previous small-pox or successful recent vaccination	—	—	—
Number not protected against small-pox	Nil.	—	—
20. Infective Diseases, Number of cases of—	—	There was a case of ankylostomiasis & cerebro-spinal fever. The former infection was with the prisoner before his admission in the jail. Both ended in death.	There was an outbreak of pneumonia in the prison in September, from which 3 patients died. These cases were taken into hospital as far as possible.
Chicken-pox	—	—	—
Dysentery	—	—	—
Influenza	—	—	—
Other	—	—	—
21. Insect and other Pests in Prison—			
Lice	No.	Nil.	No.
Bugs	—	—	—
Fleas	—	—	—
Ornithodoros Moubata ..	—	—	—
Rats	—	—	—
Mice	—	—	—

APPENDIX II—*continued.*
REPORT ON PRISONS BY STATIONS—*continued.*

	Moshi.	Musoma.	Mwanza.
22. Suggestions by Medical Officer in charge as to improvements required, and date when made	—	—	—
(a) Accommodation, ventilation, etc.	—	—	—
(b) Diet	Meals to be ground, and not given whole.	To sieve daily flour (cooking), 27/9/24. To have a barrel with cover and a tap to store water for drinking purposes, 30/8/24.	That the grinding of grain and mohogo be not done beside the latrines.
(c) Sanitation	Latrines to be included in the compound. More frequent bathing of prisoners to be done.	Informed prophylactic means against ankylostomiasis infection, 5/11/24. Latrines and urine drums with covers, 30/11/24.	—
(d) Other matters	—	—	—
23. Action taken by Prison Authorities as a result of 22—(a)	—	The first and third recommendations have been fulfilled, and others, on account of lack of funds, are under consideration.	Shifted to the other side of the prison.
(b)	Two mealie mortars procured, and the mealie grinder repaired.	—	—
(c)	Latrines, kitchen, and bathing place included in the compound.	—	—
(d)	Bathing twice weekly.	—	—
24. What sanitary arrangements are there in the Cells for use at night?	The latrines are now within enclosures.	Two empty kerosine tins are kept in each cell for the purpose.	Two tins in each cell, one for urine, other for faeces.
25. Is drinking water provided for use at night?	Yes.	One bucket at every cell.	Yes.
26. Is there a weight register, and is it up to date?	Yes.	No register.	Yes.
27. What number of blankets is provided for each Prisoner?	One, except when prisoner marked excused or light duty, when two provided.	A blanket and a sleeping mat is supplied to each prisoner; in case of sickness two blankets and one bed.	One, and mat.
Is the clothing sufficient?	—	—	Yes.
28. Further remarks and suggestions.	—	A cell should be allocated as prison hospital, and a number of beds, with a medicine cupboard, table, and chair. A table on which to keep the cooked food before distribution. Plenty of disinfectant fluid.	—

APPENDIX II—*continued.*
REPORT ON PRISONS BY STATIONS—*continued.*

	Namanyere.	Pangani.	Shinyanga.
1. Number of Prisoners in Prison on 31/12/23	14	40	10
2. Number of Persons committed to Prison during 1924	72	579	121
3. Number of Prisoners in Prison on 31/12/24	15	61	6
4. Daily average number of Prisoners, 1924	18.62	37.2	9.45
5. Number admitted to Prison Sick-bay, 1924	2	9	1
6. Number admitted to Native Hospital, 1924	—	Nil.	3
7. Daily average on Sick List ..	4.79	4.54	1.4
8. Number of Deaths of Prisoners, 1924	1	Nil.	Nil.
9. (a) Cause of Death in each case (i) ..	Pneumonia.	—	—
(ii) ..	—	—	—
(iii) ..	—	—	—
(iv) ..	—	—	—
(v) ..	—	—	—
(vi) ..	—	—	—
(vii) ..	—	—	—
(viii) ..	—	—	—
(ix) ..	—	—	—
(x) ..	—	—	—
(xi) ..	—	—	—
(xii) ..	—	—	—
(xiii) ..	—	—	—
(xiv) ..	—	—	—
9. (b) Period of detention in Prison prior to date of death (i) ..	11 days.	Nil.	Nil.
(ii) ..	—	—	—
(iii) ..	—	—	—
(iv) ..	—	—	—
(v) ..	—	—	—
(vi) ..	—	—	—
(vii) ..	—	—	—
(viii) ..	—	—	—
(ix) ..	—	—	—
(x) ..	—	—	—
(xi) ..	—	—	—
(xii) ..	—	—	—
(xiii) ..	—	—	—
(xiv) ..	—	—	—
10. Prisoners released on medical grounds, 1924. Cause of release in each instance	Nil.	Nil.	Nil.
11. System of confinement—Association Cells (A.C.) or Single Cells (S.C.)	A.C.	A.C.	A.C.
12. Cubic space available at night per Prisoner, taking average number	483.33 cub. ft.	400 cub. ft.	3,101 cub. ft.

APPENDIX II.—*continued.*REPORT ON PRISONS BY STATIONS—*continued.*

	Namanyere.	Pangani.	Shinyanga.
13. Floor space in square feet per Prisoner, taking average number of Prisoners	48.33 sq. ft. .	37 sq. ft.	228 sq. ft.
14. Labour on which Prisoners are employed, and hours of work ..	Brick making, gardening, building, ordinary prison work, water carrying, wood cutting, etc., 9½ hours daily, except Saturday, when only 5½ hours. Sunday nil.	Rigorous & simple: (R.) Lime burning, wood cutting and station improvements. (S.) Mat weaving, rope twisting, jail cleaning, and other light work.	Cleaning township area and bringing water and firewood. Working from 6 a.m. to 12 noon, and 1 p.m. to 4 p.m.
15. Sanitary condition of Prison ..	Good.	Good.	Good.
16. Are floors of Cells cemented? ..	Lime cement.	Yes.	No.
17. Prevailing Diseases	I.C.T., Bronchitis, Venereal, Eye Diseases.	Ulcers and wounds.	Bronchitis & local injuries.
18. Rules as to diet and hours of meals. What variety is provided—green food? meat?	In accordance with dietary scale authorised under Govt. Notice No. 118 of 1921.	Each morning, mid-day, and evening. As much variety as possible, consistent with local supply and Dietary Scales.	6 a.m., 12 noon, and 4 p.m. Ugali of mtama, flour, and kunde given. Half lemon is given to each convict on Tues., Thurs., Sat., and Sun. during the week.
19. Vaccinations: number vaccinated, 1924	68	170	No.
Results—Successful	4	Nil.	—
Modified	—	165	—
Failures	64	15	—
Number excused vaccination on account of previous small-pox or successful recent vaccination	4	—	—
Number not protected against small-pox	Nil.	Nil.	—
20. Infective Diseases, Number of cases of—			
Chicken-pox	—	—	—
Dysentery	—	—	—
Influenza	—	—	—
Other	—	—	Yaws, 1.
21. Insect and other Pests in Prison—			No.
Lice	Prison cleaned daily with disinfectants. Clothing and blankets washed weekly in solution of disinfectants.	—	—
Bugs	—	—	—
Fleas	—	—	—
Ornithodoros Moubata	—	—	—
Rats	Rat holes have been seen.	Rats only by traps.	—
Mice	—	—	—

APPENDIX II.—*continued.*REPORT ON PRISONS BY STATIONS—*continued.*

	Namanyee.	Pangani.	Shinyanga.
22. Suggestions by Medical Officer in charge as to improvements required, and date when made	Nil.	For the construction of a removable latrine for the convicts inside the jail. Done.	—
(a) Accommodation, ventilation, etc.	—	—	Nil.
(b) Diet	Nil.	—	On 6/11/24 about 200 lbs. of beans, stored for the use of prisoners, were found to be unsound, and so it was suggested that these should be destroyed.
(c) Sanitation	—	The construction of a night latrine.	—
(d) Other matters	—	—	On 19/10/24 it was requested that disinfectant be sprinkled on the floors of the cells twice a week.
23. Action taken by Prison Authorities as a result of 22—(a)	Nil.	—	—
(b)	Nil.	—	The beans were destroyed the 2nd day.
(c)	Nil.	Carried out.	This was done.
(d)	—	—	—
24. What sanitary arrangements are there in the Cells for use at night?	Sanitary buckets are in use in all wards during night.	Night soil tubs for the urine, and a removable latrine.	Latrine pans and urine drums are placed in the wards at night.
25. Is drinking water provided for use at night?	Yes.	Yes.	Buckets full of water are kept in the wards at night.
26. Is there a weight register, and is it up to date?	Yes.	Yes.	There is no weight register.
27. What number of blankets is provided for each Prisoner?	Two blankets during cold weather, otherwise one only.	One blanket and a sleeping mat.	One blanket is provided to each prisoner.
Is the clothing sufficient?	Yes.	—	—
28. Further remarks and suggestions.	Nil.	Nil.	—

APPENDIX II.—*continued.*
REPORT ON PRISONS BY STATIONS—*continued.*

	Singida.	Songea.	Tabora.
1. Number of Prisoners in Prison on 31/12/23	25	36	107
2. Number of Persons committed to Prison during 1924	124	144	542
3. Number of Prisoners in Prison on 31/12/24	—	24	164
4. Daily average number of Prisoners, 1924	10.4	29	170
5. Number admitted to Prison Sick-bay, 1924	—	Nil.	158
6. Number admitted to Native Hospital, 1924	44	19	171
7. Daily average on Sick List ..	—	3	8
8. Number of Deaths of Prisoners, 1924	1	Nil.	5
9. (a) Cause of Death in each case (i) ..	Pneumonia.	—	Heart Failure.
(ii) ..	—	—	Asthenia.
(iii) ..	—	—	Heart Failure.
(iv) ..	—	—	Epilepsy.
(v) ..	—	—	Pyæmia.
(vi) ..	—	—	—
(vii) ..	—	—	—
(viii) ..	—	—	—
(ix) ..	—	—	—
(x) ..	—	—	—
(xi) ..	—	—	—
(xii) ..	—	—	—
(xiii) ..	—	—	—
(xiv) ..	—	—	—
9. (b) Period of detention in Prison prior to date of death (i) ..	180 days.	—	3 mths., 23 days.
(ii) ..	—	—	7 „ 22 „
(iii) ..	—	—	5 yrs. 9 „
(iv) ..	—	—	2 months.
(v) ..	—	—	6 mths., 8 „
(vi) ..	—	—	—
(vii) ..	—	—	—
(viii) ..	—	—	—
(ix) ..	—	—	—
(x) ..	—	—	—
(xi) ..	—	—	—
(xii) ..	—	—	—
(xiii) ..	—	—	—
(xiv) ..	—	—	—
10. Prisoners released on medical grounds, 1924. Cause of release in each instance	—	—	—
11. System of confinement—Association Cells (A.C.) or Single Cells (S.C.)	A.C.	A.C.	A.C.
12. Cubic space available at night per Prisoner, taking average number	—	400 cub. ft.	300 cub. ft.

APPENDIX II.—*continued.*
REPORT ON PRISONS BY STATIONS—*continued.*

	Singida.	Songea.	Tabora.
13. Floor space in square feet per Prisoner, taking average number of Prisoners	—	35 sq. ft.	144 sq. ft.
14. Labour on which Prisoners are employed, and hours of work	—	Road making building repairs, station improvements and general labour, 6.30 a.m. to 12 noon, 1 p.m. to 4 p.m.	Prison industries, carpentry, tailoring, rope making. Outside work—Brick making, and building, wood chopping, water carrying.
15. Sanitary condition of Prison ..	—	Satisfactory.	Good.
16. Are floors of Cells cemented? ..	—	No, the floors are of mud.	Those of the Association cells are cemented.
17. Prevailing Diseases	—	Malaria, Rheumatism, and Bronchitis.	—
18. Rules as to diet and hours of meals. What variety is provided—green food? meat?	—	Food twice daily. Prisoners are fed according to the scale laid down by Govt. Notice No. 118 of 1921.	6 a.m., 12 noon, 6 p.m., mealies (mealie-meal), germinated beans, muhogo, meat 4 oz. each Sun., Thurs., Tues. Green food twice a week (4 ozs.).
19. Vaccinations: number vaccinated, 1924	—	40	On repeated examination.
Results—Successful	—	22	The average number of unvaccinated prisoners is about 20%.
Modified	—	7	—
Failures	—	11	—
Number excused vaccination on account of previous small-pox or successful recent vaccination	—	4	On discharge those unvaccinated are vaccinated.
Number not protected against small-pox	—	Nil.	—
20. Infective Diseases, Number of cases of—			
Chicken-pox	—	—	2
Dysentery	—	—	10
Influenza	—	—	7
Other	—	—	Mumps 14, Yaws 4.
21. Insect and other Pests in Prison—			
Lice	—	No.	No.
Bugs	—	—	—
Fleas	—	—	—
Ornithodoros Moubata ..	—	—	—
Rats	—	—	The food is now kept in rat-proof tins.
Mice	—	—	—

APPENDIX II.—*continued.*
REPORT ON PRISONS BY STATIONS—*continued.*

	Singida.	Songea.	Tabora.
22. Suggestions by Medical Officer in charge as to improvements required, and date when made	—	Nil.	—
(a) Accommodation, ventilation, etc.	—	—	Lunatics and lepers should be segregated.
(b) Diet	—	—	Germinated beans should be provided twice a week.
(c) Sanitation	—	—	New soakage pit to be constructed.
(d) Other matters	—	—	—
23. Action taken by Prison Authorities as a result of 22—(a) ..	—	Nil.	Has been done. Separate compounds have been provided for lepers and lunatics, with separate latrines and bathing accommodation. Drinking water tank has also been provided, so that there is no need for the inmates to leave the compound.
(b)	—	—	Has been done.
(c)	—	—	Has been done.
(d)	—	—	A new soakage pit has been constructed—concrete cover with tight-fitting lid has been provided, all the openings are mosquito proof.
24. What sanitary arrangements are there in the Cells for use at night?	—	Sanitation soils are put out during the night, and cleaned in the morning.	One latrine pan in each cell.
25. Is drinking water provided for use at night?	—	Yes.	Yes.
26. Is there a weight register, and is it up to date?	—	Yes.	Yes.
27. What number of blankets is provided for each Prisoner? ..	—	Two blankets during wet and cold weather, and one during summer.	One; three are provided for sick prisoners in hospital.
Is the clothing sufficient? ..	—	Yes.	Yes.
28. Further remarks and suggestions..	—	The floor needs cementing, and new corrugated iron is needed for the roof.	—

APPENDIX II.—*continued.*
REPORT ON PRISONS BY STATIONS—*continued.*

	Tanga.	Tukuyu.	Tunduru.	Utete.
1. Number of Prisoners in Prison on 31/12/23	124	107 and 2 lunatics.	3	15
2. Number of Persons committed to Prison during 1924	349	200	42	77
3. Number of Prisoners in Prison on 31/12/24	132	125 and 2 lunatics.	—	19
4. Daily average number of Prisoners, 1924	119	109	8.7	15
5. Number admitted to Prison Sick-bay, 1924	—	Nil.	—	13
6. Number admitted to Native Hospital, 1924	52	94	—	Nil.
7. Daily average on Sick List ..	4.77	9	—	1.95
8. Number of Deaths of Prisoners, 1924	2	2	—	1
9. (a) Cause of Death in each case (i) ..	Phthisis.	Heart Failure and Influenza.	—	Double Pneumonia, Heart Failure.
(ii) ..	Ankylostomiasis.	Heart Failure and Influenza.	—	—
(iii) ..	—	—	—	—
(iv) ..	—	—	—	—
(v) ..	—	—	—	—
(vi) ..	—	—	—	—
(vii) ..	—	—	—	—
(viii) ..	—	—	—	—
(ix) ..	—	—	—	—
(x) ..	—	—	—	—
(xi) ..	—	—	—	—
(xii) ..	—	—	—	—
(xiii) ..	—	—	—	—
(xiv) ..	—	—	—	—
9. (b) Period of detention in Prison prior to date of death (i) ..	—	23 months.	—	6 months.
(ii) ..	—	3 weeks.	—	—
(iii) ..	—	—	—	—
(iv) ..	—	—	—	—
(v) ..	—	—	—	—
(vi) ..	—	—	—	—
(vii) ..	—	—	—	—
(viii) ..	—	—	—	—
(ix) ..	—	—	—	—
(x) ..	—	—	—	—
(xi) ..	—	—	—	—
(xii) ..	—	—	—	—
(xiii) ..	—	—	—	—
(xiv) ..	—	—	—	—
10. Prisoners released on medical grounds, 1924. Cause of release in each instance	—	—	—	1
11. System of confinement—Association Cells (A.C.) or Single Cells (S.C.)	A.C.	5 A. wards, and 4 cells.	A.C.	2 Association cells.

APPENDIX II.—*continued.*
REPORT ON PRISONS BY STATIONS—*continued.*

	Tanga.	Tukuyu.	Tunduru.	Utete.
12. Cubic space available at night per Prisoner, taking average number	300 cub.ft.	1,350 cub. ft.	—	868 cub. ft.
13. Floor space in square feet per Prisoner, taking average number of Prisoners	27 sq. ft.	72 sq. ft.	—	67 sq. ft.
14. Labour on which Prisoners are employed, and hours of work ..	—	Working hours, 6.30 to noon, 1.30 to 4.30 p.m., public works, construction of police lines, repairs to prison, prison garden, sanitation, cleaning, etc.	—	Minor labour, sanitary work, 7 a.m. to 12 noon, 1 p.m. to 4.30 p.m.
15. Sanitary condition of Prison ..	—	This is very satisfactory.	—	Satisfactory.
16. Are floors of Cells cemented? ..	—	No.	—	No.
17. Prevailing Diseases	—	Influenza.	—	Malaria, Bronchitis, Diarrhoea, and constipation, etc.
18. Rules as to diet and hours of meals. What variety is provided—green food? meat?	—	Long-term prisoners are allowed meat and ghee in addition to ordinary diet. Hours of meals, 6.15, noon, 5 p.m. Variety of food: Rice, maize, potatoes, beans, salt.	—	As per prison Ordinance No. 14 of 1921. Time of food, morning 6 a.m., 12 noon, and dinner 4 to 5 p.m.
19. Vaccinations: number vaccinated, 1924	—	67	—	78
Results—Successful	—	45	—	53
Modified	—	4	—	8
Failures	—	18	—	17
Number excused vaccination on account of previous small-pox or successful recent vaccination	—	—	—	40
Number not protected against small-pox	—	—	—	78
20. Infective Diseases, Number of cases of	—	—	—	Yes, 4 cases of Influenza and 1 case of Double Pneumonia. One death due to pneumonia during the year.
Chicken-pox	—	—	—	—
Dysentery	—	4	—	—
Influenza	—	28 (2 deaths).	—	—
Other	—	1 Mumps.	—	—

APPENDIX II.—*continued.*
REPORT ON PRISONS BY STATIONS—*continued.*

	Tanga.	Tukuyu.	Tunduru.	Utete.
21. Insect and other Pests in Prison—				
Lice	—	Lice, fleas and rats	—	—
Bugs	—	in moderation. All	—	—
Fleas	—	clothing is washed	—	—
Ornithodorus Moubata ..	—	and disinfected	—	—
		once weekly.		
Rats	—	—	—	Rats only. Rat-
Mice	—	—	—	traps were used.
22. Suggestions by Medical Officer in				
charge as to improvements	—	—	—	—
required, and date when made				
(a) Accommodation, ventila-	—	Minor matters of	—	Nil.
tion, etc.		sanitation.		
(b) Diet	—	Diet is adequate.	—	Nil.
(c) Sanitation	—	—	—	Nil.
(d) Other matters	—	—	—	Nil.
23. Action taken by Prison Authorities				
as a result of 22—(a) ..	—	—	—	Nil.
(b)	—	Adequate.	—	Nil.
(c)	—	—	—	—
(d)	—	—	—	—
24. What sanitary arrangements are				
there in the Cells for use at	—	Sanitary pails in	—	Latrine buckets
night?		wards.		are kept at 6 p.m.
25. Is drinking water provided for use				
at night?	—	Yes.	—	Yes.
26. Is there a weight register, and is it				
up to date?	—	Yes.	—	Yes.
27. What number of blankets is pro-				
vided for each Prisoner? ..	—	Two.	—	One blanket and
				one mat.
Is the clothing sufficient? ..	—	Yes.	—	Yes.
28. Further remarks and suggestions..	—	—	—	Nil.

APPENDIX III.

ANNUAL REPORT OF THE SUPERINTENDENT,
LUTINDI LUNATIC ASYLUM.

STAFF.

European Staff (2).—Matron and Superintendent.

The Superintendent (Mr. J. Spittles) and the Matron (Mrs. C. M. Spittles) were relieved by Mr. R. J. Whelan and Mrs. Whelan on the 1st April, and proceeded on Home Leave.

They resumed duty at the Asylum on the 1st December.

Native Employees (15).

Male Attendants	6
Female Attendants	3
Female Cook	1
Clerks	2
Tradesman	1
Farm Hand	1
Messenger and Post Boy	1

Sundry porters have been engaged to transport Asylum stores to or from Maurui Station.

Health of Native staff has been satisfactory throughout the year.

Discipline excellent.

STATISTICS.

	Males.	Females.	Total.
In residence on 1st January, 1924	50	31	81
Admitted since " " " "	13	7	20
Discharged " " " "	9	1	10
Deaths " " " "	2	2	4
Remaining on 31st December, 1924	52	35	87
Total under treatment during 1924	63	38	101
Average daily state during 1924	49	33	82

	Males.	Females.
Average length of stay of those discharged 1 yr. 5 mths. 4 yrs. 8 mths.		
" " " " " " who died 4 " 1 " 5 " 8 "		
" " " " " " remaining 5 " 0 " 7 " 7 "		

ADMISSIONS.

The 20 patients admitted were classified as follows:—

	Females.	Males.	Total.
Mania	1	6	7
Delusional Insanity	4	2	6
Climacteric "	1	0	1
Melancholia	0	2	2
Senile Dementia	1	1	2
Imbecility	0	1	1
" moral	0	1	1

Two males and two females were admitted as Criminal Lunatics.

Three male admissions had previously been inmates of a Lunatic Asylum.

DISCHARGES.

Ten patients were discharged, 13 less than in 1923. One male and one female were improved, remainder were regarded as recoveries.

As noted formerly the males have provided the bulk of the recoveries, they appear to reach the Asylum when their mental illness is in its early stage and it readily responds to the Asylum nursing.

The majority of female admissions suffer from the more severe forms of mental disorder. Unless they become actively troublesome or dependent in their village, they do not reach the Asylum until their condition is well established. Of the 35 females at present in residence there are perhaps two who can be said to be probable recoveries.

DEATHS.

Four died during the year, one less than in 1923. The death rate, based on the average number resident, is considerably lower than that of many Asylums at Home in 1923.

The principal cause, so far as could be ascertained, in each case was as follows :—

Male	„	117	Dysentery (addicted to earth-eating).
„	„	36	„
Female	„	23	Epilepsy.
„	„	136	Senile decay.

HEALTH.

The general health of the patients has been very satisfactory.

There has been no epidemic, infectious disease or serious casualty throughout the year.

Patients and employees were vaccinated during April.

There were three cases of severe abrasions during epileptic seizures.

Several patients sustained minor injuries at the hands of fellow-patients.

One male underwent operation for hydrocele at the Native Hospital, Tanga.

One male suffering from glandular inflammation required special treatment. His transfer to Tanga Hospital is being arranged.

One male suffering from an abscess in the ear was operated upon by the Sub-Assistant Surgeon, Lushoto.

Five patients were placed in seclusion for short periods during the year.

Artificial restraint was resorted to in four cases of acute excitement.

There were no escapes during the year.

VISITORS.

The Administrative Officer in charge, Usambara District, inspected the Asylum on 3rd October.

The Sub-Assistant Surgeon, Lushoto, visited and operated on one male patient on 21st August.

EXPENDITURE.

The total spent at the Asylum during the year was Shs. 9540/37. The cost of maintenance during the same period was approximately cents. 32, per head, per day.

INCOME.

Shs. 36/- realized from the sale of coffee grown in the grounds was paid in to the Sub-Accountant, Lushoto, in January.

Shs. 10/- realized from the sale of ox-hides and medicines, was paid in to the Treasury officer, Tanga, in December.

GENERAL MATTERS.

A daily service was held in the adjacent Mission Church. The Mission band gave frequent performances in the grounds.

Between 20 and 30 male patients were daily employed in occupations useful to the Asylum, and beneficial to themselves.

Foodstuffs and tobacco were grown, to the value of Shs. 806/37, and taken on Ration Ledger charge.

Several female patients were employed cleaning food.

Two large cupboards were made for Lushoto Hospital.

No case of ill-treatment was observed, and no complaint was received during the year.

The Matron and Mrs. Whelan conducted the dispensary for out-patients from the surrounding villages. The number treated was 829, the majority being children.

A list of the various ailments treated is attached.

Ample supplies of medical stores have been received from Headquarters.

OUT-PATIENTS TREATED AT THE ASYLUM DISPENSARY.

Ailment.	No. of Patients.
Aural discharge	7
Ankylostomiasis	130
Boils	21
Bronchitis	70
Burns	4
Constipation	84
Conjunctivitis	3
Cardiac disorder	4
Diarrhoea	7
Gonorrhoea	2
Injuries from Accidents, etc.	14
Influenza	11
Malaria	38
P.U.O.	22
Rheumatism	9
Ringworm	3
Scabies	10
Tonsillitis	6
Teeth extractions	9
Ulcers	98
Worms (Ascaris)	255
Dislocation	2
Dyspepsia	20

Total number treated 829

VI. SCIENTIFIC.

A BRIEF NOTE BY DR. J. HALES PARRY, ACTING SENIOR MEDICAL OFFICER,
TANGA, ON FOUR INTERESTING CASES.

"I believe there were two cases of Diphtheria which died in the town of Tanga; both cases came from the same Goan family. The first child I did not see, but the second both Dr. Nixon and myself were called in consultation with Dr. Gonsalves, who was treating the case. The throat was extremely difficult to see, but the symptoms all pointed to the case being Diphtheria, and Dr. Gonsalves was requested to take a swab and give anti-diphtheria serum. This child died the next day and about ten days after the first.

"Two cases of Relapsing fever were treated during the year, one a European member of the Graves Commission who had become infected on the Korogwe Handeni road, and was brought to Hospital at the end of his first attack. His first relapse occurred nine days afterwards, and was very severe. Neckharsivan .45 grm. cut short the attack to some extent, but did not prevent a subsequent one; during the interval between the attacks he had a most persistent headache. The second relapse was again a severe one, and commenced by a violent fit and unconsciousness. Neokarsivan .6 grm. cut short this attack, and he had no further relapses, but convalescence was complicated by a left sided facial paralysis, and attacks of frontal headache, worse at night-time. He eventually completely recovered.

"The other case was an Indian, who became infected at Buiko, on the Tanga line. This case was also very severe, but I did not have an opportunity of seeing him till his second relapse; previously he had been treated for Malaria. It required two injections of Neokharsivan before he completely recovered. Convalescence in this case was very slow and accompanied by headache and photophobia. No eye complications could be discovered.

"I saw a case of Hookworm in a European baby 12 months' old, but I have no clear idea how it could possibly have become infected."

EXTRACT OF A REPORT BY DR. G. R. C. WILSON, MEDICAL OFFICER, TUKUYU,
ON THE TREATMENT OF YAWS WITH BISMUTH SODÆ POTASS. TARTR.

"Yaws.—A special dispensary was opened at Mwaya in June, for the treatment of this disease.

Number Treated	3554
----------------	----	----	----	----	------

"The treatment used has been Bismuth Sodium Potassium Tartarate, which is remarkably efficient in clearing up the lesions.

Out-Patients' average number of injections	..	2.1
In-Patients' " " " "	..	2.9

"This average should improve with the less painful injection of the more concentrated solution of the Bismuth salt.

"Results have been very satisfactory. Relapses are few; and none, in those cases, which have undergone the full course of injections.

"There have been no deaths attributable to the drug. Abscesses have been rare.

"The administration of the drug in a more concentrated form is very much less painful and as efficient."

The method of using concentrated solutions in quantities of 5 minims or .5 c.c. per injection was recommended for trial in a circular issued from the Principal Medical Officer's office; several other Officers have also reported that less pain and reaction occur following the use of small quantities of fluid.

J. O. SHIRCORE,
Principal Medical Officer,
Tanganyika Territory.

III. SANITATION.

This report of the work of the Sanitation Division during 1924 is submitted in the same form as the Model Sanitary Report issued by the Colonial Office in 1923.

I. ADMINISTRATIVE.

The trained staff was employed as follows on 31st December, 1924 :—

P.M.O.'s Office,				
Dar-es-Salaam	..	1	Senior Sanitation Officer.	
Dar-es-Salaam	..	1	Senior Medical Officer of Health from 27.10.24.	
		1	Lady Health Visitor.	
		4	European Sanitary Superintendents.	
		1	Sub-Assistant Surgeon.	
		1	Asiatic Sanitary Inspector.	
		10	Partially-trained Native Sanitary Inspectors.	
		6	Vaccinators.	
Tanga	..	1	Medical Officer of Health.	
		2	European Sanitary Superintendents.	
		3	Partially-trained Native Sanitary Inspectors.	
		2	Vaccinators.	
Tabora	..	1	European Sanitary Superintendent.	
		3	Partially-trained Native Sanitary Inspectors.	
		1	Vaccinator.	
Kigoma and Ujiji	..	1	Asiatic Sanitary Inspector.	
		1	Partially-trained Native Sanitary Inspector.	
Mwanza	..	1	Asiatic Sanitary Inspector.	

In addition a partially trained Native Sanitary Inspector is stationed in each of nine smaller townships throughout the Territory.

Outside Dar-es-Salaam, Tanga and Tabora seventeen Vaccinators are employed to tour the districts. Vaccinations in the Townships being done by the Hospital staffs.

FINANCIAL.

The figures showing the expenditure on Sanitation and Public Health work are shown on page II, in the general financial statement of the Medical Expenditure.

The expenditure on Quarantine has been considerably increased. Passengers for Dar-es-Salaam are quarantined when necessary at Zanzibar, and in former years payments have been made for the actual number of passengers booked to Dar-es-Salaam who have been detained at Quarantine Island, Zanzibar. It was found, however, that owing to more regular shipping facilities, many passengers from Bombay to Tanganyika Territory booked to Zanzibar only, and then transhipped by other boats for the remainder of the journey, in consequence this Territory escaped paying for a number of passengers whose destination was Dar-es-Salaam. Tanganyika Territory now pays one fourth of the cost of maintenance of the Quarantine station at Zanzibar.

PLAGUE.

Forty-two cases, with Thirty-five deaths, were reported during the year. Twenty-five of these, with eighteen deaths occurred in the endemic areas in the neighbourhood of Singida and Musoma. A new focus of infection was discovered during October, near Mbulu in the Arusha district. It was reported that between August 7th, and August 23rd, fifteen persons had died at a jumbeate, about nine miles from the Administrative headquarters. Further enquiries showed that the symptoms were those of bubonic plague, and that there had been considerable mortality amongst the local rat population. Energetic measures were enforced by the Administrative Officers, and only two more cases occurred, one on the 17th of November, the other on November 29th. More than 2,000 persons were inoculated against plague in this area, no further cases have been reported.

SMALL-POX.

Thirty cases with twelve deaths occurred during 1924. Twenty-five of these cases, and all the deaths were reported from the Bukoba district. Three cases were notified from the Tabora district, and two from Lindi, all of whom recovered.

VACCINATIONS.

120,878 were performed during the year, a detailed table is shown on page 136.

CEREBRO SPINAL MENINGITIS.

Only two cases with one death, were reported both from the Mwanza district.

INFLUENZA.

During the year seven districts reported the presence of epidemic Influenza. The number of cases is not accurately known, but as a general rule the disease was present in a mild form, only thirty-eight deaths being notified. The most severe outbreak occurred in the Tanga area, where twenty-six deaths took place.

DYSENTERY.

Five hundred and seventy-seven cases of Dysentery with 15 deaths were reported from Government Hospitals during 1924, as compared with 293 and 6 in 1923, and 369 and 18 in 1922.

The cases were classified as follows :—

	Cases.	Deaths.
Amoebic	328	11
Bacillary	168	1
Unclassified	81	3
	<hr/> 577	<hr/> 15

Forty-nine Europeans contracted the disease with no deaths. 101 cases of Amoebic Dysentery with 5 deaths, and 73 unclassified with 3 deaths were reported from the hospitals at Morogoro and Kilosa, which are situated near one another on the Central Railway. Diarrhoea is common in both these townships, and there are considerable plantations which employ labourers from other districts of the Territory. Change of climate and unsuitable food are the causes of a considerable incidence of intestinal complaints amongst these labourers, and also amongst the prisoners at the Central Gaol, which is situated at Morogoro. It is probable that many of the cases of dysentery reported from these two stations are cases of enteritis, due to unsuitable diet.

ENTERIC GROUP.

Nine cases of Typhoid fever were reported during the year. The figures for 1922 and 1923 were 18 and 21. Seven of the patients lived at Tabora, five being Europeans and two natives. These cases showed the following seasonal incidence :— Three in March, one in April, one in June, one in August and one in December. Four of the patients are stated to have previously received typhoid vaccine, while no information is available as to the other three.

One European died of the disease.

Kigoma and Mwanza each reported one patient as suffering from Typhoid Fever.

Dar-es-Salaam remained free from the disease during the year.

INCIDENCE OF PRINCIPAL INFECTIOUS DISEASES DURING 1922, 1923 AND 1924.

Compiled from Telegraphic Returns received Weekly from Medical Stations. The Figures are frequently obtained from Native Information, and are not always reliable.

DISTRICTS.	Small-Pox.						C.S.M.						Population
	1922		1923		1924		1922		1923		1924		
	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	
NORTHERN AREA—													
Bukoba ..	7	0	11	9	25	12	—	—	9	6	—	—	320,100
Mwanza ..	—	—	—	—	—	—	—	—	—	—	—	1	702,300
Arusha ..	6	2	2	0	—	—	—	—	1	1	—	—	97,700
Usambara ..	—	—	3	0	—	—	—	—	—	—	—	—	107,400
Moshi ..	—	—	—	—	—	—	—	—	1	0	—	—	158,200
CENTRAL AREA—													
Tabora ..	84	14	63	12	3	0	4	4	—	—	—	—	502,100
Dodoma ..	3	2	1	0	—	—	—	—	—	—	—	—	270,900
Kondoa-Irangi ..	—	—	1	0	—	—	2	0	—	—	—	—	196,700
Morogoro ..	11	2	1	0	—	—	—	—	—	—	—	—	174,300
SOUTHERN AREA—													
Iranga ..	—	—	—	—	—	—	—	—	—	—	—	—	104,800
Mahenge ..	—	—	—	—	—	—	—	—	—	—	—	—	74,600
Songea ..	—	—	10	0	—	—	—	—	—	—	—	—	148,200
WESTERN AREA—													
Ujiji ..	13	5	—	—	—	—	1	1	—	—	—	—	139,500
Ufipa ..	—	—	—	—	—	—	—	—	—	—	—	—	93,600
Rungwe ..	—	—	—	—	—	—	—	—	—	—	—	—	237,200
COASTAL AREA—													
Tanga ..	84	14	98	10	—	—	—	—	—	—	—	—	86,700
Pangani ..	1	0	2	0	—	—	1	0	—	—	—	—	74,900
Bagamoyo ..	1	0	1	0	—	—	1	1	—	—	—	—	57,100
Dar-es-Salaam ..	1	0	—	—	—	—	—	—	—	—	—	—	149,100
Rufiji ..	150	2	8	0	—	—	—	—	—	—	—	—	83,200
Kilwa ..	9	4	13	2	2	0	—	—	—	—	—	—	84,000
Lindi ..	4	0	3	0	—	—	—	—	—	—	—	—	243,400
Mafia Island ..	16	1	—	—	—	—	—	—	—	—	—	—	10,000
TOTALS ..	390	46	217	33	30	12	9	6	101	89	2	1	4,116,000

INCIDENCE OF PRINCIPAL INFECTIOUS DISEASES DURING 1922, 1923 AND 1924—continued.

DISTRICTS.	Plague.						Influenza.				Population		
	1922		1923		1924		1922		1923			1924	
	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.		Cases.	Deaths.
NORTHERN AREA—													
Bukoba ..	..	..	..	..	..	..	1	0	—	—	20	0	320,100
Mwanza ..	..	..	..	..	16	12	6	1	1	0	—	—	702,300
Arusha ..	..	..	..	..	24	17	66	6	52	0	—	—	97,700
Usambara ..	..	..	..	..	—	17	—	—	—	—	—	—	107,400
Moshi ..	..	..	..	..	—	—	—	—	350	0	—	—	158,200
CENTRAL AREA—													
Tabora ..	..	..	..	..	15	—	28	1	3	2	—	—	502,100
Dodoma ..	..	..	..	..	23	6	3	0	359	151	—	—	270,900
Kondoa-Irangi ..	..	..	..	..	0	—	14	0	—	—	—	—	196,700
Morogoro ..	..	..	..	..	—	—	107	9	—	—	—	—	174,300
SOUTHERN AREA—													
Iringa ..	..	..	..	..	—	—	481	18	—	—	—	—	104,800
Mahenge ..	..	..	..	..	—	—	16	0	26	0	48	0	74,600
Songea ..	..	..	..	..	—	—	3	1	141	0	—	—	148,200
WESTERN AREA—													
Ujiji ..	..	..	..	..	—	—	2	0	—	—	—	—	139,500
Ufipa ..	..	..	..	..	—	—	—	—	217	23	234	9	93,600
Rungwe ..	..	..	..	..	—	—	23	1	—	—	8	0	237,200
COASTAL AREA—													
Tanga ..	..	..	..	..	—	—	20	0	—	—	—	26	86,700
Pangani ..	..	..	..	..	—	—	1	0	—	—	—	—	74,900
Bagamoyo ..	..	..	..	..	—	—	34	0	—	—	—	—	57,100
Dar-es-Salaam ..	..	..	..	..	—	—	371	0	—	—	—	—	149,100
Rufiji ..	..	..	..	..	—	—	—	—	—	—	25	—	83,200
Kilwa ..	..	..	..	..	—	—	—	—	—	—	—	—	84,000
Lindi ..	..	..	..	..	—	—	—	—	784	115	209	3	243,400
Mafia Island ..	..	..	..	..	—	—	—	—	—	—	—	—	10,000
TOTALS	52	40	39	26	42	35	1,176	37	1,933	291	544	38	4,116,000

VACCINATION.

173,550 doses of vaccine were issued by the Director of Laboratory during the year. The following table shows the results that have been reported from the various districts during 1924.

District.	Number vaccinated.	Successful.	Modified.	Failed.	Not seen again.
NORTHERN AREA—					
Bukoba	924	—	—	—	924
Mwanza	10,097	7,183	1,249	1,399	266
Arusha	1,880	1,011	—	419	450
Usambara	6,890	1,388	748	613	4,141
Moshi	13,906	1,995	332	5,354	6,225
CENTRAL AREA—					
Tabora	14,568	3,056	905	1,043	9,564
Dodoma	8,765	6,975	234	1,046	510
Kondoa-Irangi	848	473	189	186	—
Morogoro	1,467	462	185	149	671
SOUTHERN AREA—					
Iringa	9,600	5,105	2,654	1,296	545
Mahenge	1,081	607	148	324	2
Songea	1,560	994	334	232	—
WESTERN AREA—					
Ujiji	506	265	69	84	88
Ufipa	1,479	216	55	928	280
Rungwe	3,418	1,947	—	896	575
COSTAL AREA—					
Tanga	4,487	—	—	2	4,485
Pangani	2,300	1,389	116	158	637
Bagamoyo	765	343	170	146	106
Dar-es-Salaam	20,791	7,958	1,083	6,227	5,523
Rufiji	6,700	3,900	929	848	1,014
Kilwa	4,335	2,638	—	734	963
Lindi	4,511	1,292	937	872	1,410
TOTALS	120,878	49,206	10,337	22,956	38,379

ANKYLOSTOMIASIS.

The Acting Keeper of German Records has recently supplied the Medical Department with an interesting summary of the reports on this disease made by the German Medical Department. In the 1913-14 report the Principal Medical Officer stated that Ankylostomiasis was the most prevalent disease amongst the natives, and was still on the increase. He gives a series of the percentages of infection in different districts varying from 4·6 per cent. in the highlands near Lake Tanganyika, to 90 per cent. in the Songea district. In the immediate neighbourhood of Dar-es-Salaam, it was found that about 40 per cent. of the inhabitants were infected. The most successful treatment was Calomel followed by Beta Naphthol.

In 1913 the Tanga labour inspector reported that on some plantations, 5, 7, and in one case 11 per cent. of the labourers had died, and that the cause of death in the majority was Ankylostomiasis.

In 1914 the Police at Wilhelmstal issued a Police Ordinance intended to check the spread of the disease. Sections were inserted making it compulsory to provide proper latrine accommodation in villages, labour camps and on plantations. The Medical Officer at Dar-es-Salaam, after a tour through his district, stated that he was of opinion that these latrines in the villages had only been erected to satisfy the Government, and were not used. The old insanitary pits were still in use and these he had ordered to be filled up.

In many districts of the Territory, Ankylostomiasis is still the most prevalent disease, 487 in-patients and 2487 out-patients were treated in Government hospitals during 1924, while 109 deaths are reported from this disease. The distribution of these patients amongst the different Government Hospitals is shown in Table XIV, on pages 91 and 92 of this report.

Tanga hospital heads the list with a total of 1,370 patients. Dr. Nixon, the Medical Officer of Health at Tanga, discusses the situation in the district on page 181 of this report.

It is hoped that during 1925 a campaign against Ankylostomiasis may be started in the Tanga district, combined with an attempt to improve the sanitary conditions in some of the villages. This suggested experiment is referred to on page 193.

MALARIA.

Malaria continues to provide the largest number of patients at the Government Hospitals. 22,764 cases were treated during 1924. The numbers of Europeans and non-Europeans are given below :—

European In-patients	394
European Out-patients	184
Non-European In-patients	4,400
Non-European Out-patients	17,786

Three European deaths, and 22 non-European deaths were attributed to Malaria.

This total of 22,764 was reported from 33 Government Hospitals, the types of Malaria being classified as follows :—

Benign Tertian Malaria	11,155
Quartan Malaria	189
Sub-tertian Malaria	11,015
Chronic Malaria	405

A large number of cases, particularly from the smaller hospitals, are classified clinically and the figures as a whole cannot be regarded as reliable.

The table reproduced in the annual reports for 1922 and 1923 is repeated below. The sick rate per 1,000 is calculated on the Census return for 1921, no other reliable figures being available. It is certain that there is a very considerable increase in the European population since 1921, and in consequence the sick rates shown in the table are higher than they would be had it been possible to calculate the malarial incidence on the basis of the actual number of Europeans resident in the Territory during 1924.

MALARIA: EUROPEANS.

Districts.	Area.	Sick rate per 100.
Moshi	Kilimanjaro	156
Arusha		
Bukoba		
Mwanza	Lake Victoria	264
Rungwe		
Iringa		
Songea	South Western	313
Ufipa		
Mahenge		
Morogoro		
Dodoma	Central Railway	305
Tabora		
Ujiji		
Kondoa-Irangi		
Tanga		
Pangani	Costal	255
Bagamoyo		
Kilwa		
Lindi		
Dar-es-Salaam		
Mafia		
Rufiji		

BLACKWATER FEVER.

Sixteen Europeans and fifteen non-Europeans were treated for Blackwater Fever during 1924. Of these two Europeans and three non-Europeans died, a death rate of 12.5 and 20 per cent. respectively.

The figures for 1923 were nineteen Europeans, and 16 non-Europeans, with a death rate of 21 and 19 per cent. Special reports received on cases of Blackwater Fever are attached to the end of this report.

TRYPANOSOMIASIS.

The discovery of further cases of Sleeping Sickness in additional areas of the Territory is ominous. Fifteen cases have been found in the Ujiji district, eight being treated at Kigoma Hospital, and seven discovered by Dr. Wallace, the Medical Officer, Kigoma, in the course of two short tours along the lake shore. It is probable that all these cases were infected by *G. Palpalis*, which infests the shores of Lake Tanganyika, and there is little doubt that many more infected people will be found when it is possible to make a detailed survey of the inhabitants of the lake shore. It is hoped that Dr. Maclean will be able to undertake this survey when his investigations in Ufipa and Tabora are completed.

Mwanza infected area.—There is little to add to the reports of this outbreak which are included in the Annual Medical Reports 1922 and 1923. Towards the end of 1923, it was decided that a member of the medical staff should receive special instruction in Sleeping Sickness work, and that on his return from leave he should be stationed in the Mwanza area. It was most unfortunate that this Medical Officer fell sick immediately after his return to the Territory. He was eventually invalided to England, and consequently it has only been possible to station native dressers in the Sleeping Sickness area, with occasional visits from a Sub-Assistant Surgeon, and one visit from the M.O., Mwanza. Where the instructions issued by the Senior Commissioner have been obeyed

by the natives, the disease appears to have been stamped out, only 28 cases being reported during the year from the whole area. An Administrative Officer has now been stationed in this district, and early in 1925 a Medical Officer was sent to Maswa, which is situated in the infected area. It is realised that the absence of medical attention must have had an unfortunate effect on the minds of the local natives, but shortage of staff made it impossible to provide adequate medical supervision.

New outbreaks.—It is estimated that between one half and two thirds of the whole Territory is infested with tsetse of the Morsitans group. Two hitherto unknown foci of human trypanosomiasis have been discovered during 1924. The first of these was situated south of Liwale, a sub-station of the Kilwa district. The outbreak appears to have been a small one, only three cases being discovered amongst the hundreds of natives examined, while the local inhabitants estimated the total number of deaths during 1923 and early 1924 at twenty. The second focus is a much more serious one, and is being investigated at the present time. It is situated in the north eastern portion of Ufipa, and the southern part of the Tabora district, and lies across the main trade routes between Tabora and the south western areas of the Territory. Dr. Maclean, who has had experience of Sleeping Sickness whilst in charge of the Mwanza district, has been detailed for duty in this area, and will be joined early in 1925 by two additional Medical Officers. By the end of 1924 Dr. Maclean had discovered 32 cases of Sleeping Sickness, and estimates that the infected area is approximately 10,000 square miles in extent.

It is probable that scattered cases have been occurring in the area for years, and have been diagnosed by the local natives as Ankylostomiasis, but information obtained from intelligent natives shows that from 1921 onwards cases have been occurring with increasing frequency. In five small villages with a total population of 111, twenty-five cases of Sleeping Sickness were found by Dr. Maclean between November 1924 and February 1925, a percentage of 22.5 infected. These villages are all situated within the fly infested area, the clearings are small, and the inhabitants are constantly liable to attacks by fly. The cases found are being treated mainly with Bayers "205" and with Tryparsamide, and efforts are now being made to collect the inhabitants in as fly free areas as possible, and by extending cultivation round the villages to drive the fly away from the immediate vicinity of habitations. The native roads and the paths have been closed for through traffic, and the movements of natives restricted as far as possible.

Cases of the Rhodesian type of Sleeping Sickness are known to occur in the Kilwa-Lindi area, in Tabora and Ufipa, and in the Mwanza district. It is practically certain that other parts of the morsitans infested areas of the Territory will be found to be infected as investigations are extended.

It is understood that during 1925 Mr. Swynnerton, the Director of Game Preservation, is to be provided with additional staff to continue and extend his investigations into measures which can be adopted to eradicate the tsetse fly. The problem is a serious one, and unless something tangible can be done in the near future, there is a grave possibility that large areas at present under cultivation will have to be evacuated by the human inhabitants, and abandoned to the tsetse fly.

LEPROSY.

There are no new figures available regarding the leper camps distributed throughout the Territory.

A full account of the position with maps was submitted to the Secretary of State for the Colonies, in a Memorandum forwarded by His Excellency the Governor, under cover of Despatch No. 164 of 1924.

URBAN SANITATION.

The year under review was spent in consolidating and improving the work initiated in previous years. In Dar-es-Salaam the construction of the new native township has proceeded on satisfactory lines, and when the roads are completed, this area of the town, which includes the new market, will be a model native township. At Tanga, the re-opening and repairing of the outlet to the School Street drain together with the reconstruction of the drains along the wharf line, will remove one of the most prolific mosquito breeding places in the township area. The alterations to the old German laundry have been completed by the Public Works Department, and Tanga has now an excellent Infectious Diseases Hospital. At Mwanza Dr. Thomson and Mr. Sharma, the Sanitary Inspector, have made considerable improvement, particularly in the native area. It is hoped that the increased staff asked for in the estimates will be approved, it will then be possible to provide trained European supervision for towns other than Dar-es-Salaam, Tanga and Tabora. An increase in the native sanitary labour, where no European supervision is possible, is frequently a waste of money.

One of the least satisfactory features of many of the townships in the Territory is the absence of good water supplies. The shortage of water at Dar-es-Salaam is referred to by Dr. Scott on page 155, while Tanga is dependent on wells which act as mosquito breeding places. At Lindi, drinking water has to be brought by boat from the other side of the harbour. While at Mwanza the water is obtained in tins from the lake shore, and frequently contains considerable quantities of semi-decayed vegetable matter. Should the appointment of a Sanitary Engineer to the staff of the P.W.D. be approved, it should be possible at least to draw up schemes to provide the more important towns with adequate pure water supplies.

A second menace to public health exists in all towns in the Territory. The habit of storing large quantities of grain, cotton, hides and other rat attracting produce in shops and dwelling rooms, is ubiquitous throughout the whole country. Efforts are being made to make it compulsory for such merchandise to be stored in rat-proof bins or godowns, but while Government stores and sheds are not rat proofed, it does not seem fair to compel small traders to incur considerable expense.

Dr. Haworth's investigations into the question of mosquitoes breeding in coconut palms have been continued, and are referred to by Drs. Scott and Nixon on pages 144 and 180, and in Appendix IV. This problem will not be definitely solved until the investigations can be carried out under the strictest European supervision.

In September 1924, a committee was appointed to consider the recommendation of the Tropical Medical and Sanitary Advisory Committee, that the trees in the Botanical Gardens at Dar-es-Salaam, which cut off the sea breezes from the greater part of the town, should be cleared away, and that the Gardens should be turned into an open space. *Inter alia*, the committee recommended that "The major portion of the mango trees in the Botanical Gardens, including those in Government House grounds and the Veterinary paddock, should receive attention first, those suffering from blight (the large majority) being completely removed. Thereafter the greater part of the coconut palms in the same area should be removed, only isolated specimens of artistic value being retained. Avenue trees should be conserved as far as possible, but thinned and pollarded when necessary; a beginning to be made upon the trees in and near Park Avenue. Coconut palms overhanging public roads to be removed."

By April, 1925, eighty-six trees had been removed, tabulated as under :—

	Botanical Gardens.					Other Areas.
Coconuts	40	18
Mangoes	10	5
Other Trees	5	8
					—	—
Total	55	31
					—	—

Low branches of mango and other trees in Government House grounds, and the Botanical Gardens had also been removed while the work of thinning the avenues was then in progress. The removal of this small number of trees has resulted in an improvement in the conditions in some of the houses situated in the centre of the residential area, but a very much larger number will have to be removed before the conditions in this area become comparable with those of the residences situated on the sea front.

TOWNSHIP RULES.

Practical experience of the application of the Township Rules has shown that many amendments are needed. So considerable are the alterations required, that the Rules have been practically redrafted, and will be issued as new Rules during 1925.

In April, 1924, Rules were published in the Gazette governing the construction and conduct of Aerated Water and Ice Factories. These Rules are comprehensive, and give Township Authorities all the powers required to ensure that Aerated Water and Ice are produced under satisfactory sanitary conditions.

In the Annual Report for 1923, attention was drawn to the increase in the clerical work performed by Medical Officers, due to their appointment as Executive Officers of the Township Authorities. It has now been decided that, except in townships where a Medical Officer of Health is stationed, the duties of Executive Officer will be carried out by an Administrative Officer.

CENTRAL TOWN PLANNING AND BUILDING COMMITTEE.

Twelve meetings of this Committee were held during the year. Sites were selected for a large number of Government buildings in the different Townships. The general lay-out of the following Townships was discussed and approved:— Arusha, Kilosa, Morogoro, Tukuyu, Igali, Bukoba and Songea. The general principal of the town plan of Mwanza was approved, but a final decision cannot be reached until more definite information as to Railway requirements is available.

REPORT OF THE MEDICAL OFFICER OF HEALTH FOR DAR-ES-SALAAM,

BY DR. R. R. SCOTT, M.C., M.B., B.S., M.R.C.S., L.R.C.P., D.P.H.,

Senior Medical Officer of Health.

INTRODUCTORY.

The year 1924 has been marked by no event affecting deeply the administration of the Public Health of Dar-es-Salaam. The period has been spent in consolidating the structure which has been slowly erected on the foundation of previous years.

Greater continuity in all branches of the work has been possible owing to the relatively fewer changes of staff which have taken place. Every effort has been made to render the different branches of the office more efficient, and the tendency to embark on new lines of work before adequate preparation has been made has been resisted as far as possible.

One important new branch has, however, been opened up with the appointment of a Sister to inaugurate a Maternity and Child Welfare scheme. By comparison with the results of other countries this is sure to prove of the greatest importance to the community.

The school medical work is closely allied to this branch, and it has been possible to pay greater attention thereto, while great improvement in the general condition of the children is noticeable since the inauguration of the work in 1921.

The work of the Township Authority is becoming more stereotyped, and though still absorbing an undue amount of attention, is somewhat less serious than in 1923. The appointment of a Building Inspector was specially recommended to the Secretary

of State at the end of the year, and has since been approved. It is hoped that this appointment will relieve the Medical Officer of Health of much of the routine work in connection with buildings which has hitherto developed upon him and upon the Sanitary Superintendents.

The appointment in the middle of the year of an additional Sanitary Superintendent who possesses the special certificate in Meat and Food inspection enabled greater attention to be given to Markets, and food and milk supply, and to the anti-rat campaign.

No epidemic occurred during the year, but the amount of endemic malaria in spite of a low rainfall still gives serious food for reflection. Is the money we are spending on anti-mosquito measures being spent to the best advantage, and ought we not to spend more capital and reduce the cost of maintenance of temporary work?

Tuition of the Native Sanitary Inspectors was maintained throughout the year, and an examination was held at which ten candidates out of twelve obtained certificates.

The lack of reliable statistics of population and births becomes more serious from year to year. As far as one can judge, the town is growing rapidly, and the longer we postpone the collection of this very necessary information, the less valuable are the deductions which we make from the information now at our disposal.

PREVENTIVE MEASURES.

III. *Mosquito-borne Disease* :—

The prevention of mosquito breeding has been carried on as before; extension of the area examined has taken place in the Kurasini and Msimbazi districts. The only important breeding area within the Township boundary not yet under regular examination, is the land owned by the Mission at Msimbazi, and lying west of the bridges on the Bagamoyo road. This land is largely under cultivation, and is a continuation of the Msimbazi valley. It is most probably a prolific producer of anophelines, and will have to be tackled as soon as funds permit.

Many of the breeding places within the inhabited part of the town have now been eliminated, but far too many remain. The most serious are the lower end of Gerezani creek, and the Msimbazi valley, which adjoins the new native town.

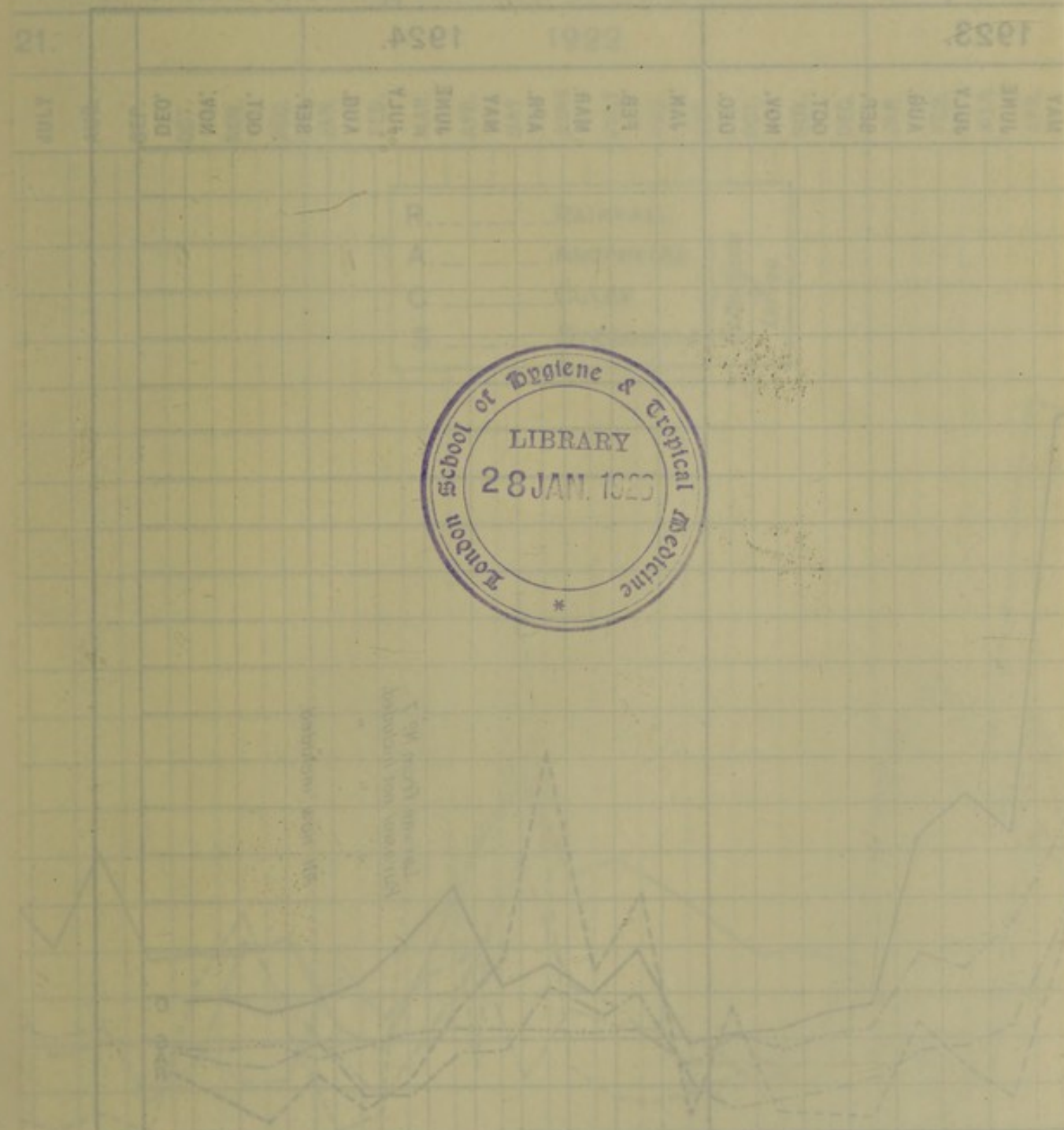
No funds were provided in the Public Works Department Estimates for any large surface drainage or filling operations; the Medical Department still has to find the funds and skilled labour to maintain the sandy ditches, of which there are some twenty miles in the township. It is again submitted that much of this expenditure is wasted, and that the temporary drains should be replaced by permanent work.

It is hoped that the appointment of a Sanitary Engineer, if approved, will allow of definite proposals in this direction being submitted, and that the necessary funds for their execution may be found.

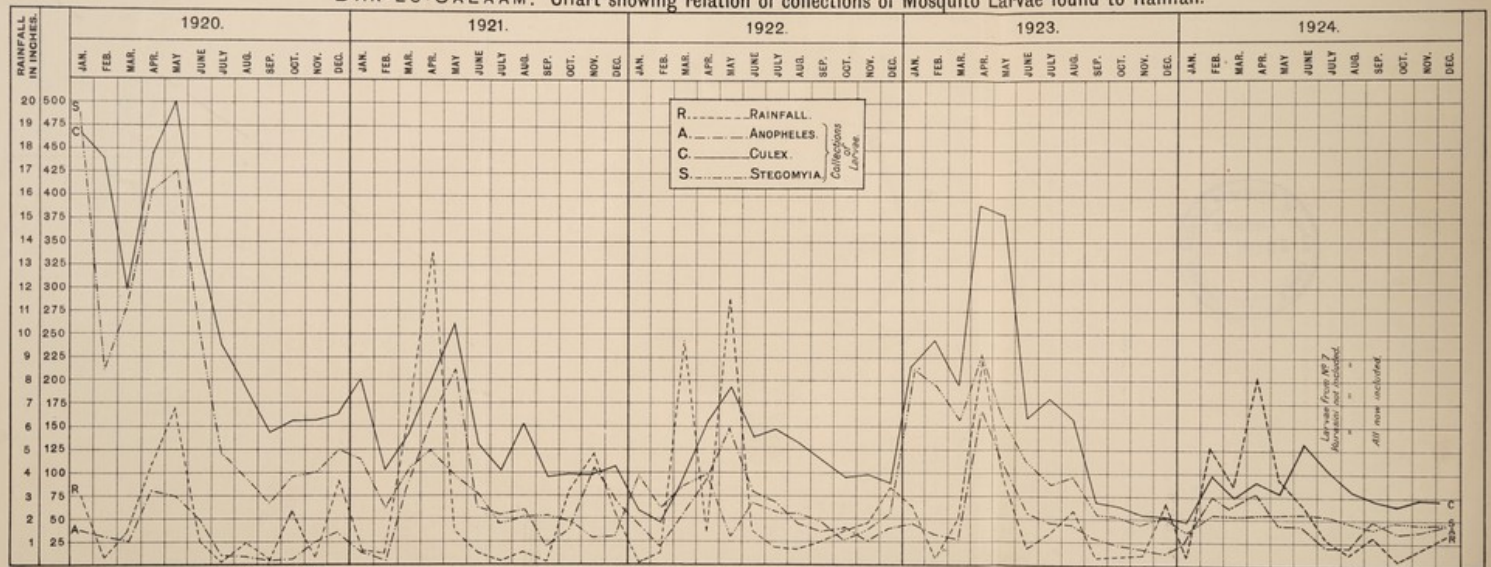
COMPARATIVE TABLE SHOWING COLLECTIONS OF MOSQUITO LARVÆ FOUND IN THE TOWNSHIP.

	1922.	1923.	1924.
Anopheles	690	636	574
Culex	1,332	2,166	1,115
Stegomyia	697	1,457	630
TOTAL	2,719	4,259	2,319

Chart showing relation of rainfall to malaria



DAR-ES-SALAAM. Chart showing relation of collections of Mosquito Larvae found to Rainfall.



ANALYSIS OF FINDINGS OF MOSQUITO LARVÆ, DAR-ES-SALAAM TOWNSHIP, 1924.

MONTHLY TOTALS.

	Rainfall (in inches)	Anophelines.	Culex.	Stegomyia.
January	0.490	24	48	41
February	4.902	70	110	54
March	3.170	49	74	58
April	8.090	79	91	62
May	3.795	46	84	64
June	2.865	44	130	69
July	1.090	30	137	51
August	0.410	72	159	47
September	1.540	49	72	44
October	0.265	33	63	51
November	0.740	40	75	44
December	1.590	38	72	45
TOTAL	28.947	574	1,115	630

The chief recorded breeding places of anophelines were :—

	1922	1923	1924
1. Dockyard and Kurasini (seven creeks containing fresh-water springs)	140	171	183
2. Gerezani Valley	154	153	126
3. Town (swampy places, road pools and surface drains within the actual town regularly searched by a special man)	127	125	50
4. Msimbazi Valley	93	80	123
5. Town (casual finds by the Sectional Inspectors)	142	68	92

The above table shows how constant the various permanent anopheline breeding grounds remain from year to year.

COMPARATIVE TABLE OF ARTIFICIAL MOSQUITO BREEDING PLACES.

	Anopheles.			Culex.			Stegomyia.		
	1922	1923	1924	1922	1923	1924	1922	1923	1924
Tins	—	—	—	—	—	13	—	—	52
Jars	—	—	—	—	—	14	—	—	60
Flower pots, etc.	—	—	—	—	—	7	—	—	8
Drums and barrels	—	—	2	—	—	47	—	—	111
Roof tanks and gutters	—	—	—	—	—	3	—	—	7
Unclassified iron containers	—	—	1	—	—	17	—	—	28
Defective Structure	—	—	1	—	—	5	—	—	3
Excavations and borrow pits	—	—	4	—	—	1	—	—	—
Dhows (water containers in)	—	—	—	8	—	2	77	37	85
Tanks	11	3	4	171	753	85	403	1,200	225
Drains	—	—	31	—	—	100	—	—	6
Pools	—	—	24	—	—	38	—	—	1
Soakage and cesspits	—	—	—	—	—	103	—	—	1
Wells	11	13	8	59	75	29	—	1	5
Rubbish	—	—	—	5	101	2	15	136	4
Galley trap and street drains	—	—	—	155	138	191	—	—	—

The reduction in the number of collections of *Culex* and *Stegomyia* larvæ found is gratifying, but there remain too many for either safety or comfort.

The monthly number of collections of *Stegomyia* larvæ varied between a minimum of 41, and a maximum of 69, the mean being 52. A heavy rise in *Stegomyia* incidence indicates storage of water by natives in jars and tins, and suggests inefficient supervision. The *Stegomyia* curve ought to remain as nearly as possible flat throughout the year.

The greatest number (225) of *Stegomyia* larvæ was found in tanks, as might be expected. In the residential area the tins of water which are placed under meat safes and ice chests, to prevent the ants from obtaining access thereto, form one of the commonest sources of breeding.

Of *Culex* larvæ, the greatest number (191) was found in gully traps and street gullies. These are numbered and searched regularly. The ideal trap in which mosquitoes cannot breed has not yet appeared.

Adult Mosquitoes caught, 1924.

Anopheles	..	..	..	..	169
Culex	..	..	..	..	19,306
Stegomyia	..	..	..	..	90

The Anophelines were caught in the following buildings, which are searched weekly for adult mosquitoes :—

K.A.R. Depot, Mkongeni	..	..	..	on 8 occasions
„ New Mess (above Dockyard)	..	..	..	5 „
„ House No. 1 (above Gerezani creek)	..	..	..	3 „
„ Old Mess (South lines)	..	..	..	2 „
„ Sergeants' Mess (Near No. 2 creek, Kurazini)	..	..	..	2 „
Gerezani Road, House No. 2	..	..	..	3 „
Kichwele Street, House of Mzee Hussein	..	..	..	4 „
„ „ „ „ Fundi Mika	..	..	..	3 „
„ „ „ „ Ahmed Abed	..	..	..	2 „
European Hospital	..	..	..	3 „
Bagamoyo Street, Infectious Diseases Hospital	..	..	..	1 „

COCONUT TREES.

The native employed during 1923 on this work continued the inspection of the crowns of the coconut trees during 1924.

He was joined by another native tree climber in October.

Up till the month of September, this work was done without skilled supervision. During that month the native work-room assistant accompanied the climbers on their rounds on several occasions, viz. (1st, 3rd, 4th, 5th, 7th, 9th, 10th, 11th, 12th). The fall in the number of larvæ brought in during this month is surprising.

During October, November and December, the two climbers were accompanied by a skilled and trusted mosquito finder of long service. This was done in order that accurate observations might be taken of the findings in the tins which had been affixed to the trees at different heights, in the attempt to fix the optimum height for the breeding of *Stegomyia*. The results of this experiment, which was carried out at the suggestion of the Honourable the Principal Medical Officer, are shown in Appendix IV. The tops of these and other trees were searched by the two climbers in the presence (on the ground) of the skilled finder, but no larvæ have been produced since the climbers were accompanied by the skilled finder.

COMPARATIVE TABLE OF COCONUT TREES IN WHICH MOSQUITO LARVÆ WERE STATED TO HAVE BEEN FOUND DURING 1923-24.

Month.	1923.				1924.			
	Rainfall (inches).	Trees examined	Containing Larvæ.	% of Trees containing Larvæ.	Rainfall (inches).	Trees examined.	Containing Larvæ.	% of Trees containing Larvæ.
January ..	—	—	—	—	0.49	348	70	—
February ..	—	—	—	—	4.902	346	82	—
March ..	—	—	—	—	3.170	342	70	—
April ..	—	—	—	—	8.090	278	61	—
May ..	—	—	—	—	3.795	347	86	—
June ..	—	—	—	—	2.865	349	85	—
July ..	—	—	—	—	1.090	339	80	—
August ..	2.29	333	50	—	0.410	306	65	—
September ..	0.27	314	73	—	1.540	261	4	—
October ..	0.38	387	87	—	0.265	300	—	—
November ..	0.47	384	83	—	0.740	90	—	—
December ..	2.62	353	78	—	1.590	302	—	—
		1,771	371	20.9		3,608	603	16.7

The percentage of trees containing larvæ from January to August, 1924, is 22.5.

As a result of this failure to find any larvæ in the presence of reliable witnesses, it is considered that further careful investigation of the whole problem is necessary, before action is taken in regard to coconut palms on the grounds of mosquito breeding. It is understood that an investigation was carried out in Mauritius by an entomologist with negative results.

FILLING AND DRAINAGE OF SWAMPS.

No. 7 Creek, beyond Kurasini Mission was undertaken for the first time in August and September, and a sum of £50 was allocated from Sanitary labour funds for the filling and drainage of its two branches. The work was completed on the usual lines in two months, and the creek rendered safe.

Filling was continued in Gerezani as labour permitted, and a little progress was made. This area is the most serious permanent breeding ground near the town and calls for the earliest possible attention on the appointment of a Sanitary Engineer. It requires not merely filling, but careful calculation of the permanent area required to hold the volume of water which accumulates when a neap tide and heavy rain occur together.

The creek has been surveyed through the kindness of the Land Officer, and it was found that its area had now been reduced by filling to about two-thirds of its area when surveyed in 1921, but extensive overflowing occurs at neap tides. The enclosed area of water now measures about seven acres. It is believed that this area may have to be increased to allow for overflow in the circumstances named above.

Provision for the replacement of many of the open side branches of the drains in this and other valleys by agricultural tile drain pipes, was asked for in the Estimates, 1925-26. It is believed that this would reduce the cost of maintenance of the temporary drains to a considerable extent.

In October it was found that extensive breeding of anophelines was taking place in portions of the Msimbazi valley, which had not hitherto been maintained; certain old military drains were opened up, and seepage areas attended to with immediate reduction of the anopheline breeding.

No re-alignment of drains is being undertaken in this area, until the work can be properly planned by an Engineer.

A further swamp remains to be investigated beyond the K.A.R. range. It forms the eighth creek discharging into the South Harbour. It is of the same formation, but on a larger scale, as the other seven creeks, and is at present a very valuable vegetable garden. It is situated on private land, and is partly outside the Township boundary. It is producing anopheline larvæ in very large numbers.

It appears that steps may have to be taken to render this creek free from mosquito breeding, since it probably acts as a mosquito reservoir, from which the other creeks and Gerezani valley may be permanently supplied.

This creek and the portion of the Msimbazi valley beyond the bridges, are the two furthest and largest breeding places now remaining untouched.

LENGTH OF DRAINS MAINTAINED DURING 1924.

	Feet.	Yards.
GEREZANI.—Comprises Gerezani Creek, all the drains around it, the drains along the valley as a whole, with branch drains in Mzee-bin-Akida's shamba, south arm (Kheko), north-western arm (Msakara) as far as Pugu Road	34,831	11,610½
MSIMBAZI.—Includes drains in Mohamed Abedi's shamba, Mchikichini, up to borrow pit	9,745	3,248½
DOCKYARD.—The drains behind Dockyard and the creeks falling into South Harbour numbered 1 to 7, inclusive of Barracks' swamp ..	15,422	5,140½
BAGAMOYO STREET.—Bagamoyo swamp, drains along Caravan Road, carrier corps swamp	5,186	1,728½
UPANGA.—Main drain from Bagamoyo pool to sea view, Upanga swamps, golf course, with surface drains	16,701	5,567
RESIDENTIAL AREA.—Drains in Versailles Street, Upanga Road, Main Acacia and Garden Avenues, and concrete drain from Garden Avenue to old European cemetery	16,408	5,469½
COMMERCIAL AREA.—The surface drain along Acacia Avenue, Windsor and Selous Streets, with small drain in Arab Street, Stanley Street, and several other places	24,224	8,074½
TOTAL, 23.2 miles	122,517	40,839

Malaria Infection.

A total of 700 cases of Malaria was notified, of which 520 were confirmed by blood examination. Only 12 cases were definitely ascribed to infection outside Dar-es-Salaam.

TABLE OF MALARIA NOTIFICATIONS.

	Sub- tertian.	Benign- tertian.	Total confirmed by blood examination.	Not confirmed by blood examination.	Total.	Percentage of Total Notifications confirmed by blood examination.
1923	—	—	—	—	883	59%
1924	503	17	520	180	700	74%

No cases of Blackwater Fever were notified.

ANALYSIS OF THE DISTRICTS FROM WHICH THE CONFIRMED CASES WERE NOTIFIED GIVES THE FOLLOWING RESULTS.

	Notifications.	Probable source of Infection.
King's African Rifles	92	Gerezani and Kurasini.
Native quarter (Kitumbini and Karia Koo)	76	Msimbazi.
Arab Street	52	Gerezani.
School children (residences not given)	48	Various.
Acacia Avenue	41	Gerezani.
Kichwele Street	29	Gerezani and Kitumbini.
Bagamoyo Street	27	Various.
Selous Street and Kisutu	26	"
Others	129	"
TOTAL (confirmed cases)	520	

The figures show a reduction of 20 % in the number of cases notified compared with 1923, and an increase of 15 % in the percentage of cases confirmed by blood examination, which is very creditable to the medical practitioners responsible. The notifications are voluntary and are rendered monthly.

They point, however, to the grave responsibility which is incurred by failure to apply more thorough anti-malarial measures in Gezerani and Msimbazi.

Mosquitoes.

The Anopheline mosquitoes identified in Dar-es-Salaam since 1919 are :—

A. Costalis.

A. Funestus.

A. Mauritianus (rare)

(breeding place not found, but occurs in vicinity of European Hospital).

These were kindly identified by Dr. Aders of Zanzibar.

A small collection of mosquitoes was kindly identified by Mr. Edwards of the British Museum, in 1923, and included the following culicines :—

<i>Lutzia tigripes</i>	..	..	..	..	(Theo.)
<i>Culex Sitiens</i>	..	..	..	..	(Wied)
„ <i>Fatigans</i>	..	..	..	..	(„)
„ <i>Tipuliformis</i>	..	..	..	..	(Theo.)
<i>Meg. (Toxorhynchites) brevipalpis</i>	..	..	..	..	(„)
<i>Aedes Simpsoni</i>	..	..	..	..	(„)
„ <i>(Skusia) Pembaensis</i>	..	..	..	..	(„)
(all in Crab-holes)					
<i>Aedes Argenteus (Stegomyia fasciata)</i>					

A. W. J. Pomeroy in "The prophylaxis of Malaria in Dar-es-Salaam" Journal of R.A.M.C., July, 1920, Vol. XXXV, No. 1, p. 55, gives the following additional species :—

<i>Anopheles maculipalpis</i>	..	..	..	..	(Giles)
<i>Banksinella lineatopennis</i>	..	..	..	..	(Ludlow)
<i>Culex bitaeniorhynchus</i>	..	..	..	..	(Giles)
„ <i>consimilis</i>	..	..	..	..	(Newstead)
„ <i>anulsioris</i>	..	..	..	..	(Theo.)
„ <i>invidiosus</i>	..	..	..	..	(„)
„ <i>duttoni</i>	..	..	..	..	(„)
„ <i>thalassius</i>	..	..	..	..	(„)
„ <i>aurantapex</i>	..	..	..	..	(Edw.)
„ <i>laurenti</i>	..	..	..	..	(Newstead)
„ <i>simpsoni</i>	..	..	..	..	(Theo.)

Dr. Haworth in his paper on "Mosquitoes and Cocoanut Palms" (Transaction of the Royal Society of Tropical Medicine and Hygiene, 1924, October, Vol. XVIII, No. 4, pp. 162 - 189), gives the following additional identifications :—

<i>Anopheles praetoriensis</i>	..	..	..	..	(Gough)
<i>Aedes metallicus</i>	..	..	..	..	(Edw.)
„ <i>fulgens</i>	..	..	..	..	(Edw.)
„ <i>adersi</i>	..	..	..	..	(Edw.)
„ <i>soleatus</i>	..	..	..	..	(„)
„ <i>pseudonigeria</i>	..	..	..	..	(Theo.)
<i>Culex nebulosus</i>	..	..	..	..	(„)
„ <i>horridus</i>	..	..	..	..	(Edw.)
„ <i>decens</i>	..	..	..	..	(Theo.)
<i>Eretmopodites quinquevittatus</i>	..	..	..	..	(„)
<i>Mansonioides uniformis</i>	..	..	..	..	(„)
<i>Culicomyia nebulosa</i>	..	..	..	..	(„)
<i>Cohlerotatus albocephalus</i>	..	..	..	..	(„)
<i>Harpagomyia taeniarostris</i>	..	..	..	..	(„)
<i>Uranotaenia mashonaensis</i>	..	..	..	..	(„)

Filariasis.

No special investigations into, or measures against this disease were taken. Every endeavour is taken to prevent the breeding of mosquitoes in the native quarter as in all parts of the town.

OTHER INSECT BORNE DISEASES.

No tsetse flies were caught during the year.

Plague.

Reorganisation of the anti-rat work was undertaken by Mr. Humphrey in the second half of the year, with very satisfactory results.

	Total Rats caught.	Average number of Catchers employed.	Average Rats per Catcher.
1922	4,355	2½	1,742
1923	10,851	3	3,283
1924 { January to June, 5,663 } { July to December, 8,981 }	14,644	3	4,881

The following table is given from Mr. Humphrey's report for July-December :—

RATS CAUGHT.			
Rattus Rattus	8,956		
Rattus Norvegicus	25		
Total	8,981		
<hr/>			
Catchers employed	3		
Average number of traps used daily	160		
Total number of traps laid	23,592		
Percentage of rats caught per trap laid	38.20		
Cost (without overhead charges)			
Labour		Shs. 522.00	
Bait		70.00	
Depreciation of traps		20.00	
Total		612.00	
<hr/>			
Cost per rat caught		cents. 6.82.	

The *Rattus Norvegicus* were caught in the following places :—

Old Market	11	(probably from untrapped sewer).
Dhows	6	
Sewa Hadji Hospital	8	(probably from old fashioned trough latrines).
	25	
	<hr/>	

Mr. Humphrey found that the "Nipper" break-back trap with moveable bait platform gives the best results. Poor results on the whole have been obtained with other traps tried, which include :—

- 3 varieties of cage trap.
- 1 variety of break-back trap (fixed bait platform).
- 1 drowning trap (automatic re-setting).

Clayton gas was tried in a large sewer without success. It is thought that insufficient concentration of gas was obtained owing to the very large area of the sewer, its numerous branches, and its damp, soft, masonry walls. Bird-lime as used for fly-catching was tried without success.

Baits of various kinds were tried, the most successful being raw cassava root, cut into slices fresh. Bread was the next best bait.

POISONS.

Barium Carbonate, Strychnine, Sodium Arsenite, Plaster of Paris, and "Rodine" were tested with various vehicles.

The conclusions arrived at by Mr. Humphrey were :—

1. Maize meal or wheat flour and Barium Carbonate, made up with water without the addition of salt, ghee, dripping or butter is the most attractive bait.
2. Maize flour is the best vehicle, as it is almost as attractive as any other vehicle, and certainly much more economical.

3. A bait made according to the following formula gave the best results :—

Barium Carbonate 7 grammes or 108 grains
Maize meal 50 " or 771 "
made into a stiff paste with water makes 50 baits, containing approximately two grains Barium Carbonate per bait.

4. A dose of 2 grains of Barium Carbonate proved to be lethal for *Rattus Rattus* in from 4 – 36 hours. A dose of 3 – 4 grains is required to ensure the killing of *Rattus Norvegicus*. (5 baits containing 2.2 grains were eaten without fatal result, while seven 3 grain baits were eaten causing 3 deaths.)
5. Baits must be fresh, i.e., mixed just before being laid.
6. Handling by man does not make poison baits or baited traps less effective.

An ingenious and simple machine for the sub-division of Barium Carbonate baits into portions containing the correct dose was made by Mr. Humphrey, and has proved to save time when a large number of baits are required.

FLEAS.

The fleas taken from rats, and identified by the Director of Laboratory were

Dermatophelus Penatrans.
Xenopsylla cheopis
" *astja*.
Pulex irritans.

IDENTIFICATION OF RATS.

Four Rat Skins were sent to the British Museum, and were examined and reported on by Mr. Hinton, to whom our thanks are due.

The first two were sent without skulls, and were reported as "skins of the brown rat, *Rattus Norvegicus*, but determination in the absence of the skull is not too easy."

The second two were identified as *Rattus Rattus Alexandrinus* and *Rattus Norvegicus*.

RELAPSING FEVER.

Twenty-nine cases have been notified :—

Senior Medical Officer, European Hospital.	Medical Officer Sewa Hadji Hospital.	Private Practitioners.	Total.
10	18	1	29

Of the above 7 were Europeans, 3 Asiatics and 19 Africans, and all cases into which inquiry was made (11) could be attributed to infection contracted outside Dar-es-Salaam. No ticks (*Ornithodoros*) were found in Dar-es-Salaam. One *Ornithodoros moubata* was sent in from Ruvu, 60 miles up the railway.

SOURCES OF CERTAIN CASES OF RELAPSING FEVER.

European Cases.	Asiatic Cases.	African.
Anglo-Belgian boundary	Rufiji (2)	Tanga
Tabora	Central Railway	—
Songea	—	—
Pugu (Minaki)	—	—
Bagamoyo	—	—
Rufiji (2)	—	—
Dodoma (Buigiri)	—	—

OTHER NOTIFIABLE DISEASES.

For admissions to Infectious Diseases Hospital see Table VI.

No epidemic occurred.

Six deaths occurred, all from Tuberculosis of the lungs.

SUMMARY OF INFECTIOUS DISEASES NOTIFIED DURING 1924.

	By S.M.O., European Hospital.	By M.O., S. Hadji Hospital.	By M.O.H.	By Private Practitioners.	Total.
Chicken-pox	—	8	4	—	12
Influenza	30	5	—	7	42
Leprosy	—	5	11	—	16
Mumps	—	5	18	3	26
Measles	—	16	8	14	38
Spirillum Fever	10	18	—	1	29
Tuberculosis (Lungs)	—	26	2	3	31
Yaws	—	344	—	—	344
TOTAL	40	427	43	28	538

TUBERCULOSIS OF THE LUNGS.

	Cases notified.	Deaths.	
		Certified.	Notified.
1923 *	9	17	3
1924	31	14	10

* Disease was made notifiable on 14th June, 1923.

The percentage of deaths from Tuberculosis out of total deaths is as under :—

	All causes.	Tuberculosis of Lungs.	Percentage of deaths from Tuberculosis over all.
Certified deaths	152	14	9.2
Notified „	194	10	5.1
TOTAL	346	24	6.9

The percentage of total deaths for 1923 was 6.1.

I regard this disease as a most serious menace, and while perhaps less disturbing to the peace and pockets of the community than the spectacular diseases of Plague and Small-pox, its further spread should be prevented by every means in our power.

The complete lack of sanatorium treatment for early and last-stage cases merits consideration.

Fly-borne Intestinal Disease :—

Enteric Group.—No cases were notified.

Dysentery.—One Asiatic and two African deaths were certified from this cause.

Diarrhœa.—One Asiatic death from diarrhœa and one from primary infantile diarrhœa were certified. Two Asiatic deaths from enteritis were certified.

Total deaths from diarrhœa.—Asiatic, 5 ; African, 2.

Small-pox :—

No case occurred.

VACCINATIONS PERFORMED.

	Town.	District.	Total.
1922	398	—	—
1923	817	—	—
1924	19,003	1,788	20,791

An intensive vaccination campaign has been carried out, and, owing to the strong co-operation of the Administrative Department, a large proportion of the inhabitants of the town have received primary or re-vaccination.

The lymph used throughout was supplied by the Director of the Laboratory, and is considered thoroughly active.

SUMMARY OF VACCINATION RESULTS, 1924.

	Jan. May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
Total number vaccinated	116	1,134	1,593	4,445	4,127	4,185	2,436	967	19,003
Re-inspected on eighth day	—	969	904	3,552	3,630	3,392	1,589	832	15,268
Number re-inspected on or after the eighth day ..	116	165	673	893	397	793	447	138	3,735
Successful	—	231	446	1,851	2,182	1,767	1,116	365	7,958
Modified	—	106	131	288	137	187	174	70	1,083
Negative	—	632	327	1,413	1,321	1,438	699	397	6,227
Percentage of successful and modified cases out of those re-inspected ..	—	34.7	63.8	60.21	63.60	57.60	64.85	52.28	59.2

Leprosy.

Treatment of cases of leprosy at the Infectious Diseases Hospital by intravenous injections of "Moogrol" was continued throughout the year. 5 c.c. are now given weekly by the intravenous method.

In three cases the disease was considered to have been arrested, and the patients were discharged during January, 1925, work being found for them at the Health Office, where their further progress could be watched, and any recurrence noted early. Two were nodular cases (bacteriologically positive) and one nerve case, not bacteriologically confirmed. (This was the K.A.R. Askari referred to in the 1923 report.)

The conclusion formed after four years continuous treatment by weekly injections of the ethyl esters of Chaulmoogra oil, are that the treatment combined with good food and cleanliness will render an early case bacteriologically negative in about a year. The hopes of arresting advanced cases do not appear good.

LEPROSY SETTLEMENT AT NUNGE.

The conditions are now more satisfactory, and certain improvements and repairs have been effected. A deep pit latrine has been provided. One dresser remains in charge of the Settlement and rations are issued monthly. A large amount of cultivation is done by the inmates.

STATEMENT OF INMATES AT NUNGE LEPROSY SETTLEMENT FOR THE YEAR ENDING 31ST DECEMBER, 1924.

	Remain- ing, 31/12/23.	Admis- sions during 1924.	Total.	Dis- charged.	Abs- conded.	Died.	Total.	Remain- ing, 31/12/24.
Male Adults	36	8	44	—	5 ^a	5	10	34
„ Children	3	—	3	—	—	—	—	3
Female Adults	35	5	40	—	3 ^b	4	7	33
„ Children	3	—	3	—	2	—	2	1
TOTALS	77	13	90	—	10	9	19	71

^a—Three of these patients were re-admitted to the Settlement.

^b—Two „ „ „ „

CLASSIFICATION OF LEPELERS NUNGE LEPROSY SETTLEMENT, 31ST DECEMBER, 1924. (Muir's method, see T.D.B. 1924, Vol. 21, No. 11, p. 871.)

Nerve Cases.		Bacteriological Cases.			Unclassified.	Non-Leper.	Total.
(A1)	(A2)	(B1)	(B2)	(B3)			
36	17	6	2	5	4	1	71

Includes all cases showing apparent infection of the skin, apart from mere depigmentation, whether confirmed bacteriologically or not.

Yaws.—344 cases were notified, against 123 during 1923.

Patients appear to be coming in well from the district for treatment at the Sewa Hadji Hospital.

OTHER NOTIFIABLE DISEASES.

The cases of Chicken-pox (12), Influenza (42), Mumps (26), Measles (38), do not call for comment.

OTHER DISEASES CAUSED BY INFECTION.

Two African deaths were certified as due to tetanus.

Six deaths (one Asiatic, five Africans) were certified to be due to the retention of the products of conception or puerperal infection. One African was so notified.

Malaria accounted for ten deaths.

DEFICIENCY DISEASES.

Rickets.—One African death was notified from this cause.

Scurvy.—One African death was certified from this cause.

HELMINTHIC DISEASES.

Ankylostomiasis.—This disease again came second in the list of causes of death. 55 deaths were attributed to the disease, of which 19 were certified.

SEWAGE DISPOSAL.

The reconstruction of the Police Barracks drainage was proceeding at the end of the year.

The water flushed public trough closets at Suliman Street were completed and connected by a new length of sewer to a new septic tank above the foreshore. An incinerator latrine has thereby been abolished, and the system is working well.

Those of similar pattern at the Press and New Market are working well, though it has been found necessary to construct a second absorption pit for the latter, owing to the pores of the ground becoming choked by the enormous quantity of solid fæces passing into the first pit. The second chamber is now absorbing the liquified effluent well, and provision has been made for sub-soil irrigation, should that ever become necessary.

CESSPIT EMPTYING.

An increase of 986 lorry loads of liquid cesspit contents was emptied during the year, with an increase of revenue from this source of Shs. 167-20.

Were it not for the fact that most of the cesspits are at Government buildings, the revenue would be much greater, but the process is offensive and affords scope for mosquito breeding in the cesspits owing to covers being broken and left partially closed. The sooner the cesspits can be replaced by sewerage the better for the comfort of the community.

REFUSE DISPOSAL.

28,164 cart loads of refuse were removed, an increase of 2,963 loads over the number for 1923. The filling of Amani Street Swamp with the resultant ash is proceeding well.

It is hoped that motor transport will be available shortly for the more rapid and efficient removal of house refuse, for which the present ox transport is unsatisfactory.

WATER SUPPLY.

The figures supplied by the Executive Engineer, Public Works Department, and inserted as Table IV, 9 show some progress, but the amount of water available is still inadequate as shown by the 15 applications for connection to the main which had to be refused. It has been calculated that 250,000 gallons per day are necessary for the township; i.e., 91,250,000 gallons per annum.

A scheme for taking into use the Gerezani stream and filtering it, and chlorinating if necessary, is now under consideration.

The new Railway quarters for Asiatic Staff are supplied from the New Market bore-holes; the water closets are connected to the mains, but all washing water is drawn from stand pipes in the street, in order to minimize waste and to prevent the porous cesspits from overflowing.

The inadequacy of the water supply for the native population is again emphasized. Many more stand-pipes are required throughout the native town.

It is distressing to watch the crowd of sometimes twenty persons waiting round a single well, of whom perhaps six have dropped their buckets into the well, waiting while sufficient water percolates into the well to fill the buckets.

CLEARANCE OF BUSH.

This is carried on continuously as far as labour permits. No accurate figures are kept to show the acreage cleared.

STATISTICS.

Available figures are given in Table III.

Without any accurate estimate of the population, and without registration of Asiatic and African births, it is impossible to place any reliance on calculated rates.

The importance of frequent census taking with the object of establishing rates of increase from which the population could be estimated with sufficient accuracy in the inter-census periods is again urged.

FOOD SUPPLY.

With the appointment of an additional Sanitary Superintendent possessing the Meat and Food Inspector's certificate of the Royal Sanitary Institute, it has been possible to exercise much closer supervision over the food and milk supply.

The new dried Shark Market was occupied on 1st November and the old buildings are being demolished.

One hundred "lots" of foodstuffs were seized or surrendered and condemned.

Those so condemned since July include :—

Grain and pulses	43 lots
Tinned foods, including :—	
Sardines	} 10 lots
Milk	
Cream	
Chocolates	
Herrings	
Vegetables	
Meat (from Market)	8 lots
Fresh Fish	1 lot.

Mr. Humphrey states that the average percentage of diseased grains out of ten samples seized was 43.3 %. The lowest number was 22 % and the highest 98 %. The unsound condition of the grain was generally due to weevils.

Forty-seven samples were sent to the laboratory, of which forty were milk. All were satisfactory. The percentage of fat in the milk samples varied from 3.11 to 5.45 %. It was found that the high class vendors supplied milk with the lowest percentage of fat, and it is believed that the proprietor of the poorer class mixes goats' milk with the cows' milk.

Ten shops are now licensed for the sale of milk. Sixteen other persons supply milk direct to customers, or sell in the market.

LICENSED PREMISES.

	Licensed.	Not Licensed.	Total.
Eating Houses	21	0	21
Aerated Water Manufacturers	2	0	2
Ice Cream and Cool drink Manufacturers	8	0	8
Milk Sellers	26	0	26
Milk Shops	10	(1 under notice)	11
Cowsheds	3	17	20
Bakeries and Confectioners	14	0	14

Seven persons were prosecuted after warning for selling milk without a licence, one for exposing unsound food for sale, and one for refusing to supply a sample on demand. Eight persons were convicted and one discharged on compassionate grounds.

GOVERNMENT FOOD SUPPLIES.

Samples of food-stuffs submitted to the Central Tender Board were examined and reported on at the six-monthly meetings of the Board, and as becomes necessary from time to time.

MATERNITY AND CHILD WELFARE.

This most useful branch of the work was inaugurated on 27th October, 1924, with the appointment of Miss B. G. Allardes as Sister in charge.

It was decided to erect a model native house in the Native quarter to be used as a Clinic for ante - and post-natal work among the African population and containing two small wards for the accommodation of two in-patients.

This building was under erection at the end of the year. It contains, in addition to the two small wards, an office for the Sister-in-charge and large out-patients treatment room, in addition to the usual out-buildings.

The following duties are also carried out by the Sister at the present time :—

Daily visit to Infectious Diseases Hospital.

Daily visit to Government School excepting Saturdays and Sundays.

Fortnightly visits to K.A.R. Women and Children.

" " " Police

Supervision of vaccination of Women and Children.

Home visiting of maternity cases, and school children where necessary.

The Sister reports that the women were shy of interference at first and very careless about disease, especially regarding the babies' eyes.

It is expected that the maternity side of the work will increase very much as soon as the Clinic is opened.

The work of home visiting is much hindered by there being no notification of births.

MEDICAL INSPECTION OF SCHOOL CHILDREN.

This branch demands increasing attention and is of undoubted value to the community.

The attendance at the School has averaged 201.11, and the number of Teachers and Pupil Teachers in residence was 22.

It was found possible to make a card index survey of the physical condition of the children during the year, but an analysis of the results of this survey has not yet been made.

The general condition of the children has improved very much and cleanliness of body and mouth show considerable progress, which reflects great credit on the teaching staff.

The issue of a mid-day meal to necessitous children is a valuable innovation and will no doubt lead to better work in the afternoons.

The appointment of a Nursing Sister to take charge of Maternity and Child Welfare work allowed of frequent visits being paid to the school by this lady and much greater supervision of the dressings and treatment is thereby made possible. The homes of children with scabies have been visited in many cases and an endeavour made to prevent their re-infection in the home after treatment.

BUILDINGS.

It is much to be regretted that the medical work, in common with the educational work, suffers from the extremely unsuitable buildings in which the school is accommodated. These consist of one stone building containing two class rooms for senior students, two long iron buildings accommodating the technical classes (carpentry, weaving, and painting), the head-master's office, medical room and ordinary classes. Several sheds built of Coconut leaves house many of the junior classes, and these are not rain-proof.

The boarders are housed in well-built dormitories built of mud and wood in native fashion.

The whole of the medical work is carried out in one room which is also used as a store for garden tools and through which it is necessary to pass in order to reach the Headmaster's office. There is no privacy for examination, and interruptions are constant. The light is insufficient for the examination of a throat. There is no water laid on to the main building and no drainage. The need for adequate accommodation for the satisfactory performance of the medical work was pointed out in connection with the Estimates for 1925-26.

The latrines are on the dry pan and incinerator system, and the foul smoke from the incinerator frequently causes nuisance in the buildings. Water is now available and it is considered that water flushed closets of oriental pattern, draining into a cesspit, should be provided, as much for an object lesson in hygiene to the pupils, as for improvement of the unsatisfactory and potentially dangerous conditions now prevailing.

The diseases treated, as diagnosed by the dresser, are summarized below :—

Ulcers	653	Ear-ache	15
Pain (situation not stated) ..	243	Yaws	9
Cough	198	Diarrhoea	5
Fever	137	Impetigo	4
Scabies	137	Measles	3
Ringworm	87	Anæmia	1
Colic	78	Tapeworm	1
Jiggers	49	Chicken-pox	1
Mba (a form of tineæ)	34	Hordeolum	1
Boils	26		
Constipation	21	TOTAL	1703

VACCINATIONS.

258 vaccinations were performed with a success rate of 48 % out of those re-inspected on the eighth day.

Admissions to Hospital.—Sixty-two.

Laboratory.—183 specimens were sent to the Laboratory.

Malaria.—Eight children were admitted to hospital suffering from malaria.

An examination of the blood of apparently healthy children was carried out by the Director of the Laboratory; all had normal temperatures but a heavy infestation with malarial parasites was revealed, as below :—

PUPILS.

1924, Month.	Blood Speci- mens sent.	S.T. Para- sites.	S.T. + B.T. Para- sites.	B.T. Para- sites.	Total Positive.	Per- centage Positive.	Micro- filaria.	Negative.
September ..	7	3	—	—	3	—	—	4
October ..	92	46	2	3	31	—	1	40
November ..	45	20	—	—	20	—	1	24
December ..	27	14	—	1	15	—	2	10
Total ..	171	83	2	4	89	52.04	4	78
PUPIL TEACHERS—								
(a) Young—								
October } ..	10	9	—	—	9	—	—	1
November }								
(b) Adult—								
November ..	3	3	—	—	3	—	—	—
Total ..	13	12	—	—	12	92	—	1

DENTAL.

Fifty children visited the Dental Surgeon and a number of extractions, fillings and scalings were performed. The Dental Surgeon points out how necessary it is that the children should have a regular dental inspection with probe and mirror, but this is impossible at present. It is hoped that the provision of an additional dental officer may permit of this being done before long and so prevent caries from proceeding to a point when it becomes obvious to the eye. The deposits of tartar which are so frequent in these children and lead to pyorrhœa also demand frequent expert attention.

PORT HEALTH.

Ships Cleared	274
Dhows	814

No cases of infectious disease were found on vessels arriving in the harbour.

The following steamers of the British India Line were in quarantine at Zanzibar, on account of the occurrence of Small-pox during the voyage from Bombay to the coast :—

KAROA, on 29.2.24.	Small-pox in a second class passenger.
KHANDALA, on 12.4.24.	„ „ a deck passenger.
KARAGOLA, on 11.5.24.	„ „ „ „
KARAPARA, on 26.5.24.	„ „ „ „

NEW WORKS.

The list of works required was submitted through the Township Authority in August and mainly recapitulated those which have been asked for in former years.

The need for work in connection with Swamp drainage is again urged.

NATIVE SANITARY INSPECTORS.

Two new probationary Inspectors commenced their training in January and February.

A comprehensive course of training, both theoretical and practical, lasting 11½ months, was carried out for these men in English, and an examination was held in the latter half of December, at which ten out of twelve candidates satisfied the examiners.

The examiners consisted of :—

The Senior Sanitation Officer.
The Deputy Director of Public Works.
The Acting Director of Laboratory.
The Headmaster, Government School.

The following papers were set :—

1. Sanitary Science	..	..	..	3 hours
2. Tropical Hygiene	..	..	..	3 "
3. Mixed Paper	..	..	..	2 "
4. Practical Report	..	..	..	2 "
5. Viva .. .. .	..	..	..	40 minutes.

The whole ground covered by the course was examined and the results were very satisfactory. Weakness in the English language and in arithmetic are the main difficulties which have to be met, together with the difficulty of obtaining natives who can apply their knowledge.

MUSEUM AND PROPAGANDA.

Some progress has been made in the furnishing of the Museum and great credit is due to Sanitary Superintendents Rowe, Moore and Humphrey for their excellent work in the preparation of exhibits.

Two large size Crayon drawings of *Culex* and *Stegomyia* mosquitoes, copied from the coloured illustrations in Byam and Archibald, were made and kindly presented by Mr. H. M. Fisher, Government Dental Surgeon.

A large number of the photographs presented by the Director of the Wellcome Bureau of Scientific Research were mounted and described.

A set of specimens and photographs illustrating the coagulation of cows' and dried milk in the stomach, and the preparation of dried milk were presented by Glaxo Ltd., through their local agents.

A special feature of the Museum is the collection of modern sanitary fittings, and a model inspection chamber, set up for the purpose of showing local contractors and property owners the requirements of modern sanitary practice in the tropics.

It is hoped that when routine duties become less onerous, more attention may be given to the teaching of Hygiene to all members of the community through the various media of newspaper articles, lectures, posters and lantern talks. The native paper "*NAMBO LEO*," is an excellent medium for this purpose, but it has not hitherto been possible to give the Editor the material assistance which he would welcome.

STORES AND ACCOUNTING.

This branch has been under the charge of Sanitary Superintendent Mackay throughout the year and occupies his whole time. A very great improvement in the methods of store-keeping and accounting is noticeable and great credit is due for the thorough reorganisation which has been effected.

It is hoped that the Sanitation Stores may be handed over to the Medical Store-keeper as soon as possible and so enable the Sanitary Superintendent to undertake other duties more immediately connected with the Health Office.

Summary of sanitation stores despatches (applying to stores for out-stations only ; Health Office Stores not included) :—

Packages despatched	458
Items dealt with	674
Articles accounted	21,906

The engagement of an Indian artizan to maintain the wheeled transport and other equipment is much appreciated.

Regular attention to cart wheels is now assured, and the minimum possible delay in the execution of repairs takes place.

TOWNSHIP AUTHORITY.



Ordinary Meetings	49
Extraordinary Meetings	2
Meetings of the District Town Planning and Building Committee ..	10
Number of new files opened (each in respect of new premises) ..	235
Number of Plans approved	66
Number of applications for minor alterations and reconstructions	1,204
Number of applications for construction of privy pits ..	420
Number of building plots issued for native houses ..	229
Number of notices issued for demolition of dilapidated houses	18
Number of notices for abatement of nuisances (structural) ..	9
Number of notices served for demolition of small huts erected without permit	23

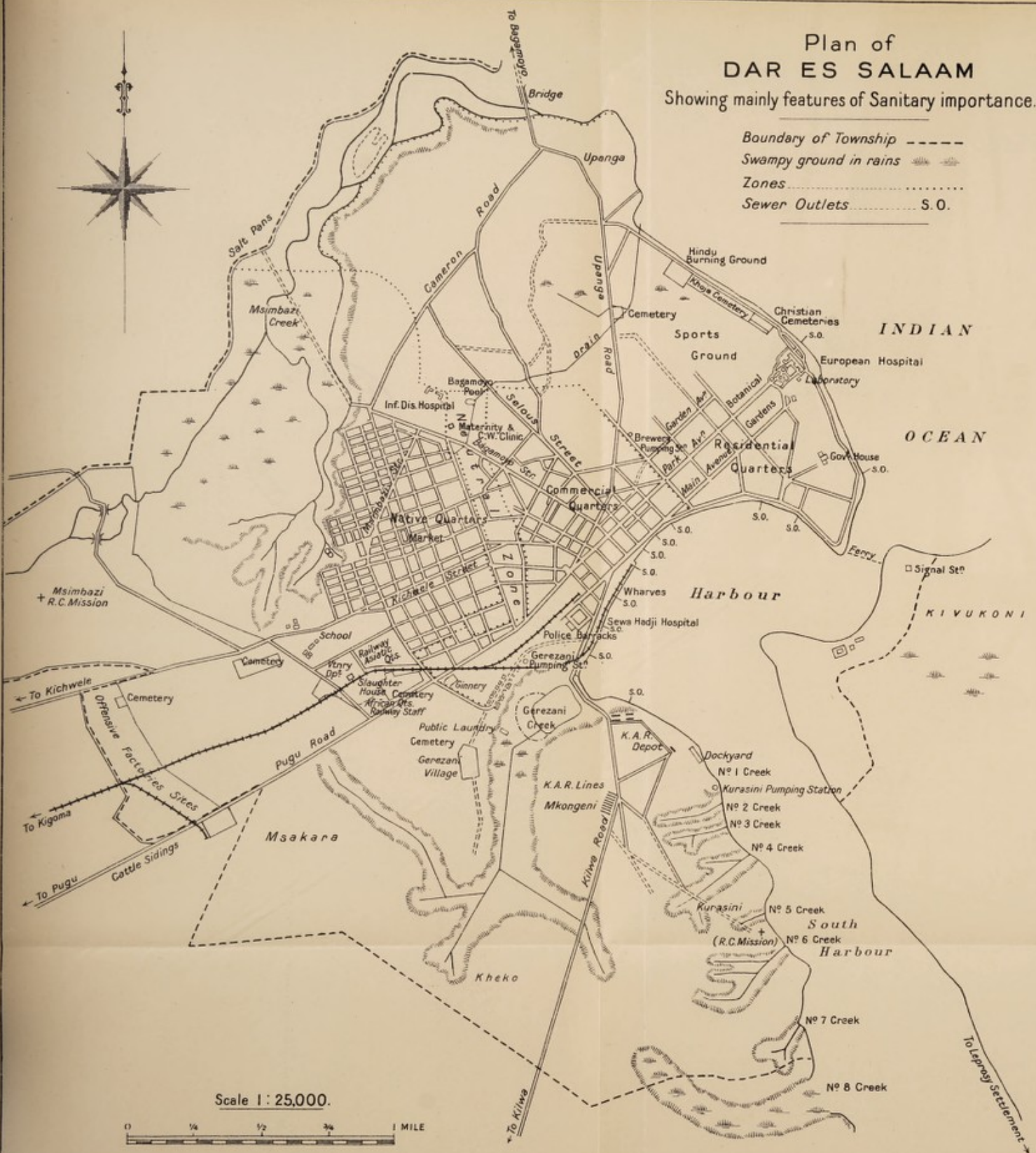
STAFF.

It is hoped that the appointment of technical and clerical staff during the new financial year, will relieve the Medical Officer of Health of much of the routine work in connection with the Township Authority. (The appointment of a Building Inspector was sanctioned by the Secretary of State in March, 1925.)

Plan of DAR ES SALAAM

Showing mainly features of Sanitary importance.

Boundary of Township -----
Swampy ground in rains  
Zones
Sewer Outlets S.O.



Scale 1 : 25,000.

0 1/4 1/2 3/4 1 MILE

D! 266
919

Traced by A.C.S.G. & H.M. from a plan supplied by the Health Officer. N° D! 67/114

WATERLOW & SONS LIMITED, LONDON, DEVONPORT & WATERFORD.

Land, Survey & Mines Dep't T.T. 4.4.1925.



EXTENSION OF THE NATIVE QUARTER.

This is proceeding most satisfactorily, 564 new building plots having been issued during 1923 and 1924. The quality of native dwelling house which is being erected is very good on the whole.

Subdivision of the town into building zones was gazetted on 26th September, 1924, in accordance with Rule 49, of Township Rules. This divides the town into three zones, as follows:—

Zone No. I. Residential buildings of European type only may be erected.

Zone No. II. Residential and trading buildings only may be erected.

Zone No. III. Native Quarters may be erected.

Between Zones II and III, there is a space nearly 150 yards wide, and about 55 acres in extent, upon which it is the intention to allow no new buildings, and it is hoped that this will gradually become an open space for recreation and amusement.

GOVERNMENT OFFICIAL'S QUARTERS.

The Government quarters available are insufficient to meet the needs of the number of Officials stationed in Dar-es-Salaam, and a number of these live in hotels, and in rented quarters which are far from comfortable.

It is considered that more houses for junior officials (two-roomed quarters) should be provided to relieve the present congestion.

TREE CUTTING.

The number of trees cut down by the Agricultural Department was 755, mainly mango trees and cocoanut palms. A large number of the latter were situated on plots and roads in the new native quarter, and were removed in order to facilitate building of houses and the passage of traffic.

A committee was appointed, of which the writer was a member, to make recommendations regarding the thinning of the trees in the Botanical gardens and Residential quarter.

The committee reported on 17th October, 1924, recommending extensive thinning of the trees, especially cocoanut palms and mango trees.

TABLE I.—STAFF.

Staff:—

Dr. R. R. Scott, Senior Medical Officer of Health.

Miss B. G. Allardes, Nursing Sister, in charge of Maternity and Child Welfare scheme.

Mr. C. N. Rowe, 1st Grade Sanitary Superintendent.

Mr. W. A. Moore, 1st Grade Sanitary Superintendent.

Mr. J. S. Humphrey, 2nd Grade Sanitary Superintendent.

Mr. W. M. Mackay, 2nd Grade Sanitary Superintendent in charge of Stores and Accounts.

Mr. M. P. Dave, L.C.P.S. (Bombay), Sub-Assistant Surgeon.

Mr. R. K. Mendirath, M.B., B.S. (Bombay), Sub-Assistant Surgeon.

Mr. Saluzinho de Souza, 1st Grade Sanitary Inspector.

Mr. D. A. S. Nanayakkara, 2nd Grade Clerk.

R. G. Kasembe, African Clerk (for Township Authority).

K. H. Rashid, African Clerk.

J. E. Machina, Probationary African Clerk.

12 Native Sanitary Inspectors, of whom two were railway probationers undergoing training.

Principal Changes :—

- Mr. C. N. Rowe, Sanitary Superintendent, returned from leave in England on 14th July, 1924, and resumed duty as Sanitary Superintendent *vice* Mr. W. A. Moore, who left on transfer to the lake district on 23rd July, 1924.
- Mr. M. P. Dave was transferred to Tabora on 26th March, 1924, and returned on 16th June, 1924.
- T. E. Harawa, African Clerk, returned to duty at P.M.O.'s Office on 22nd February, 1924.

New Appointments :—

- Mr. J. S. Humphrey, who returned from leave in England, assumed duty on 13th May, 1924.
- Miss B. G. Allardes, Nursing Sister, who returned from leave in England on 18th October, 1924, was appointed to initiate Maternity and Child Welfare scheme on 27th October, 1924.
- Mr. R. K. Mendirath, M.B., B.S. (Bombay), arrived on 1st appointment, on 21st March, 1924, and took over the duties of Mr. Dave.
- K. H. Rashid, African Clerk, assumed duty on 21st February, 1924.
- J. E. Machina, appointed as Probationary African Clerk on 1st October, 1924.
- Addison Ntukula, appointed as Probationary Native Sanitary Inspector on 23rd January, 1924.
- E. R. Muhango, appointed as Probationary Native Sanitary Inspector on 23rd February, 1924.

Obituary :—

- Native Sanitary Inspector Samuel Wallace died in Hospital on 16th January, 1924, of cirrhosis of liver.

Termination of Appointment :—

- Mr. R. K. Mendireth left for India on termination of appointment on 25th August, 1924.

TABLE II.
FINANCIAL.

REVENUE AND EXPENDITURE FOR 1924.

Particulars of Revenue.	Amount.		Total.	
	Shs.	Cts.	Shs.	Cts.
Fees received by Port Office for Bills of Health	2,578	00		
Receipts, Conservancy and Water Rates	2,160	00		
Reimbursements and miscellaneous	202	95		
Sale of Departmental Stores	373	10		
Overpayments recovered, Sanitary Labour	1,390	41		
Railway Fares and Freight (recovery)	12	60		
Fines, Departmental	5	16		
			6,722	22
TOTAL REVENUE, Shs.			6,722	22

TABLE II.—continued.

REVENUE AND EXPENDITURE FOR 1924—continued.

Particulars of Expenditure.	Amount.		Total.	
	Shs.	Cts.	Shs.	Cts.
<i>Office and Administration—</i>				
Senior Medical Officer of Health (salary and compensatory allowance)	20,060	00		
Sanitary Superintendents (1 first grade, 2 second grade) ..	29,040	00		
Native Sanitary Inspectors	9,170	19		
Native " " " " Railways	1,078	00		
Asiatic Clerk (2nd grade)	3,420	00		
Native Clerks (three)	3,064	52		
Office Boys (four)	1,318	18		
Artizans (one Indian (10 months), and two Native)	3,113	44		
Yard and Motor Boys	1,712	48		
Night Watchmen (two)	666	45		
Workroom and Museum Attendant	359	00		
Store Boys (two)	530	99		
			73,542	25
<i>Quarantine and Infectious Diseases Hospital—</i>				
Sub-Assistant Surgeon	4,886	00		
Native Dispenser	1,624	00		
Boat Boys	1,632	12		
I.D.H. Attendants	1,003	26		
I.D.H. Labour	2,262	19		
Rations for Infectious Diseases Hospital	2,919	03		
Vaccinators	510	44		
			5,691	66
<i>Leper Settlement, Nunge—</i>				
Dresser	440	00		
Rations	6,622	67		
			7,062	67
<i>Maternity and Child Welfare Clinic—</i>				
Sister in Charge and Health Visitor (two months)	920	00		
Two Rickshaw Boys	129	68		
			1,049	68
<i>General Duty—</i>				
Temporary Labour (during March)	3,171	90		
Cemetery Boys	1,759	76		
Hedge Cutters	2,307	20		
			22,685	77
<i>Latrine and Market Sweepers—</i>				
Latrine Sweepers	4,235	46		
Market Sweepers (Administrative Funds)	3,387	74		
			7,623	20
<i>Refuse Disposal—</i>				
Incinerator Staff	5,286	34		
Ox-cart Boys	11,149	57		
			16,435	91
<i>Cesspit Emptying—</i>				
Pump Boys	1,324	26		
Cost of two Daimler 2-ton Lorries (approximately)	6,196	00		
			7,520	26
<i>Road Sweeping—</i>				
Residential Area	3,734	10		
Commercial Area	3,524	99		
Native Quarter	2,972	41		
			10,231	50
<i>Rat Catching—</i>				
Rat Catchers	1,174	67		
Rat Bait	181	55		
			1,356	22
Total carried forward			162,344	50

TABLE II.—*continued.*REVENUE AND EXPENDITURE FOR 1924—*continued.*

Particulars of Expenditure.	Amount.		Total.	
	Shs.	Cts.	Shs.	Cts.
Brought forward				
<i>Anti-Mosquito Measures—</i>			162,344	50
(a) Recurrent Expenditure—				
Sanitary Inspector in Charge	6,000	00		
Mosquito Clerks, Finders and Oilers	9,715	89		
Drainers—permanent	22,162	49	37,878	38
(b) Extraordinary Expenditure—				
Labourers, specially engaged during August and September to fill No. 7 Creek, Kurasini	1,045	51		
Artisan, for maintenance of trolley line (April)	60	00		
Labourers, for filling of swamps during March.. .. .	5,595	30	6,701	81
Uniforms	1,377	67	1,377	67
<i>Tree Cutting—</i>				
Permanent allocation to Head Gardener, Agricultural Department	2,220	00		
Special allocation in March	614	80	2,834	80
<i>Samples for Analysis</i>	50	84	50	84
<i>Transport and Travelling—</i>				
Motor Cycle allowance	753	29		
Cycle allowances (pneumatic)	231	52		
Rickshaw Hire and Wages	197	68		
Travelling allowances	241	99	1,423	99
GRAND TOTAL, Shs.			212,611	99

TABLE III.

STATISTICS OF POPULATION FOR THE YEAR 1924.

	Europeans.	Africans.	Asiatics.	Total.
Civilian inhabitants, 1921 Census	555	10,901	4,008	15,464
K.A.R. and Police, not included in above ..	—	1,422	—	—
Total	555	12,323	4,008	16,886
Number of Births registered during the year—				
1921	11	—	—	11
1922	12	—	—	12
1923	12	—	8	20
1924	19	—	6*	25
(There is no compulsory registration of African and Asiatic births.)			* includes 1 Mauritian.	
Number of Deaths registered during the year—				
1921	7	170	52	229
1922	11	184	44	239
1923	8	237	79	325
1924	8	259	79	346
Number of Immigrants (all nationalities) ..	—	837	—	—
Number of Emigrants (not recorded) ..	—	—	—	—
Number of Inhabitants in 1924 (estimated by Senior Commissioner, in his Annual Report)	—	24,000	—	—
Average number of Inhabitants, K.A.R. Lines	Not recorded	962	—	—
Average number of Inhabitants, Police Barracks	—	363	—	—

The above figures are not considered sufficiently reliable to serve as a basis for estimating increase of population or death rates.

TABLE III—*continued.*

TABLE OF DEATHS NOTIFIED.

Classified as Certified when seen by a Medical Practitioner before Death.

Classified as Notified when cause of death ascertained by Inquiry after Death.

DISEASE.	EUROPEAN.		ASIATIC.		AFRICAN.		TOTAL.	
	Certified.	Notified.	Certified.	Notified.	Certified.	Notified.	Certified.	Notified.
<i>Disease caused by Infection—</i>								
Dysentery	—	—	1	—	2	—	3	—
Hyper pyrexia	—	—	2	—	—	—	2	—
Malaria	—	—	—	—	1	1	1	1
„ Cerebral	1	—	4	—	3	—	8	—
Pneumonia, Broncho ..	1	—	9	3	4	10	14	13
„ Lobar	1	—	3	—	—	1	4	1
„ Undifferentiated ..	—	—	5	1	8	16	13	17
Puerperal Sapræmia ..	—	—	—	—	1	—	1	1
„ Septicæmia	—	—	1	—	4	1	5	1
Pyrexia, Uncertain								
Origin	—	—	2	—	1	32	3	32
Pyogenic Infection ..	—	—	—	—	2	—	2	—
Syphilis, Congenital ..	—	—	—	—	2	—	2	—
Septicæmia	—	—	—	—	—	1	—	1
Tuberculosis, Lungs ..	—	—	3	1	11	9	14	10
Tetanus	—	—	—	—	2	—	2	—
<i>Diseases of the Nervous System—</i>								
Convulsions	—	—	2	2	—	2	2	4
Epilepsy	—	—	1	—	—	—	1	—
Granuloma of Brain ..	—	—	—	—	1	—	1	—
Insanity	—	—	—	—	—	1	—	1
<i>Diseases of the Eye—</i>								
Carcinoma of Eye ..	—	—	—	—	1	—	1	—
<i>Diseases of the Circulatory System—</i>								
Heart Disease	—	—	—	—	—	2	—	2
Syncope	—	—	—	—	—	1	—	1
<i>Diseases of the Blood—</i>								
Anæmia	—	—	—	—	2	—	2	—
„ Pernicious	—	—	2	—	—	—	2	—
<i>Fat Embolish</i>	—	—	—	—	1	—	1	—
<i>Diseases of the Respiratory System—</i>								
Asthma	—	—	1	—	—	—	1	—
Bronchitis, Capillary ..	—	—	—	1	—	—	—	1
„ Chronic	—	—	3	—	2	18	5	18
Carried forward ..	3	—	39	8	48	95	90	103

TABLE III.—*continued.*TABLE OF DEATHS NOTIFIED—*continued.*

DISEASE.	EUROPEAN.		ASIATIC.		AFRICAN.		TOTAL.	
	Certified.	Notified.	Certified.	Notified.	Certified.	Notified.	Certified.	Notified.
Brought forward..	3	—	39	8	48	95	90	103
<i>Diseases of the Digestive System—</i>								
Colic	—	—	1	—	—	2	1	2
Cirrhosis of Liver ..	—	—	1	—	1	—	2	—
Diarrhœa	—	—	1	—	—	—	1	—
„ Primary infantile	—	—	1	—	—	—	1	—
Enteritis	—	—	2	—	—	—	2	—
Gastritis	—	—	—	1	—	1	—	2
Hernia, Strangulated..	—	—	—	—	—	2	—	2
Hepatitis	—	—	1	—	—	—	1	—
Intestinal Obstruction	—	—	—	—	—	5	—	5
„ Perforation	—	—	—	—	—	1	—	1
Rupture of Gastric-ulcer	1	—	—	—	—	—	1	—
Tumour of Liver ..	—	—	—	—	1	—	1	—
Volvulus	—	—	—	—	—	2	—	2
<i>Diseases due to Disorder of Nutrition or of Metabolism—</i>								
Chronic Wasting Disease	—	—	—	—	—	1	—	1
Debility	—	—	—	—	1	—	1	—
Diabetes	—	—	1	—	—	—	1	—
Gout	—	—	—	—	—	1	—	1
Rickets	—	—	—	—	—	1	—	1
Scurvy	—	—	—	—	1	—	1	—
<i>Diseases of the Generative System—</i>								
<i>Diseases of the Male Organs of Generation—</i>								
Elephantiasis of Scrotum	—	—	—	—	1	—	1	—
Ulceration of Penis..	—	—	—	—	—	1	—	1
<i>Diseases of the Female Organs of Generation and in connection with Pregnancy and Parturition—</i>								
Asphyxia Livida ..	—	—	—	2	—	—	—	2
Delayed Labour ..	—	—	1	—	—	—	1	—
Hæmorrhage as a result of mis-carriage	—	—	—	—	—	1	—	1
Premature Birth ..	—	—	4	1	1	2	5	3
Post-partum Hæmorrhage ..	—	—	—	—	—	1	—	1
Still Births	—	—	2	—	—	—	2	—
Tumour Ovarian ..	—	—	—	—	1	—	1	—
<i>Diseases of the Organs of Locomotion—</i>								
Arthritis, Suppurative	—	—	—	—	1	—	1	—
Cellulitis, Leg	—	—	1	—	—	—	1	—
„ Neck	—	—	—	—	1	—	1	—
<i>Malformations</i>	—	—	1	—	—	—	1	—
Carried forward ..	4	—	56	12	57	116	117	128

TABLE III.—*continued.*TABLE OF DEATHS NOTIFIED.—*continued.*

DISEASE.	EUROPEAN.		ASIATIC.		AFRICAN.		TOTAL.	
	Certified.	Notified.	Certified.	Notified.	Certified.	Notified.	Certified.	Notified.
Brought forward..	4	—	56	12	57	116	117	128
<i>Animal Parasites—</i>								
<i>Nematoda—</i>								
Ankylostomiasis ..	—	—	—	1	19	35	19	36
<i>Old Age and Senile</i>								
<i>Debility—</i>	—	—	6	1	—	26	6	27
<i>Injuries—</i>								
General—								
Contusions	—	—	—	—	1	—	1	—
Scalds	—	—	1	—	—	—	1	—
Drowning	—	—	—	—	—	2	—	2
Local—								
Fracture of the Skull	—	—	1	—	1	—	2	—
Gunshot Wound ..	1	1	1	—	—	—	2	1
Injury to Chest ..	—	—	—	—	1	—	1	—
Laceration of the								
Brain	—	—	—	—	1	—	1	—
<i>Poisoning, Fish</i>	2	—	—	—	—	—	2	—
TOTAL	7	1	65	14	80	179	152	194

SUMMARY OF DEATHS.

	Certified.	Notified.	Total.
European	7	1	8
Asiatic	65	14	79
African	80	179	259
TOTAL	152	194	346

TABLE SHOWING INCIDENCE OF DEATHS OCCURRING IN DAR-ES-SALAAM
TOWNSHIP DURING 1924.

Month.	European.	Asiatic.	African.	Total.
January	—	6	17	23
February	—	7	26	33
March	3	7	26	36
April	1	7	20	28
May	—	4	16	20
June	—	9	19	28
July	—	6	26	32
August	2	4	23	29
September	—	4	15	19
October	—	8	22	30
November	2	7	29	38
December	—	10	20	30
TOTAL	8	79	259	346
Mean Monthly Rate ..	—	6.5	21.5	28.8

TABLE III—*continued*.
COMPARATIVE TABLE OF DEATHS.

	European.	Asiatic.	African.	Total.
1921	7	52	170	229
1922	11	44	184	239
1923	8	79	237	325
1924	8	79	259	346

SUMMARY OF MORE FREQUENT CAUSES OF DEATH.

	1923.			1924.		
	Certified.	Notified.	Total.	Certified.	Notified.	Total.
Pneumonia (all varieties) ..	36	19	55	31	31	62
Ankylostomiasis	28	15	43	19	36	55
Malaria .. .	10	24	34	9	1	10
Pyrexia of uncertain origin ..	1	19	20	3	32	35
Old age and natural causes ..	—	22	22	6	27	33
Tuberculosis of lungs	16	3	19	14	10	24
Bronchitis, including undifferentiated chest complaints notified as "Kifua"	—	—	36	5	19	24

TABLE IV.

SUMMARY OF ROUTINE SANITARY WORK DONE DURING THE YEAR 1924 IN
DAR-ES-SALAAM.

I. AREA OF TOWNSHIP.

Year.	Approximate Area.	Number of Proclaimed Open Spaces.
1923 } 1924 }	9.7 square miles This includes the harbour, amounting possibly to a quarter of the total: the exact area of land within the Township is not available.	None proclaimed. The space intended to be left clear between the Native and Commercial quarters measures 55 acres. This space is occasionally referred to as the "neutral zone."

2. POPULATION (Civilian only).

Year.	Number of Natives (Asiatics and Africans).			Number of Europeans (including Americans).		
	Males.	Females.	Total.	Males.	Females.	Total.
1921	8,097	6,818	14,915	408	147	555
1922	—	—	—	—	—	—
1923	—	—	—	—	—	—
1924	—	—	See Table III.	—	—	—

3. HOUSING.

Table compiled from figures received from the Administrative Office.

Year.	Number occupied by Europeans.	Number occupied by Natives (Asiatics and Africans).
Number of Houses—		
1922	43	622
1923	55	530
1924	57	536
Number of Huts—		
1922	—	1,975
1923	—	2,180
1924	—	2,263

A census of houses was undertaken by the Native Sanitary Inspectors, for the purpose of ascertaining the number of houses in each Inspector's district. For this purpose the town was divided into five main subdivisions, I, II, III, IVa and IVb (subdivided into town and K.A.R. areas).

No. I comprises mainly the Residential quarter.

Nos. II and III contain most of the Commercial area, and a large amount of private land and small holdings, very sparsely inhabited.

Nos. IVa and IVb contain almost the whole of the native quarter, and the K.A.R. cantonment.

The figures are not absolutely accurate, but are sufficiently reliable to indicate the disposition of the houses in the Township.

TABLE IV.—*continued.*

A house of European type includes houses of substantial appearance, built mainly of stone; it does not indicate that it possesses modern sanitation, or is occupied by Europeans. It also includes the concrete and iron buildings of the K.A.R. A house of native type includes all houses built mainly of mud and wattle, and includes the ordinary Indian shop.

CENSUS OF HOUSES BY NATIVE SANITARY INSPECTORS.

District No.	Houses of European Type.	Houses of Native Type.	Total.
I.	106	—	106
II.	88	276	364
III.	77	478	555
IVa.	147	1,606	1,753
IVb. Town	144	435	579
K.A.R.	40	64	104
	602	2,859	3,461

4. ERECTION OF NEW BUILDINGS DURING THE YEAR 1924.

	1923.		1924.	
	No.	Action taken.	No.	Action taken.
Number of buildings erected without sanction ..	32	Notices served, and Township Authority's instructions complied with.	3	Prosecuted and convicted.
Number of Native huts erected without sanction	3	Demolished by order of Township Authority.	23	Notices served, and all demolished.

NOTE.—Four new Government residences completed during the year.

5. LATRINES.

	Males.		Females.	
	Number.	Number of Seats.	Number.	Number of Seats.
1. Number of Public Latrines—				
Water carriage	4	30	3	7
Incineration	12	52	3	4
Total at end of 1923	16	82	6	11
2. Number of Public Latrines erected during the year 1924—				
Water carriage	1	3	—	—
Incineration	—	—	—	—
Total at end of 1924	17	85	6	11

TABLE IV—continued.

3. Number of private latrines on dry-pan system, with incineration maintained by Health Office for Government buildings only One.			
	1922.	1923.	1924.
4. Average number of pails of night-soil removed daily ..	—	Not counted.	Not counted.
5. Average number of soiled pans removed and clean pails substituted	—	Pans are removed, cleaned and replaced at once.	Pans are removed, cleaned and replaced at once.
6. Number of night-soil men employed to clean latrines and remove excreta	—	15	12
7. Number of cesspools, including soakage pits	2,158	Not counted.	Not counted.
Number of cesspools cleansed (a) Private buildings ..	Not recorded.	Not recorded.	22
(b) Government buildings ..	"	"	34
8. Number of loads of cess removed	2,472	2,192	3,178
9. Number of new cesspools constructed during the year ..	Not recorded.	Not recorded.	Not recorded.
10. Number of old cesspools abolished	"	"	"
11. Number of new privy pits for which permits were issued	271	453	420

6. REMOVAL OF REFUSE.

	1922.	1923.	1924.
1. (a) Number of dustbins (Government bins) in use	—	194	222
(b) Number of " new " bins (Government bins) issued during year	—	—	119
2. Number of carts at work daily to remove refuse from streets ..	—	—	3
3. Amount of street refuse removed daily	Not recorded separately.		
4. Number of carts at work daily removing refuse from yards and premises	14	14	17
5. Amount of refuse removed daily from yards and premises ..	74	69	77
Total Cartloads	27,180	25,201	28,164
6. Number of men employed for moving domestic refuse—			
Ox-cart boys	—	40	42
Incinerator boys	—	15	16

TABLE IV—*continued.*

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

	Daily average number of pails of excreta.			Daily average number of cartloads refuse.			Daily average number of slaughter house and market offal.		
	1922	1923	1924	1922	1923	1924	1922	1923	1924
Buried or trenched	None.			None.			Slaughter-house offal removed by Veterin- ary Department and buried. Market offal included with domes- tic refuse and burned.		
Burnt	Not counted.			74.4	69.8	77.1			
Thrown into sea.. ..	None.			None.					
Otherwise dealt with	None.			None.					

8. AVERAGE DAILY NUMBER OF CARTLOADS OF TINS, CANS, BOTTLES, BROKEN CROCKERY AND OTHER INCOMBUSTIBLE MATERIAL REMOVED FROM HOUSES AND COMPOUNDS.

1922.

1923.

1924.

Cartloads not counted separately: all refuse passed through incinerators before picking over. Resultant ashes and incombustible material used for filling depressions.

9. WATER SUPPLY.

Nature of Supply.	1922.	1923.	1924.
I. <i>Pipe-borne Water</i> (from information supplied by Executive Engineer)—			
From Boreholes—			
1. Number of boreholes in operation at end of year.. ..	—	—	14
2. Number of new boreholes sunk during year	—	—	4
3. Additional water mains laid during year—			
(1) Garden Avenue	—	—	—
(2) Extension of Burton Street.. ..	—	—	—
4. Number of buildings on main	—	—	145
5. Number of buildings supplied by water-cart (14 of these 37 are on borehole water with higher salinity than that from Gerehani)	—	—	37
6. Number of buildings connected to main during the year, including 4 transferred from Brewery to Gerehani main	—	—	15
7. Number of applications for connection which had to be refused	—	—	15
8. Number of standpipes for sale of water	5	6	9
9. Number of gallons of water supplied from mains	—	—	24, 284, 154
10. Number of gallons sold by meter	—	—	6, 316, 320
11. Price of water sold—			
(a) To consumers on flat rate per month	—	—	Shs. 6 to 10
(b) To consumers on meter, per 1,000 gallons	—	—	Shs. 5.
(c) To consumers at standpipes per 4-gallon tin (in pence)	0.48	0.24	0.24

TABLE IV—*continued.*
WATER SUPPLY—*continued.*

Nature of Supply.	1922.	1923.	1924.
II. Wells—			
1. Public, excluding mosque wells	7	7	7
Number with pumps, and protected against surface water and mosquito breeding—			
(a) Completely	—	—	—
(b) Partially protected against surface water ..	All.	All.	All.
2. Private—			
Number in use in 1921, 295	Not recorded.	Not recorded.	238
Number disused in 1921, 52	"	"	95
Number protected against surface water and mosquito breeding	"	"	Not recorded.
Number uncovered or improperly covered	"	"	"
III. Tanks (fixed receptacles for the storage of water)—			
1. Public (elevated water towers)—			
(a) Water supply	—	11	—
(b) Fire storage tanks	—	8	—
(All are protected against mosquito breeding)			
2. Private	Not recorded.	Not recorded.	Not recorded.
IV. Nature of tanks and number of barrels in buildings ..	"	"	"

10. DRAINAGE.

Nature of Drainage.	Public.	Private.
Masonry Drains (sewers and piped drains not included)—		
Lineal yards of masonry drains—		
1922	4,951*	Not recorded.
1923	4,951*	" "
1924	7,621	" "
Lineal yards reconstructed during the year—		
1922	None.	" "
1923	"	" "
1924	†	" "
Lineal yards of new drains constructed during the year—		
1922	2,670	" "
1923	None.	" "
1924	None.	" "
Earth Drains or Ditches—		
Number of lineal yards of ditches cleaned, including clearing of masonry drains and including regrading and repairing—		
1922 (371 miles) Yards	642,882	" "
1923 (441 ")	776,151	" "
1924 (426 ")	751,294	" "
Number of lineal yards of ditches dug and graded, <i>i.e.</i> , newly dug—		
1922	2,299	" "
1923	4,991	" "
1924	3,839	" "
Average frequency clearing ditches of grass—		
1922 (22 miles) about every	3.0 weeks	—
1923 (22 ")	2.48 "	—
1924 (23.2 ")	2.8 "	—

* Figures given in Reports for 1922 and 1923 are incomplete.

† Culvert at Upanga Road repaired.

TABLE IV—*continued.*

II. INSPECTIONS AND PROSECUTIONS.

	1922.	1923.	1924.
Number of Inspectors employed—			
Native Sanitary Inspectors	9.0	9.0	10.6
Mosquito finders	28.7	26.1	24.5
Number of houses inspected	—	111,004	110,867
Number of houses wherein larvæ were found	See analysis of sources of larvæ.		
Number of notices served to remove conditions causing breeding of mosquitoes	12	210	227
Number of persons fined for having mosquito larvæ on premises ..	—	10	18
Number of notices served to remove insanitary conditions on premises	—	57	110
Latrine nuisances (native) 55	—	—	110
To provide mosquito-proof covers for wells and soakage pits 31			
Insanitary premises 21			
Cleansing notices (houses) after infectious diseases .. 3			
Number of persons fined for not removing insanitary conditions after notice	—	Nil.	19
Number of soda and aerated water factories inspected	1	2	2

TABLE V.

METEOROLOGICAL RETURN FOR THE YEAR 1924.
(Rainfall recorded at Health Office.)

	Total Fall.	Number of days on which Rain fell.
(German records—average of 19 years)	Inches. 42·60	—
1919	34·06	77
1920	24·63	83
1921	33·90	82
1922	34·08	102
1923	25·65	129
1924	28·94	114

RAINFALL RECORDED ON GAUGE AT HEALTH OFFICE, ACACIA AVENUE, 1924.

	Amount in inches.	Highest fall on one day.	Number of days on which rain fell.	Total fallen at end of month.
January	0·490	0·34	10	0·49
February	4·902	1·49	14	5·392
March	3·170	0·90	13	8·562
April	8·090	1·66	18	16·652
May	3·795	1·40	9	20·447
June	2·865	0·84	10	23·312
July	1·090	0·43	5	24·402
August	0·410	0·29	5	24·812
September	1·540	0·71	8	26·352
October	0·265	0·15	7	26·617
November	0·740	0·38	7	27·357
December	1·590	0·83	8	28·947
	28·947	1·66	114	

For other meteorological records see Report of Director of Laboratory.

TABLE VI.
 INFECTIOUS DISEASES HOSPITAL, DAR-ES-SALAAM.
 RETURN OF DISEASES AND DEATHS (IN-PATIENTS) FOR THE YEAR 1924.

Diseases.	Remaining from 1923.	Number of Patients ad- mitted during 1924.	Total number Treated during the year 1924.	Number of Deaths.	Remarks.
Chicken-pox	—	12	12	—	
Leprosy	6	13	19	—	Three transferred to Leper Settlement, Nunge
Mumps	—	23	23	—	
Measles	—	24	24	—	
Tuberculosis, Lungs	—	20	20	6	Diagnosis of two cases not being confirmed bacteriologically, changed to Debility and Bronchitis.
Under observation	1	2	3	—	Diagnosis changed to Malaria and duly confirmed by the Laboratory. One case, admitted as Mumps, not confirmed.
TOTAL	7	94	101	6	

Out of 94 newly admitted during the year, five patients escaped during the night, two of these being lepers. One of the two lepers was subsequently caught breaking into the Hospital at night, and was sentenced to three months' imprisonment.

REPORT ON THE HEALTH OF TANGA FOR THE YEAR 1924, BY DR. R. NIXON, M.B., CH.B.,
D.T.M., D.P.H., MEDICAL OFFICER OF HEALTH, TANGA.

The records for the year show an improvement in European health, an absence of small-pox throughout the district for the first time since the occupation, a decrease of malaria among all sections of the community.

The new infectious diseases hospital, and the new incinerators have been brought into use during the year, and the main storm water drains of the town have been repaired or reconstructed. The main defect within the township is the inadequate water supply, particularly in the native area.

In the subdistricts little medical supervision has been possible, the hookworm is prevalent in every direction, and the native deaths still exceed the births.

VITAL STATISTICS.

Europeans :—

The births, deaths and cases of sickness during the last two years, are :—

			1923.	1924.
Births	..	..	5	7
Deaths	..	..	7	5
Sickness	..	..	302	214

Of the five deaths during the year, three occurred in Tanga Hospital, and two at Magila Mission, Muheza. Of the three in Tanga, two were due to trauma, and one to malaria, the last an imported case from Kihuhwi. The deaths at Magila were due to general septicæmia, and to heat-stroke.

The European cases of infective disease were :—

			1923.	1924.
Malaria	..	..	55	34
Influenza	..	..	6	15
Dysentery	..	..	3	1

No ankylostomiasis, schistosomiasis, yaws, gonorrhœa, pneumonia or tuberculosis were recorded in Europeans.

Non-Europeans :—

The following table is based on the akidas' returns. Both births and deaths are certainly understated, but the factors of error are probably much the same during each year.

	Births.	Deaths.	Birth-rate.	Death-rate.
1921 (7 months only)	582	928	11·6	18·8
1922	965	1335	11·1	15·4
1923	1047	1274	12·1	14·7
1924	963	1144	11·2	13·3

The table indicates a stationary native birth-rate, and a steadily falling death-rate. The returns are, however, so unreliable that no conclusion from them can be accepted with confidence.

The Tanga Hospital Non-European Sickness returns are as follows :—

	1923.	1924.
Cases of sickness	10,754	9,553
Deaths	97	101

The more important causes of sickness were :—

	1923.		1924.	
	Cases.	Deaths.	Cases.	Deaths.
Ulcers	1,539	7	1,147	5
Hookworm	1,546	41	1,365	50
Malaria	1,151	0	762	0
Yaws	302	1	409	0
Syphilis	133	0	162	2
Gonorrhœa	116	0	142	0
Tuberculosis	44	5	37	8
Pneumonia	54	6	65	8
Dysentery	19	2	12	0
Bilharzia	114	0	107	0
Small-pox	12	1	0	0

No plague, cholera, sleeping sickness, tetanus, enteric or leprosy were treated.

MOSQUITOES, ANTI-MOSQUITO WORK AND MALARIA.

Two important structural anti-mosquito measures have been dealt with during 1924 :—

School Street Drain.—This is a masonry drain, about half a mile in length, and with a channel about $4\frac{1}{2}$ by $2\frac{1}{2}$ feet. It conveys storm water from Ngamiani and from the east and centre of the European town into the railway cutting. Near its outfall the roof caved in, presumably some years ago, and only a thin trickle of water could find its way through the obstruction. The caved-in masonry and earth were cleared from the channel in July. About 20,000 gallons of stagnant water were released, which contained at a conservative estimate, about two million mosquito larvæ. The channel was kept clear and in September the Public Works Department repaired, and in parts reconstructed the drain.

Side drains of Wharf Line.—These drains, which run through the centre of the town and receive a large volume of storm water, were filled with old iron, broken and choked. Mosquito larvæ were found in them in large numbers. They are now in course of reconstruction by the District Engineer, and the new masonry drain will provide an unbroken flow without pockets and backwaters for mosquito breeding.

The following are comparative figures of the routine anti-mosquito measures :—

Number of Inspections :—

	1923.	1924.
Premises	47,593	65,667
Drains	4,244	14,365
Pits	35,232	70,656
Pools	296	507
Wells	3,245	8,378
Tanks and barrels	36,216	115,724

It will be seen that the work has roughly been doubled. This is due to an increase in the anti-mosquito staff, and in the area supervised, the native town now being regularly included.

The collections of mosquito larvæ found are :—

1921	258
1922	440
1923	2,486
1924	3,664

Mosquitoes.

The collections of the larvæ found during the year consists of :—

Culex	58 %
Stegomyia	38 %
Anopheles	2 %
Megarhininæ	2 %

The predominant Culex, is *Culex fatigans*, and the *Stegomyia*, *Stegomyia fasciata*. In Tanga, the *Stegomyia* is rarely seen in the houses, 98 % of the house-infesting mosquitoes being *Culex*. During 1924, the *Culex* curve has been, with slight exceptions, directly proportional to the rainfall. The *Stegomyia* curve has been independent of the rainfall.

Mosquitoes and Coconut Palms.—As anti-mosquito work increases in Tanga, it becomes more difficult to accept in its entirety the indictment of the coconut palm. Dr. Haworth, after exhaustive work on the subject, concluded that the large majority of Tanga palms contained mosquito-larvæ in their tops during every month of the year. There are facts in Tanga difficult to reconcile with this conclusion. The buildings with the most palms in their immediate vicinity are not the buildings most heavily infested with mosquitoes. Again, the mosquitoes in the Tanga houses during the last four months have been few, and the breeding places found on ground level account adequately for them. We have many thousands of coconut-palms in Tanga, but the number of house mosquitoes during these four months has been incompatible with the thousands of active and uncontrolled breeding places. My own climbers have been unable to find larvæ in the palm-tops, except after rain, and then in 11 % only of the palms examined. Our seasonal mosquito "plague" has always been co-incident with the heavy rains, and it seems probable that accumulations of rainwater in defective drains and pits, in pools, holes, tins, coconut-shells and other ground breeding-places, has played a greater part than the tops of palms. An intensive campaign on ground level during the rains of 1925 may shed more light on the subject.

ANTI-MOSQUITO WORKS REQUIRED.

There are two prolific sources of mosquitoes in Tanga, which should be dealt with structurally :—

(1) *Ngamani Wells.*—Until the wells in the native town are repaired, or an alternative water supply provided, it is impracticable to prohibit the digging of shallow surface wells in the native compounds. These surface wells have provided 15 % of our collections of larvæ during the last four months, and almost all the collections have been very large.

(2) *Kisosora Springs and Swamps.*—A drainage scheme is necessary which will deal with the spring water throughout the year, and prevent the extensive flooding of the old rice fields after heavy rain. 51 of our 73 collections of Anopheline larvæ were taken in this area. The proposal to adopt the springs as the foundation of a pipe-borne water supply for the town will not obviate the annual flooding of this area.

MALARIA IN TANGA.

The following figures show the malaria incidence of the last two years :—

	1923.	1924.
European cases	55	34
Non-European cases	1151	762
Total cases	1206	796

The majority of the European cases of 1924 were infected outside the township, chiefly on the section of this railway between Mombo and Korogwe, which is heavily infested with Anophelines.

A useful control is provided by the Tanga School dispensary figures. 93 attacks of malaria occurred among 300 schoolboys during the year.

TANGA SMALL-POX.

The following is the small-pox record of Tanga district for the last five years :—

	1920.	1921.	1922.	1923.	1924.
Cases ..	1,823	412	82	81	0
Deaths ..	752	136	14	16	0

11,926 vaccinations were performed during this year. Of 2,782 re-inspected, there were 49 % successful, 27 % modified and 24 % failures.

ANKYLOSTOMIASIS IN TANGA.

The hookworm is the chief cause of native sickness and deaths in this area. The hospital return, the school return, and the akidas' returns provide some evidence of the extent of its incidence.

The hospital return shows 1,365 native cases (i.e. 14 % of all native cases), and 50 deaths (50 % of all native deaths).

The school return shows 54 cases among 300 boys, but it is noteworthy that 34 % of all the scholars have varying degrees of anæmia. The majority of the schoolboys being resident within the township, these figures are not a reliable index of the prevalence of the disease in the sub-districts.

I give a brief extract only of the akidas' returns, as their diagnosis and figures generally are not reliable.

	1921.	1922.	1923.	1924.
Number of deaths attributed to hookworm	444	284	189	241
Death-rate from hookworm per 1,000 living	5.2	3.3	2.2	2.8
Percentage of total deaths ascribed to hookworm	28	21	15	21

It is probable that hookworm is at least a contributing factor in half the native deaths of the district. At the present time mass treatment at Tanga would be expensive and of little value, for the return of the patients to their homes would mean early re-infection of most of them. Educational propaganda and the improvement of latrine accommodation are necessary, and both are dependent on regular medical supervision of the out-districts.

MEDICAL SUPERVISION OF THE SUB-DISTRICTS.

All the sub-districts, except Amani, have been visited by the Medical Officer of Health, but only at long intervals and for short periods. The main difficulty in regular inspection, is the lack of any motor transport. At the present time an inspection of shamba labour conditions throughout the district—supervision of which is obviously urgently needed—would involve the risk of a relapse of Tanga township conditions. It is, I think, a sounder policy to try to consolidate what we have gained, and to extend from it than to attempt, with a small staff and no transport, to control too large an area. The towns on the railway, such as Mombo and Korogwe, can be inspected, and technical advice given to the Administrative Officer. Any attempt to control the districts many miles from the railway is, I think, inadvisable until motor transport is acquired.

CONSERVANCY.

The new incinerators in School Street and in Ngamiani were brought into use in January and are working well. The following are comparative figures :—

	1922.	1923.	1924.
Cart loads of refuse removed ..	14,171	17,052	22,794
Dumps of rubbish removed ..	30	250	711

The products of incineration have been used to fill in Hospital Swamp, Mission Street ravine and Wasambaa ravine.

GRASS CUTTING AND DRAIN CLEARING.

The following are comparative figures :—

	1922.	1923.	1924.
Square yards of grass cutting	2,689,000	1,475,000	3,473,000
Linear feet of drains cleared	1,034,000	553,000	2,550,000
Linear feet of new drains cut	6,500	11,400	15,200

PORT HEALTH WORK.

154 ships and 930 dhows were cleared during the year.

No infectious disease entered the town through the port.

OTHER MISCELLANEOUS WORK.

Meetings of Township Authority	25
Permits to build huts	158
Permits to repair houses or huts	253
Notices to demolish huts	49
Trees cut (120 cocoanuts)	144
Notices to remove insanitary conditions	268
Prosecutions	33
Convictions	31
Animals inspected	5,020
Carcases condemned	3
Portions of carcases condemned	808
Other foodstuffs condemned	114
Burials performed	95
Trains inspected	246
Rats caught	106

The three new bungalows for European Officials were occupied in January, 1924.

Premises were rented by the Housing Committee in September, which include a better Health Office, and better quarters for the European Sanitary Superintendents.

ARBORICULTURE.

No systematic tree-planting has been carried out in Tanga since the occupation. Many of the trees in the township are now degenerated, unsightly and dangerous. The trees in Tanga are far too numerous, and removal is the solution for most of the old mangoes and acacias. On the other hand, the appearance and comfort of the town would suffer if certain avenues of trees in the main streets were removed. A replanting scheme is desirable, particularly for about half-a-mile of King Street. Staff cannot be spared from this department to carry out such a work, which can more properly be done by the Forestry or Agricultural departments.

INFECTIOUS DISEASES HOSPITAL.

The old German laundry, after reconstruction by the P.W.D., was opened as an infectious diseases hospital in January, 1924. It is an excellent stone building in a convenient site at Kisosora, and will accommodate about 30 patients. Owing to the absence of infectious disease, only four patients have been admitted during the year. It is proposed to admit acute cases of yaws and tuberculosis in 1925.

CONVALESCENT CAMP.

The Tanga hospital is occasionally overcrowded owing to shamba labourers from the out-districts having to be admitted as in-patients, although suffering from ulcers or other mild lesions. It is hoped in 1925 to establish a convalescent camp near the hospital for such cases. It may be possible to run such a camp on contributions from the employers whose labour is being treated there.

LEPER SETTLEMENT.

The Senior Commissioner reports as follows on the leper settlement at Mkuzi :—

Number of admissions during 1924	..	..	..	..	22
„ „ discharges	„	„	..	..	3
„ „ desertions	„	„	..	..	0
„ „ deaths	„	„	..	..	6
„ remaining at end of year	..	..	..	..	13

TANGA METEOROLOGY.

The comparative rainfall of the last four years is :—

1921	..	..	..	..	50.52 inches.
1922	..	..	..	..	53.08 „
1923	..	..	..	..	43.79 „
1924	..	..	..	..	45.53 „

The maximum monthly rainfall was 11.80 inches during April, and the maximum daily rainfall of the year was 4.09 inches on April 26th.

The maximum temperature recorded during 1924 was 89.9 F. on April 1st, and the minimum 74.1 F. on September 27th. The mean temperature of the year was 80.7 F. as compared with 80.8 F. in 1923.

The following are the monthly records of 1924 :—

				Rainfall in inches.	Maximum.	Temperature. Minimum.	Mean.
January	..	..	..	3.80	86.7	77.1	82.7
February	..	..	..	9.33	87.9	78.8	83.8
March	..	..	..	.95	88.1	81.3	84.9
April	..	..	..	11.80	89.9	78.2	82.7
May	..	..	..	5.12	84.5	77.0	80.9
June	..	..	..	4.35	81.3	74.6	78.1
July	..	..	..	1.11	81.6	74.4	77.1
August	..	..	..	1.61	83.4	74.8	78.1
September	..	..	..	3.14	82.2	74.1	78.1
October	..	..	..	.41	86.5	75.5	80.0
November	..	..	..	2.27	84.9	77.3	81.3
December	..	..	..	1.64	86.7	78.8	83.1

APPENDIX A.

REPORT ON THE HEALTH OF THE CHILDREN ATTENDING TANGA SCHOOL
FOR THE YEAR 1924.

The general physique of the children has shown a marked improvement during the year as a result of supervision, discipline and organised drill and games. The cleanliness is as a rule good, but has suffered during the last few months owing to the breakdown of the school water supply. The school possesses a dispensary, which is well equipped, and a small hospital, both under the daily supervision of the M.O.H. The following is a list of the cases under treatment during the year :—

Ulcers (mainly of the feet and secondary to scratches, cuts, jiggers, etc.) ..	468
Cuts and bruises	132
Injuries to muscles, tendons, bones, etc.	91
Lesions of eyes (mainly conjunctivitis)	51
Lesions of ears	13
Lesions of teeth	12
Respiratory diseases (mainly cases of mild bronchitis and catarrh, but includes six cases of pneumonia)	282
Tonsillitis	70
Lymphadenitis	54
Scabies	134
Other skin diseases	33
Digestive disturbances	108
Ankylostomiasis	54
Schistosomiasis	27
Filariasis	15
Yaws	12
Gonorrhoea	11
Malaria	93
Small-pox 0, Mumps 2, Measles 1, Chickenpox 1	4
Others	47
Total	<u>1,711</u>

The total at first sight appears disproportionately large for a school of 300, but it will be seen that the bulk of the cases consist of minor sepsis, coughs and colds, diarrhoeas and scabies. The policy adopted is to encourage the children to attend with minor ailments, owing to the tendency of small ulcers to become large and chronic if untreated in the early stages, and of other conditions to get beyond easy control.

One death only is reported during the year, due to septic meningitis secondary to a head injury.

The malaria rate is low, an average of eight cases per month being treated.

The ankylostomiasis figures indicate that this disease is becoming less within the township. It remains, however, a very serious problem in the sub-districts.

The bulk of the schistosomiasis cases occurred in March, and the bathing pools were treated. Only two cases have occurred during the last six months.

The scabies cases show a steady decrease during term times, and a large and rapid increase during each holiday. The number of scabies cases makes the water deficiency particularly regrettable.

It should be noted that only new cases and the more serious of the old ones attend the dispensary during school hours. Redressings, etc., are attended to before the school opens.

INSPECTION OF SCHOOL CHILDREN.

A routine examination of 182 of the children has been made during the last few months. The following are the more outstanding results.

Nutrition.—Good in 150 cases, fair in 30, very poor in 2.

Skin Conditions.—49 had skin infections. These include 23 of scabies, 10 of jiggers, and 8 of impetigo.

Teeth.—33 boys had one or more decayed teeth, and 5 had minor malformations of jaws or teeth. The other 144 had no serious irregularities or decay. This extremely satisfactory condition is, in part, probably due to the regular teeth-brushing enforced at the school.

Throats.—45 boys had enlarged tonsils or adenoids or both. 15 had minor inflammatory conditions.

Eyes and Ears.—Two boys had external eye disease, and two had otorrhœa.

Hearts.—Eight boys had valvular disease of the heart.

Blood.—61 boys had varying degrees of anæmia. The heavy infestation of the district with hookworm is probably one of the main responsible factors.

Glands.—91 boys had enlarged femoral or inguinal glands or both. The main factor is undoubtedly the enormous incidence of ulcers of the feet.

Other Defects.—

Knock-knee	..	..	..	..	14
Flat-foot	..	..	..	..	8
Varicocele	..	..	..	..	8
Hydrocele	..	..	..	..	2
Missing fingers or toes	..	..	..	..	5
Hernia	..	..	..	..	3
Paresis of muscles	..	..	..	..	3
Scoliosis	..	..	..	..	2
Tubercular adenitis	..	..	..	..	2
Tubercular dactylitis	..	..	..	..	1
Parotitis	..	..	..	..	2
Mastoiditis	..	..	..	..	1
Yaws	..	..	..	..	5
Syphilis	..	..	..	..	1

CONCLUSIONS AND SUGGESTIONS.

The school must have a regular and adequate water supply. It is very doubtful if the existing well, even with a new pump installed, can regularly supply sufficient water. I think it would prove more satisfactory to connect the school by pipeline with the railway supply, which is within about 400 yards.

The position as regards malaria, hookworm and other infections is fairly satisfactory. All the boys have been vaccinated. There has been no small-pox.

The chief cause of sickness is lesions of the feet. Further care of jiggers, cuts, scratches, etc., must be enforced.

Scabies reaches epidemic proportions during the holidays. The clean habits learnt at school must be maintained as far as possible in the home.

There is a real demand in the country for skilled or semi-skilled native dressers. There are three boys in training at present, but the need justifies increasing this number to twelve. I hope it may be possible to do this next year, but the difficulty lies in finding the teaching staff. It must come from the medical department, which is already fully employed.

TABLE I.

STAFF.

European.

Dr. R. Nixon - Medical Officer of Health.
 Mr. W. H. Jones - Sanitary Superintendent.
 Mr. B. T. Bailey - Sanitary Superintendent.

Native.

One Clerk.
 Three Sanitary Inspectors.
 Two Vaccinators.

TABLE II.

Included in general Financial Statement of the Department on page 11.

TABLE III.

RETURN OF STATISTICS OF POPULATION FOR THE YEAR.

				Europeans.	Africans.	Asiatics.
Number of inhabitants in 1924	..	..	..	255	86,604	2,447
Number of Births during the year 1924	..	..	..	7	963	0
Number of Deaths during the year 1924	..	..	..	5	1,144	30
Immigrants during the year 1924	..	..	..	90	—	—
Emigrants during the year 1924	..	..	..	80	—	—
Number of inhabitants in 1925	..	..	..	267	*86,423	2,447
Increase of inhabitants in 1925	..	..	..	12	—	—
Decrease of inhabitants in 1925	..	..	..	—	181	—

* The estimate of the Senior Commissioner is 105,000 - 110,000 but is not founded on the census returns.

TABLE IV. (2).

POPULATION : TANGA TOWNSHIP.

Year.	Number of Natives.		Number of Europeans.		Totals.
	Males.	Females.	Males.	Females.	
1924	9,000	7,300	170	33	16,503

All the figures on this page are rough estimates, founded on little evidence. The European births and deaths of 1924 are true. The other figures are unreliable. There are no records of Asiatic births, or of emigrants and immigrants of the district. The Senior Commissioner's estimate of 111,000 population is founded on the payment of 40,000 taxes.

(3) HOUSING.

	Number occupied by Europeans.	Number occupied by Natives.
1922	46	9
1923	63	9
1924	68	9

Number of Huts :—

1922	1,750
1923	1,840
1924	2,049

(4) ERECTION OF NEW BUILDINGS DURING THE YEAR.

Number of houses built without sanction	1922	Nil
	1923	Nil
	1924	Nil
Number of huts built without sanction	1922	350
	1923	200
	1924	90

Action taken.—All huts built without permission, actually situated in the village of Ngamiani, i.e., in thoroughfares, out of alignment, etc., have been removed by demolition, by the occupiers, and built elsewhere with permission. A large number of huts are still existing in the bush on the outskirts of the village. These cannot be removed or demolished until the Survey Department lay down boundary stones to mark out the roads, etc. No prosecutions were undertaken.

(5) LATRINES.

	For Males.		For Females.		Remarks.
	No.	No. of seats.	No.	No. of seats.	
Number of Public Latrines :—					
1922	6	—	Nil.	—	Choo-pans only used.
1923	6	—	Nil.	—	—
1924	5*	—	Nil.	—	* 1 demolished 1924.

Number of Public Latrines erected during the Year :—

1922	Nil.	—	—	—
1923	Nil.	—	—	—
1924	Nil.	—	—	—

The Railway have five Asiatic latrines (choo-pans) on a mile stretch of ground between the Station and Loco Shed. Two of these are used by other than Railway employees.

NUMBER OF PRIVATE LATRINES.

	1922.	1923.	1924.
Average number of pails of night soil removed daily ..	2	2	3
Average number of soiled pails removed and clean pails substituted	4	7	8
Average number of night soil men employed to clean latrines and remove excreta	3	4	6
Number of cess-pools	1,380	1,850	2,600
Number cess-pools cleansed	—	—	—
Number of new cess-pools constructed during the year ..	427	96	169
Number of old cess-pools abolished	380	94	115
Daily average number of pails removed from public latrines	2	4	6

EXPLANATORY NOTES.

102 private latrines, 84 are W.C.'s, eight are drums.

The number 102 includes three hotels with several W.C.'s each.

Pails of Night Soil Removed.—Refers only to the 18 private latrines mentioned above.

Cess-pools abolished.—Principally filled in, sealed up and others dug to replace.

Pails of Night Soil Removed.—Means five-gallon urine drums, which are used for this purpose.

(6) REMOVAL OF REFUSE.

	1922.	1923.	1924.
Number of Dustbins	10	15	24
Number of carts at work daily to remove refuse from streets	4	5	3
Amount of refuse removed daily	17	23	31
Number of carts at work daily to remove from yard and premises	6	8	6
Amount of refuse removed daily from yards and premises	24	34	45

NOTES.

During 1922 and 1923 50 % of the carts were out of action for repairs. Two were condemned by Board of Survey in August, 1923, and four in April, 1924.

(7) MODE OF DISPOSING 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 Slaughterhouse and Market Offal.		
	1922	1923	1924	1922	1923	1924	1922	1923	1924
Buried or trenched	—	—	—	—	—	—	—	—	—
Burnt	—	—	2	41	57	76	—	—	—
Thrown into sea	4	6	7	—	—	—	1	1	1
Otherwise dealt with	—	—	—	—	—	—	—	—	—

NOTES.

Excreta commenced to be burnt in the new incinerator during the last quarter of 1924. None is now thrown into sea or otherwise disposed of except slaughter-house offal.

TABLE IV. (8)

Included in Table above.

(9) WATER SUPPLY.

	1922	1923	1924
<i>Pipe-borne Water :—</i>			
Source	Nil.	Nil.	Nil.
Number of Standpipes along Roads	Nil.	Nil.	Nil.
Number of Standpipes in Compounds and Houses	Nil.	Nil.	Nil.
<i>Wells :—</i>			
Public :—			
Number	20	20	20
Number with pumps protected against surface water, and mosquito protected	Nil.	Nil.	Nil.
Private :—			
Number	31	31	32
Number protected against surface water and mosquito protected	Nil.	Nil.	Nil.
<i>Tanks :—</i>			
Public :—			
Number mosquito protected and served by pumps	—	—	—
Number above ground	—	—	—
Number mosquito protected	—	—	—
Private	39	40	45
Number mosquito protected	34	35	45
Number above ground	33	34	44

(9) WATER SUPPLY—continued.

	1922	1923	1924
<i>Nature of Tanks :—</i>			
Wood	—	—	—
Iron	38	39	44
Concrete	1	1	1
<i>Barrels :—</i>			
Number	156	151	164
Number mosquito protected	Nil.	Nil.	Nil.

Barrels does not include 5-gallon drums and similar receptacles.

Wells Private.—Does not include approximately 200 shallow wells in the native area, which have been dug in private compounds owing to the inadequacy of the public wells.

(10) DRAINAGE.

	Public.	Private.
<i>Masonry Drains :—</i>		
Lineal yards of masonry :—		
1922	8,000	300
1923	8,000	350
1924	8,200	550
Lineal yards reconstructed during the year :—		
1922	Nil.	Nil.
1923	Nil.	30
1924	Nil.	75
Lineal yards repaired during the year :—		
1922	Nil.	Nil.
1923	Nil.	20
1924	250	45
Lineal yards of new drains constructed in the year :—		
1922	Nil.	Nil.
1923	Nil.	Nil.
1924	300	Nil.
<i>Earth Drain or Ditches :—</i>		
Number of lineal yards of ditches :—		
1922	1,934,050	Nil.
1923	552,680	Nil.
1924	2,550,239	Nil.
Number of lineal yards of ditches dug and graded :—		
1922	6,500	Nil.
1923	11,360	Nil.
1924	15,230	Nil.
Average frequency clearing ditches of grass :—		
1922	Weekly.	
1923	Fortnightly.	
1924	Weekly.	

(11) INSPECTIONS AND PROSECUTIONS.

	1922	1923	1924
Number of Inspectors employed	3	3	3
Number of Houses inspected	37,691	64,415	74,963
Number of Houses where Larvæ were found	732	1,637	2,021
Notices served to remove conditions causing the breeding of Larvæ	94	27	68
Number of persons fined for having mosquito larvæ on their premises	7	15	31
Number of notices to remove insanitary conditions on premises	311	71	200
Number of persons fined for not removing insanitary conditions after notices	11	6	Nil.
Number of Soda and Aerated Water Factories inspected	2	4	5

SUMMARY OF ROUTINE SANITARY WORK DONE DURING THE YEAR IN THE TOWNS OF
LINDI, IRINGA, KIGOMA, DODOMA, AND KILWA.

Total approximate area, 25 square miles. Total number of proclaimed open spaces, six.

(2) TOTAL POPULATION.

Number of Europeans.		Number of Natives.		Total.
Males.	Females.	Males.	Females.	
195	55	11,461	12,637	24,348

(2) HOUSING.

Number of Houses	Number occupied by Europeans.			Number occupied by Natives.	

	76	..	2,949
Number of Huts	2,271	

(4) ERECTION OF NEW BUILDINGS DURING THE YEAR.

Number of houses built without sanction	..	..	..	..	..	Nil
Number of huts built without sanction	..	..	..	..	..	Nil

Action Taken.—

					Huts.	Houses.
Number of prosecutions	..	..	..	..	Nil.	Nil

(5) LATRINES.

	For Males.		For Females.	
	Number	Number of Seats.	Number	Number of Seats.
Number of Public Latrines
Number of new public latrines erected during the year
	41	169	27	118
	6	26	6	16
*Number of private latrines	224
Average number of pails of night-soil removed daily	169
Average number of soiled pails removed and clean pails substituted	297
Number of night-soil men employed to clean latrines, and remove excreta	22
Number of cess-pools	33
Number of cess-pools cleansed	1
Number of new cess-pools constructed during the year	2
Number of old cess-pools abolished	—

* Does not include the deep pit latrines which are provided for nearly all native houses or huts.

(6) REMOVAL OF REFUSE.

Number of dustbins	..	..	..	..	822
Number of carts at work daily to remove refuse from streets	..	..	..	..	4
Amount of refuse removed daily (cart loads)	..	..	..	..	17
Number of carts at work daily to remove refuse from yards and premises	..	..	..	..	6
Amount of refuse removed daily from yards and premises (cart loads)	..	..	..	..	18½
Number of men employed for moving refuse	..	..	..	..	14

In some of the towns no distinction is made between carts used to remove refuse from streets, and carts for removal of refuse from yards and premises.

(7) 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.
Burned or Trenched	—	—	—
Burnt	235	40	2½
Thrown into Sea	—	—	—

(8) AVERAGE DAILY NUMBER OF CART-LOADS OF TIN CANS, BOTTLES, BROKEN CROCKERY AND OTHER INCOMBUSTIBLE MATERIAL REMOVED FROM HOUSES, HUTS AND COMPOUNDS.

Two.

(9) WATER SUPPLY.

Pipe-borne.—

Source (river, lake or spring)—Spring.

Number of stand-pipes along roads	2
Number of stand-pipes in Compounds and Houses	54

Wells.—*Public.*—

Number	14
Number with pumps protected against surface water and mosquito protected	1

Private.—

Number	111
Number protected against surface water and mosquito protected ..	1

Tanks.—*Public.*—

Number mosquito protected, and served by pumps	1
Number above ground	9
Number mosquito protected	6

<i>Private</i>	67
Number mosquito protected	10
Number above ground	13
Number mosquito protected	3

Nature of Tanks.—

Iron	94
Concrete	2

(10) DRAINAGE.

Nature of drainage.	Public.	Private.
<i>Masonry drains.</i> —		
Lineal yards of masonry drains	12,880	1,250
Lineal yards reconstructed during the year	500	—
Lineal yards repaired during the year	1,000	—
Lineal yards of new drains constructed during the year	500	—
<i>Earth drains or ditches.</i> —		
Number of lineal yards of ditches cleaned	27,364	120
Number of lineal yards of ditches dug and graded	200	—
Average frequency clearing ditches of grass	once a month.	

(11) INSPECTIONS AND PROSECUTIONS.

Number of Inspectors employed	4
Number of houses inspected	10,710
Number of houses where larvæ were found	168
Number of notices served to remove conditions causing the breeding of larvæ	32
Number of persons fined for having mosquito larvæ on premises	5
Number of notices served to remove insanitary conditions on premises	96
Number of persons fined for not removing insanitary conditions after notice	—
Number of Soda and Aerated Water Factories inspected	8

RECOMMENDATIONS FOR FUTURE WORK.

Water supplies.—A plentiful pure water supply is a necessity if the health of the population is to be satisfactory. It may not be feasible in the near future to provide each Township in the Territory with a pipe borne supply, but the possible sources of pure water for each important town should be examined, and where necessary protected from contamination, and an estimate made of the expenditure required. The provision of sufficient properly constructed standpipes would diminish the amount of water stored in tins and jars in the bazaars and native quarters, and so reduce the most prolific breeding places of *stegomyia* mosquitoes.

Surface drainage, Roads and Swamps.—The number and extent of the earth drains in the Townships is a constant source of trouble and expense. A tropical downpour of rain will do as much damage in an hour as a large gang of men can repair in many days. Constant supervision is necessary to see that hollows are not being formed in which mosquitoes can breed. Properly constructed masonry drains would be an economy. Many of the coast towns are low lying, and the swamps semi-tidal. The removal of surface water and the treatment of the swamps are questions which should be dealt with by the Sanitary Engineer, should such an appointment be approved. In many of the townships the roads, especially in the native quarters, are badly in need of repair, this causes considerable inconvenience and delay in collecting household refuse. The use of permeable cess-pits has, as a rule, been satisfactory as a temporary measure, and, where pipe-borne water supply is available, causes no serious risk to the health of the inhabitants. The water table at Dar-es-Salaam is near the surface, and as the soil surrounding the cess-pits becomes water-logged, more frequent emptying will be necessary. The removal of the concrete covers often results in damage to the sides and corners, and great care is necessary to prevent the cess-pits becoming mosquito breeding places. The provision of a proper sewerage system for the whole of the business and residential area will have to be considered in the near future.

Public and School Latrines.—The replacement of pan and incinerator latrines by automatic water flushed oriental pattern latrines should be proceeded with as soon as possible, a commencement has been made, but the shortage of water at Dar-es-Salaam gives rise to difficulty.

Registration of Births and Deaths.—The necessity for this has been pointed out in previous annual reports, and becomes more apparent each year. Any vital statistics prepared at present are quite unreliable.

Rural Sanitation.—With the present staff it is quite impossible to supervise the sanitation of the villages. Even were considerable numbers of native sanitary inspectors available, European supervision would still be necessary in order to obtain any permanent benefit. The ideal system would be to have native sanitary inspectors in charge of groups of villages with European Sanitary Superintendents provided with motor transport as inspecting officers of areas, these inspecting officers being in turn responsible to a Medical Officer of Health in charge of the whole district. Should the increased staff asked for in the estimates be sanctioned and appointed, an attempt will be made during the year to improve the sanitary conditions of the villages in the ankylostoma infested area round Tanga. A selected group of villages should be provided with proper latrine accommodation built under the supervision of a European Sanitary Superintendent, and the inhabitants subsequently subjected to mass treatment with Carbon Tetra-chloride by a Medical Officer appointed for this purpose. Should an experiment of this nature result in an improvement in the general health of the community so great as to be obvious to themselves and their neighbours; then there should be little difficulty in extending the campaign to larger areas.

Tsetse Fly.—In the section of this report which dealt with Human Trypanosomiasis, attention has been drawn to the necessity for further investigations into the question of the distribution of infected tsetse flies. The new foci of infection discovered during 1924 provide an additional argument to the many brought forward in previous annual reports in favour of the appointment of a Medical Entomologist or Biologist on to the staff of the Medical Department.

APPENDIX IV.

In despatch No. 392, dated July 12th, 1924, from the Secretary of State, the following recommendation was made. "As regards the suggestion that coconut palms should be cut down, the Committee recommend that further experiments should be made to ascertain the value of this measure, especially with a view to determining whether the mosquitoes bred in trees of any height or only in the lower trees."

In August, the Principal Medical Officer outlined an experiment to be carried out by the staff of the Health Office at Dar-es-Salaam. Briefly stated, this was to provide artificial breeding places situated at varying heights on the trunks of cocoanut palms standing in different sections of the town.

The report submitted by Dr. R. R. Scott, the Senior Medical Officer of Health, Dar-es-Salaam, was submitted to the Secretary of State under cover of despatch No. 162 of 14/3/25, but is reproduced here as being of general interest.

"The Hon'ble the Principal Medical Officer,
Dar-es-Salaam.

"Sir,

"With reference to your 39/2/52 of 26/8/24, I have the honour to submit the results of the investigation which you outlined therein and which has been carried out between 1st October and 31st December, 1924.

"2.—Ten coconut palms were selected in various parts of the Residential and Commercial quarters. These were labelled A – J, and their positions marked approximately on the plan appended. Cleaned cigarette tins (capacity 275 c.c.s.)

punched with a single hole near the upper rim were then affixed to each tree by hanging upon nails, the lowest nail placed fifteen feet from the ground, and other nails at intervals of five feet up to the crown of the tree. The trees selected varied in height from 45 to 75 feet.

" 3.—The tins were filled with tap water carried to the trees in bottles and placed in position. They were examined twice weekly by two climbers, a skilled native mosquito finder standing at the bottom of the tree and examining the water in the tins, and recording the results. The water in the tins was changed and rusty tins replaced by new ones.

" 4.—The crowns of the trees were examined after the first week of the experiment by the method described in Dr. Haworth's report, the senior climber having been instructed in the method by Dr. Haworth's climber before Dr. Haworth left Dar-es-Salaam.

" 5.—The tins were numbered 1-13, according to their height from the ground, thus :—

Tin No.	Height from the ground in feet.
1.	15
2.	20
3.	25
4.	30
5.	35
6.	40
7.	45
8.	50
9.	55
10.	60
11.	65
12.	70
13.	75

" 6.—6.7 % of the tins were found dry on inspection. But out of the total of 162 tins found dry during the experiment, no less than 57 were so found on 29th December, an interval of seven days having elapsed since the previous inspection, owing to the Christmas holidays ; giving a percentage of 35.1 of the total found dry having occurred on one day. Therefore, excluding the 99 tins examined on 29/12/24, 105 tins were found dry out of 2,314 tins examined during the bi-weekly period of examination, giving a percentage found dry of 4.5 only.

" 7.—The following table gives the necessary information regarding distribution of the tins, times of examination, and drying of the water in the tins :—

Palm.	Height in feet.	Number of Tins.	Situation.	Number of times examined.			Total examina- tions.	Total Tins exam- ined.	Number of Tins found dry.			Total.	Percent- age of Tins found dry.
									Oct.	Nov.	Dec.		
				Oct.	Nov.	Dec.							
A.	50	8	Main Avenue	9	8	8	25	200	2	1	7	10	5
B.	50	8	Between Main and Park Avenue	9	8	8	25	200	2	2	5	9	4.5
C.	45	7	Between Magogoni Street and Azania Front.	9	8	8	25	175	8	1	4	13	7.4
D.	73	12	Between Magogoni Street and Azania Front.	10	8	8	26	312	18	6	12	36	11.5
E.	74	12	Park Road	9	7	8	24	288	10	4	6	20	6.9
F.	65	11	Park Road	9	7	8	24	264	8	3	5	16	6
G.	57	9	Botanical Gardens	10	7	8	25	225	4	2	9	15	6.6
H.	66	11	Botanical Gardens	10	7	8	25	275	5	5	6	16	5.7
I.	75	12	Ring Street and Sulimen Street	9	6	8	23	276	5	3	5	13	4.7
J.	60	9	Ring Street and Sulimen Street	8	7	7	22	198	1	.1	12	14	7.0
—	—	99	—	92	73	79	244	2,413	63	28	71	162	6.7

" 8.—No mosquito larvæ were produced either from the crowns of the palms or from the tins affixed to the trees in the presence of the skilled mosquito finder, or of any member of the supervisory staff.

" But during the temporary absence of the skilled finder through sickness on the morning of 22nd December, a single full grown stegomyia larvæ was brought in by the climber in tin No. 6, from Palm A, this tin being suspended at a height of forty feet from the ground.

" I regarded the circumstances as so suspicious as to prevent me from accepting the climber's statement, taking into consideration the following facts :—

- 1.—Absence of the watcher.
- 2.—Single finding of a larvæ out of 2,251 tins containing water examined (2,413 less 162 found dry).
- 3.—The larva being single and almost full grown, although the tin was inspected on the 22nd December, four days previously. The larva pupated, and a female stegomyia, apparently *aedes argenteus*, hatched out on 27th December.

" 9.—The crowns of all the ten palms to which tins were affixed, were examined after the 8th October, by Dr. Haworth's method, and twenty-four additional palms in various parts of the town also had their crowns examined regularly during the period, all with negative results for mosquito larvæ.

	Height.	Average No. of times Crown examined.
10 Palms (with tins)	45 - 75	22
10 „ (without tins)	48 - 75	} .. 20.3
14 „ „ „	not recorded	

" 10.—During the period of the experiment, three collections of *Culex* larvæ and nineteen collections of *Stegomyia* larvæ were found in tins in the township. The plan attached shows the proximity of some of the collections to the trees to which the tins were affixed.

" 11.—I therefore have to report that in my opinion the experiment has produced an entirely negative result.

I have the honour to be,

Sir,

Your obedient servant,

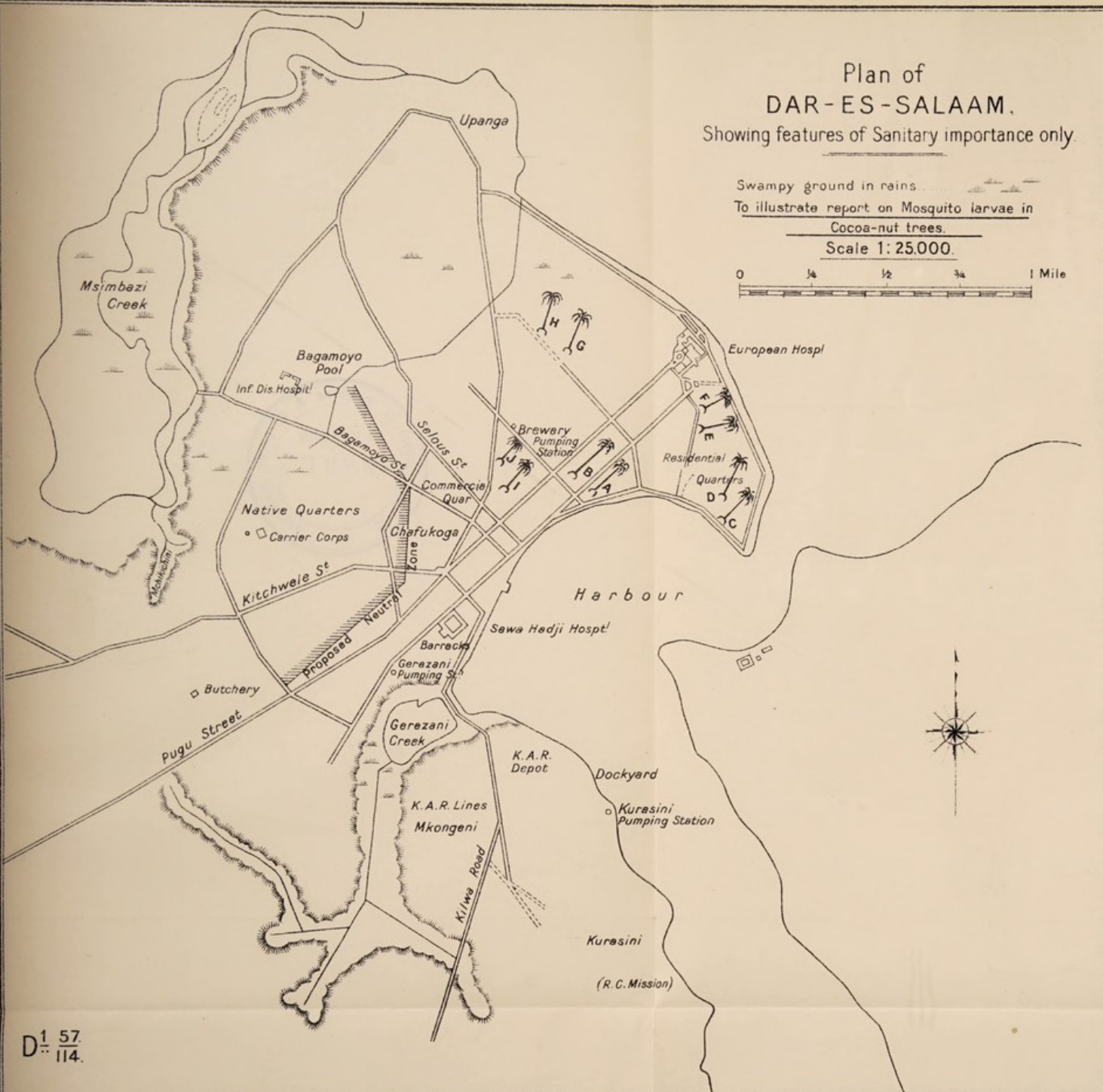
sd. R. R. SCOTT,

SENIOR MEDICAL OFFICER OF HEALTH."

Plan of
DAR-ES-SALAAM.
Showing features of Sanitary importance only.

Swampy ground in rains.
To illustrate report on Mosquito larvae in
Cocoa-nut trees.
Scale 1: 25,000.

0 1/4 1/2 3/4 1 Mile



D¹ 57.
114.



TANGANYIKA TERRITORY.

REPORT OF THE DAR-ES-SALAAM LABORATORY FOR THE YEAR 1924.

BY A. R. LESTER, M.B., B.S., F.R.F.P.S., D.P.H., D.T.M. & H.

A. INTRODUCTORY.

The period, January to December, 1924, inclusive, which represents the fourth completed year's work of the laboratory, is dealt with in the following report. Routine work has been greatly augmented; an appreciation possibly of the assistance afforded the clinician and surgeon by the facilities a laboratory diagnosis offers.

Unavoidable changes in the staff, and the uncertainty of tenure of office for any definite term in consequence, have effectually scotched any attempt at original inquiry introducing the personal element and requiring protracted and concentrated attention.

1. *Staff*.—For a few days at the commencement of the year Dr. Haworth controlled the laboratory, Dr. G. G. Butler taking over and remaining in charge till the end of March, when changes in the Head Office necessitated a rearrangement of staff, and the services of the latter were requisitioned as Deputy to the Principal Medical Officer. I was posted to the laboratory in March, and continued in this department to the end of the year.

Mr. W. A. Irvine, who fully maintained the reputation for ability and aptitude expressed of him in a previous report, carried on the duties of Laboratory Assistant till the return from leave of Mr. Hammond, in May. The latter has ably continued and the work has proceeded smoothly and efficiently. Mr. Hammond, as a result of his sojourn at the Tropical School of Medicine and other centres in London, has acquired a knowledge of several side lines which he has already put to practical use in the laboratory.

No changes are to be reported in the native staff. Each has been allotted duties to which he has been accustomed and trained since German times, and this arrangement appears eminently satisfactory.

(b) While not on the laboratory staff, one or two European Medical Officers and one or two European Officers of other departments specially interested and an Asiatic Sub-Assistant Surgeon took advantage of a short stay in headquarters, to refresh their memories on the subject of bacteriology, and were given every facility to do so.

A couple of demonstrations to members of the Royal East African Commission and Native Sanitary Inspectors were arranged.

2. *Buildings*.—No alterations or new constructions have been undertaken yet. Plans for extensions have been submitted and, I understand, approved. The necessity for expansion is more pronounced than before and while not yet acute, is liable to become so at no distant date. A few petty repairs have been made, mainly with a view to rendering the animal houses rat-proof and simplifying their thorough cleansing.

3. *Equipment*.—Several small pieces of apparatus have been received during the year. These include a staining rack for dealing with slides in numbers, a Cambridge Rocking Microtome, and a Pointolite Oblique Illuminator for dark ground work.

Ice is still purchased locally and kept in refrigerators, which besides being too small for our growing needs, are becoming the worse for wear. An electrically worked refrigerator has been indented for and we anticipate it will be an economy despite the initial cost.

4. *Library*.—With two or three changes, the periodicals received are much the same as in former years. Subscriptions to three foreign medical periodicals have lapsed. Three others have been substituted, two British and one American. The journals now received fairly regularly are :—

1. Annals of Tropical Medicine.
2. British Journal of Experimental Pathology.
3. Bulletin of Entomological Research.
4. Indian Journal of Medical Research.
5. Indian Medical Gazette.
6. Journal of the American Medical Association.
7. Journal of Bacteriology.
8. Journal of Experimental Medicine.
9. Journal of Hygiene.
10. Journal of Infectious Diseases.
11. Journal of Pathology and Bacteriology.
12. Medical Science : Abstracts and Reviews.
13. Parasitology.
14. Proceedings of the Royal Society.
15. Quarterly Journal of Medicine.
16. Review of Applied Entomology.
17. Tropical Diseases Bulletin.

The following books form useful additions to a library to which frequent reference has to be made in several branches of science :—

1. Beverages and their Adulteration - Wiley.
2. Biochemistry - Moore.
3. Dysentery in the Federated Malay States - Fletcher & Jepps.
4. Food and Drugs - Greenish.
5. Foods and their Adulteration - Wiley.
6. Laboratory Companion - Johnson.
7. Lyon's Medical Jurisprudence for India - Waddell.
8. Manual of Chemistry - Luff & Candy.
9. Manual of Physics - Candy.
10. Treatment of Malaria - Fletcher.

5. *Experimental Animals*.—The animals kept by the establishment for experimental and other purposes are calves, guinea pigs, monkeys, sheep, and brown and white rats.

(a) *Calves* are obtained through the Veterinary Department and are examined by them before dispatch to us. They have yielded a fair proportion of anti-variola lymph and have not suffered any casualties in the process.

(b) *Sheep* are kept in a pen behind the calf stalls, and their erythrocytes are used periodically in the Bordet-Gengou reaction. One or two of the young have died from one cause and another during the year. Those in excess of our requirements have been disposed of as usual to the Veterinary Department.

(c) *Monkeys*.—As heretofore, these have been obtained from the Administrative Officer through the "Jumbes" of villages outlying the town. No more than six at a time have been kept on the premises. They are used solely to maintain the potency of the lymph vaccine prepared in this establishment; the transference of seed from calf to monkey being effected from week to week.

(d) *Guinea pigs*.—These have on the whole kept well, but have again not bred fast enough to keep pace with our requirements in "Complement." Weakness of complement apparently inherent in guinea pigs in the tropics and not greatly improved by a more liberal diet, has necessitated the killing of two or more of these animals fortnightly, depending on the number of Wassermann's to be performed and their numbers have by reason of this toll, been considerably reduced. Except where unavoidable, adult males are taken for their complement and this considerably restricts one's choice.

The following table shows the number of cases of malaria reported in the United States during the year 1924.

By State and Territory.

Alabama 1,234

Arizona 567

Arkansas 890

California 1,567

Colorado 234

Connecticut 123

Delaware 45

District of Columbia 67

Florida 2,345

Georgia 1,890

Idaho 123

Illinois 1,234

Indiana 987

Iowa 567

Kansas 345

Kentucky 678

Louisiana 1,567

Maine 123

Massachusetts 456

Michigan 1,234

Minnesota 789

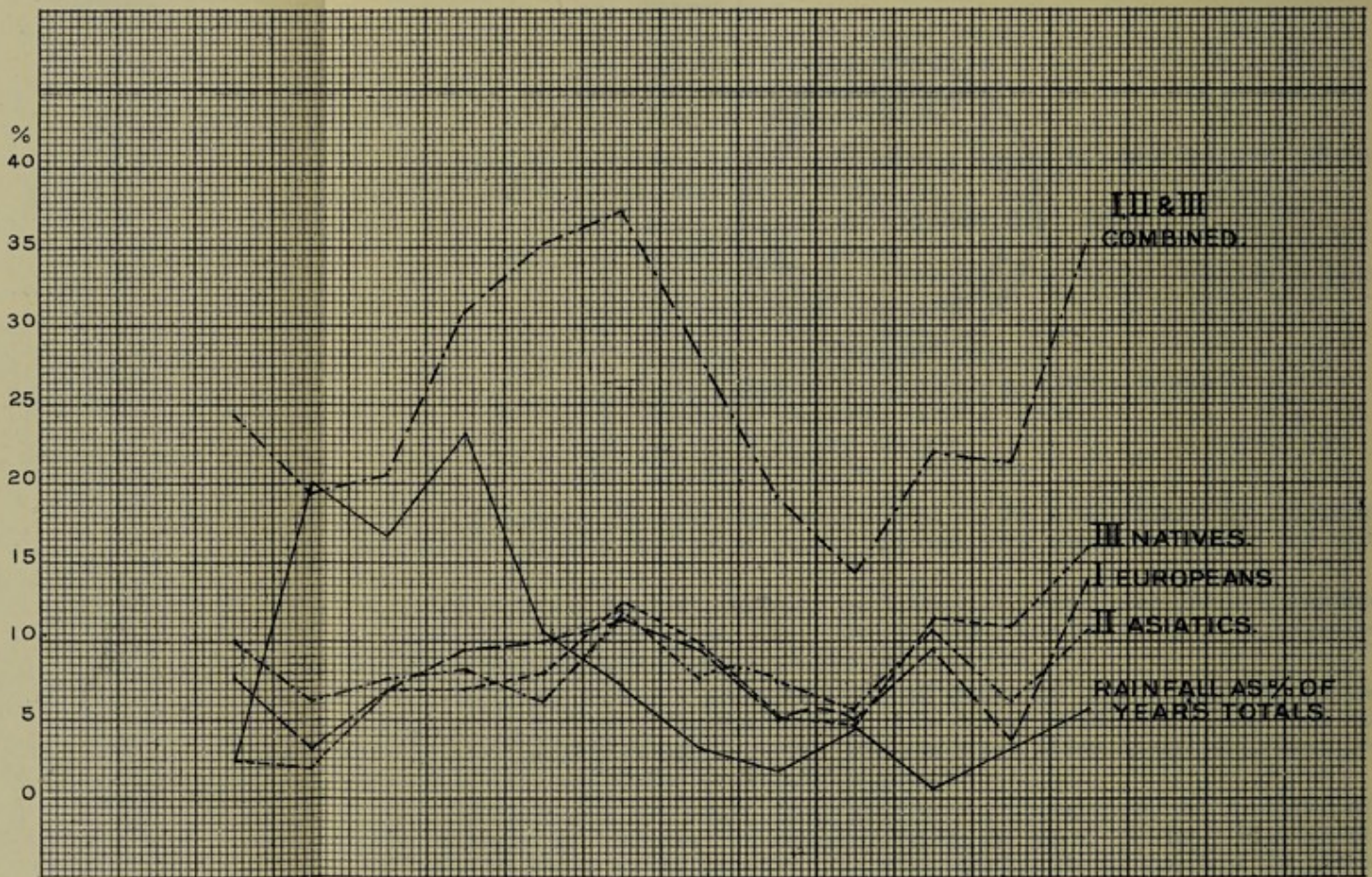
1924

FROM BLOOD SLIDES
DISTRIBUTION OF MALARIA IN 1924 BY RACE
AND SEX, BY STATE AND TERRITORY



1924.

JAN. FEB. MAR. APR. MAY JUN. JUL. AUG. SEP. OCT. NOV. DEC.
FROM BLOOD SLIDES
MONTHLY DISTRIBUTION OF MALARIA IN % OF YEAR'S TOTAL
FOR EACH RACE SEPARATELY & ALL COMBINED.



A few were added to the group we have from the Veterinary Laboratory at Mpapua. The two groups were let loose into the same run, as much to accelerate breeding as to prevent "in-breeding." Those from Mpapua appeared to be the hardier animals and friction between the tribes, led to a few casualties among the old stock.

Rats.—*Rattus rattus* are procured, when required for biological tests, from the Health Department.

(e) *White rats* were secured, through the courtesy of the Veterinary Department, from their laboratory at Mpapua, in the last quarter of the year and they have bred prolifically. One or two litters were devoured by the parent animals. They were afflicted on arrival with *Cordylobia* larvæ and on removal of these have thrived.

6. *Revenue.*—This is derived from the sale of calf lymph, sheep, and analysis of milk, water, etc., and fees for Wassermann tests. The revenue has materially decreased since the Zanzibar Government discontinued their demand for vaccine lymph in September, this having been the main source of income.

I. *Blood* :—

B. GENERAL EXAMINATIONS.

(1) *Blood Films.*—Thick films are examined as a matter of routine, and thin films, where a differential leucocyte count is requested. A total of 3,939 blood films have been examined during the year, showing an increase over last year's total of 770. A total of 184 blood films forwarded by the Senior Medical Officer of Health, of normal persons attending the Government School, will be dealt with separately.

The blood films were received from the following sources :—

European Hospital	602
Sewa Hadji Hospital	3,251
Other Medical Officers	51
Outstations	35

(a) *Blood Parasites in Europeans* :—602 slides were examined with the results detailed below :—

Subtertian malaria parasites	150
Benign tertian malaria parasites	5
<i>Spirillum duttoni</i>	13
Negative	434

(b) *Blood parasites in Asiatics.*—1,186 was the total examined.

Subtertian malaria parasites	383
Benign tertian malaria parasites	29
Crescents " "	6
<i>Spirillum duttoni</i>	17
<i>Microfilaria</i>	17
Negative	734

(c) *Blood parasites in Natives.*—These include cases from the 6th Battalion King's African Rifles and the Police and Prisons. 2,116 blood films were examined.

Subtertian malaria parasites	471
Benign tertian malaria parasites	7
Crescents	12
<i>Spirillum duttoni</i>	34
<i>Microfilaria</i>	125
Negative	1,467

Stating these results as percentages of the total number of blood slides of all races and of the total of individual races, we have the following as being indicative of the approximate distribution of malaria in the township of Dar-es-Salaam.

Nationalities.	Jan.	Feb.	Mar.	Apl.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
Europeans ..	7.7	3.2	7.0	9.6	10.3	12.9	9.6	5.1	5.1	10.3	3.8	14.8
Asiatics ..	10.0	6.7	7.6	8.1	6.2	12.2	7.6	7.6	5.7	10.8	6.2	10.5
Natives ..	2.4	2.0	6.9	7.3	8.6	12.7	10.4	5.3	4.7	11.6	11.4	16.1
All Races ..	24.2	19.6	20.8	30.7	35.1	37.3	28.6	19.3	14.5	22.0	21.7	35.5

184 blood films of normal school children and teachers were forwarded by the Senior Medical Officer of Health in continuation of an enquiry commenced a year or two before.

The results of examination are illuminating and instructive and exemplify the difficulties in the eradication of malaria. These results are set out in tabular form below:—

Year and Period.	Number of Blood Slides received.	S.T. Parasites.	S.T. & B.T. Parasites.	B.T. Parasites.	Total Positive.	Per Cent. Positive.
<i>Pupils—</i> September to December, 1924	171	83	2	4	89	52.04
<i>Pupil Teachers—</i> October and November, 1924	13	12	—	—	12	92.00

From the above table it would appear that more than half the subjects, chosen at random, in the Government school harbour malaria parasites, and that these latter are in the peripheral circulation.

These results moreover lay wide the potentialities in a prophylactic campaign against the scourge of malaria.

(d) *Relapsing (Tick) Fever.*—64 slides of this disease have been dealt with, an increase of 11 over last year. These are distributed as under:—

Europeans	13
Asiatics	17
Natives	34

Few, if any cases have occurred among the local resident population. A history of recent safari into or through tick infested villages in the interior, can almost invariably be elicited from patients whose blood contains this spirillum.

(e) *Microfilaria.*—As a matter of routine, blood films are examined for microfilaria, and 142 have been found. This represents a percentage of 3.6 on the total of films examined, and no cases have occurred among Europeans. All these, except eight specially asked for, were found in the day blood of patients. In the eight specimens referred to, the number of microfilariae in the night blood, was, contrary to expectations, considerably reduced.

As both, flies of the genus *Chrysops* and cases of Calabar swelling are rare on this coast, few as these cases are, they would appear to refute the general opinion in relation to the periodicity of microfilaria in the peripheral circulation. Sheathed and unsheathed varieties have been noted throughout the year, the maximum findings being attained in May, the month following the maximum rainfall registered. The remaining cases scattered over the year appear to bear some superficial relation to meteorological conditions as is suggested by the adjoining chart, and this in spite of the fact that the migratory habits of *Culex* are not pronounced and infection with microfilaria usually "comes to stay."

1924.

JAN. FEB. MAR. APR. MAY JUN. JUL. AUG. SEP. OCT. NOV. DEC.

FROM BLOOD SLIDES
MONTHLY DISTRIBUTION OF MICROFILARIAE
IN % OF YEAR'S TOTAL.

ASIATICS &
NATIVES.

%

25

20

15

10

5

0

MICROFILARIAE AS
% OF YEAR'S FINDS

RAINFALL AS %
OF YEAR'S TOTAL

Jan Feb. April May June July Aug.
Jan. Fe. M. A May June July

JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV
FROM BLOOD SLIDES
MONTHLY DISTRIBUTION OF MICROPHYLARIAE
IN 2 OF YEARS TOTAL

12A
1



A small variety belonging probably to the *microfilaria perstans* group is not uncommonly encountered. Insufficient data have been collected as yet to enable us to attempt an accurate classification of the types observed.

(f) *Trypanosomes*.—The occurrence of cases of suspected sleeping sickness in some of the districts in the interior led to a series of 32 blood and gland juice smears being forwarded for diagnosis or confirmation from Utete, Liwale, Namanyere and Kigoma. Among other hæmoprotezoa, 11 showed Trypanosomes.

(g) *Differential Leucocyte Counts*.—The main demand for these arises from the European Hospital, where clinical conditions require it or as affording a possible clue to diagnosis resultant on a return negative to parasites.

Marked leucocytosis, polymorphonuclear, mononuclear or eosinophilic or other points of interest or assistance to the physician are commented on as a routine. 28 differential leucocytic counts have been made by request, and there is little of interest to report in this connection.

(h) *Blood Parasites of Animals*.—As a matter of curiosity entirely, blood films of a few animals that came into our hands were made. Films of the following were examined with negative results in most instances:—

Bat, calf, canary, chameleon, civet cat, guinea pig, lizard, monkey, owl, rats, brown and white.

The parasites mentioned below were found:—

Monkey.—Hæmoprotezoa, resembling malaria, but taking the stain much more deeply.

Owl } Halteridia like organisms.
Canary }

Civet Cat.—*Microfilaria* unsheathed.

2. *Agglutinations*.—

For the typhoid and dysentery group of organisms only seven tests were performed, with the results shown below:—

Typhoid	} Negative in all cases.
Paratyphoid, A, B, C, & D.	..	..	..	..	..
Flexner Y.	..	..	..	..	..
Morgans No. 1	..	..	..	..	..

A modification of the Dreyer technique was adopted.

A series of over a hundred sera were treated by the above method for agglutination with *B. abortus* as much in consequence of Malta fever having been reported last year, as to ascertain the prevalence or otherwise of the disease and to explain occasional cases of fever of the undulant variety of obscure origin, unsatisfactorily diagnosed or not amenable to ordinary treatment. In view of the fact, too, that goat's milk is a regular article of diet with certain of the natives, it was thought the disease might be more prevalent than was supposed. Laborious attempts extending over the greater part of the year, however, have failed to show a single serologically positive case: in many respects a very satisfactory result.

(3) *Blood Cultures*.—The blood was obtained by venipuncture and inoculated directly into the usual Ox-bile medium as occasion required. The culture was employed in three European cases, all proving negative.

(4) *Wassermann and Flocculation Tests*.—Dr. Butler was engaged, when he handed over charge of the Laboratory to me, in an enquiry into the relative merits of the Wassermann and Khan tests. As insufficient data had been collected for a comparison and report, as also the personal factor enters so largely into the reading and interpretation of results, these investigations were continued by the former, assisted by Mr. Irvine in the first half of the year, and latterly by Mr. Hammond.

The results are dealt with below.

(a) *Wassermann Tests*.—604 sera were received during the year for this test, but 12 proved unsatisfactory for various reasons and were discarded. The remaining 592 were subjected to the full Wassermann Technique with the following results :—

	Europeans.	Asiatics.	Natives.
Strongly positive ..	1	0	88
Positive	2	5	123
Weakly positive ..	3	1	45
Doubtful	0	1	8
Negative	23	34	237
Anticomplementary ..	0	0	19
	<u>29</u>	<u>41</u>	<u>522</u>

The cases from which these results were obtained were sent with the following clinical diagnosis and is of interest to compare the results under these headings which include all nationalities.

	Total.	Strongly Positive.	Positive.	Weakly Positive.	Doubtful.	Negative.
Primary Syphilis	9	2	—	1	—	6
Secondary	8	2	1	3	—	2
Tertiary	27	2	14	1	—	10
Syphilis	219	33	51	21	5	109
Syphilis (?)	59	4	11	6	2	36
Parasyphilis	3	—	—	2	1	—
Yaws	17	1	6	3	—	7
Not diagnosed	231	45	47	12	2	125

Interesting and suggestive points in these diagnoses are (i) the few cases regarded as Primary Syphilis ; out of a total of nine no less than four Europeans or Asiatics and (ii) the few cases diagnosed as Yaws, which is the commoner diagnosis away from the neighbourhood of large towns.

(b) *Kahn's Flocculation Test*.—The test was described in the 1923 annual report and need not be repeated. 486 Sera were received in a suitable state for the test, and may be classified as follows :—

	Europeans.	Asiatics.	Natives.
Strongly positive ..	2	3	111
Positive	2	8	127
Weakly positive ..	0	5	53
Doubtful	3	7	15
Negative	12	24	114
	<u>19</u>	<u>47</u>	<u>420</u>

The higher percentage of positive results obtained in this test compared with the Wassermann may be explained by the fact that many of the cases were under treatment, and that the test is less sensitive to treatment than the Wassermann test, as was suggested in the report for 1923.

If the cases are classified according to the diagnosis supplied with the material, as has already been done with the Wassermann above, the following results are shown:—

	Total.	Strongly Positive.	Positive.	Weakly Positive.	Doubtful.	Negative.
Primary Syphilis	9	2	1	2	2	2
Secondary „	9	4	3	1	1	—
Tertiary „	34	10	6	7	1	10
Syphilis	134	31	42	16	4	41
Syphilis (?)	72	15	14	12	8	23
Parasyphilis	1	1	—	—	—	—
Yaws	14	5	3	2	—	4
No diagnosis	209	46	67	18	8	70
Various diagnosis	4	2	1	—	1	—

B. II. EXAMINATION OF FÆCES.

1,180 stools have been submitted to microscopic scrutiny, an increase over last year's figures of 730. Of these 665 showed evidence of helminthic infections, a total percentage of 56·35. The following table gives the types of intestinal protozoal infestations with percentages:—

	Total.	Percentage of slides examined.
Ankylostomes	354	30·0
Tænia saginata	75	6·35
Flagellata	57	4·8
Strongyloides stercoralis	50	4·2
Trichuris trichinora	23	1·94
Amœbæ cysts	26	2·2
Amœbæ	13	1·1
Schistosomum mansoni	3	0·25
Ascaris lumbricoides	7	0·59

Expressing these figures as percentages of individual races including all helminthic infestations, the results are shown as follows:—

Europeans	39·2 %
Asiatics	6·1 %
Natives	61·14 %

The figures for Europeans would lead one to conclude that an unduly large proportion harbour intestinal parasites. This is not the case, for the figures are based on the number of stools sent to the laboratory for examination, and as many as six or eight stools of the same individual have been so forwarded on successive occasions.

The high incidence of helminthic infection more particularly with uncinaria (53·23 %) in the native is worthy of note. The figures are in all probability an underestimate of actual infestation. The method of examination of stools adopted in the laboratory is, for a small portion of a loopful of fæcal matter to be emulsified in a couple of drops of sterile saline solution on a glass slide.

In these circumstances, the finding of ova at all appear to me to indicate a moderately heavy infection. In quite a number of cases as many as thirty ova have been found on a single slide; in others merely two or three. The habits of the native moreover conduce towards infection and re-infection with ankylostoma. It is not inconceivable, however, with recent improvements in sanitation and hygiene, and possibly previous treatment for hookworm, that a recent and comparatively light infection would escape detection completely, unless a larger amount of faecal matter were emulsified, filtered through tow and centrifuged. In other words, concentration methods would, I am convinced, show a very much higher incidence in anklostomiasis, and incidentally increase the percentages of intestinal protozoal infestations generally. Concentration methods however are impracticable and unnecessary in all cases. I have been led to these conclusions, in addition, by finding ova in stools that showed none for three, four and five consecutive examinations.

Infestations with two entirely different types of parasites are not uncommon. In one instance as many as five were found in the same individual.

Entamoeba histolytica or its cyst are not seen as often as one might expect in the tropics, having been found in seven cases only of the thirty-nine recorded.

(b) *Bacteriological examinations.*—

Conradi-Drigalski medium is employed for the isolation of organisms of the Colityphoid group. 39 stools were plated, with negative results in 31.

Typhoid	0
Paratyphoid A. B. C. & D. .. .	0
Flexner Y	5
Morgans No. 1	3
Negative	31

A typical *B. coli communis* were found in one or two instances. A curious feature of the so called "mango season" was the influx of a number of stools consisting mainly of mucus, from which no pathogenic, in fact no other organism than *B. coli communis* could be isolated on Conradi medium. Whether in certain circumstances, prevalent during this season, this bacillus acquires pathogenic properties in the alimentary canal we were unable to determine. One stool was forwarded from Singida with the request that anthrax bacilli be specially looked for. None were found, on microscopic or bacteriological examination. Ova of *Schistosomum mansoni* were found in three cases.

A sample of urine, from a female European patient was cultured, in an attempt to discover *B. coli communis*. The urine proved sterile.

B. III.—URINE EXAMINATIONS.

General urine examinations have been performed on 222 samples distributed as under :—

Europeans	89
Asiatics	28
Natives	105

Oxyhæmoglobin was found in a few cases, European and Asiatic, and none amongst natives.

Albumen was present in 54 specimens, Sugar in large amount in 7, Gonococci in 7 and ova of *Schistosomum hæmatobium* in 15, none of the last mentioned occurring in Europeans and Asiatics.

In one or two cases quantitative estimations of albumen were requested and done.

Four cases showed evidence of nephritis, none being amongst natives.

B. IV. Pus.

In the majority of pus films forwarded, the examination resolves itself into a search for gonococci. Urethral and vaginal smears to the number of 180 were received. Stated separately for the different races the total and results are as follows:—

	EUROPEANS.	ASIATICS.	NATIVES.
Urethral and vaginal smears	31	46	103
Total positive	13	27	52
Percentage of the total positives	14.1	29.3	56.5
„ of slides examined of each race	41.9	58.6	50.4
„ of slides examined of all races	7.2	15.0	28.8

Three times a search for *B. tuberculosis* and once for *Entamoeba histolytica* in liver abscess pus was asked for. The result in each case was negative.

Five slides from suspected cases of anthrax infection up country were sent in. *Bacillus anthracis* was found in two. In this connection it is interesting to record that the type of anthrax infection when in malignant pustule form appears to be mild, and microscopically bacilli in the same smear may or may not take Gram's stain. Whether this is due to an attenuation of the strain of organism, or to a relative immunity in the native is an open question. Cases suspected to be anthrax in its intestinal form have been reported, but we have failed hitherto to isolate the bacillus from viscera and their contents. The usual history in such cases is briefly this: An ox falls dead in or near a native village; as soon as it is discovered, which may be immediately or after the lapse of some time, the villagers proceed to divide and devour the spoil, occasionally raw and frequently only rizzled. In the course of a few hours most of them are attacked with symptoms indicative of violent gastro-intestinal disturbance, and in as many hours more, the majority of those afflicted succumb.

B. V. SPUTUM.

231 slides were subjected to scrutiny. 211 for *B. tuberculosis*; 42 were positive.

	Slides examined.	Positive.	Percentage of Slides examined of each race.	Percentage of Positive.	Percentage of Slides examined of all races.
Europeans ..	11	1	9	2.38	0.47
Asiatics	62	10	16.1	23.8	4.7
Natives	138	31	22.4	73.8	14.69

Pneumococcus was found in preponderance in one slide.

B. VI. SCRAPINGS FROM ULCERS AND SORES.

Three such slides were examined for *Treponoma pallidum*. Results were negative in all. One scraping was forwarded for *Leishmania donovani*. It too was negative.

B. VIII. MISCELLANEOUS.

(a) *Exudates*.—Cerebro spinal fluid was submitted on two occasions for meningococci. None were found.

Pleural and peritoneal exudates forwarded from the interior showed putrefactive organisms.

A smear from a liver puncture was examined for Leishman-Donovan bodies. They were not found. A milky exudate from the scrotum of a native contained sheathed microfilariæ in numbers.

(b) *Throat examinations*.—Three throat swabs were examined. Two for diphtheroid organisms showed none. In one, Vincent's organisms were found.

(c) *Nasal scrapings and nodule punctures*.—Twenty-nine from suspected cases and cases under treatment showed intra cellular acid fast bacilli in nine. In two, short form acid fast bacilli, almost coccoid, were observed. Subsequent observations on the same two patients confirmed their nature in the discovery of typical *B. lepræ*. On two or three occasions in the same patient *B. lepræ* has been found in nasal secretions and not in nodule punctures and the reverse; in these cases the absence of bacilli in one or the other is probably a matter of chance.

(d) *Skin and Hair examinations*.—The presence of *Microsporon audouini* was demonstrated in the only case occurring in the year, a European.

(e) An attempt to discover *B. tuberculosis* in a couple of vulcanite telephone mouth-pieces stated to have been used by a consumptive, failed.

(f) *Sections*.—Tissues of various kinds were forwarded for examination. Ten were received, and sections or smears made and reported on.

Cerebrum (abscess at base)—*B. tuberculosis* not found.

Cerebellum (abscess at base)—acid fast bacilli found.

Brain smear (European, inland)—cerebral malaria.

Lymphatic glands from groin—*B. tuberculosis* not found.

Uterine contents—1. decidual tissue.

2. decidual tissue.

Neoplasms—Fibroma.

Fibro-sarcoma.

Enchondroma.

Squamous celled carcinoma.

Sections were also made of ten specimens that had been sent during the previous year. The tissues were identified, but in three no signs of pathogenic processes were evident. Of the remainder, two were lipomata, one chondroma, two sarcomata (one melanotic), one sebaceous cyst and one showing hypertrophied thyroid.

(g) *Entomological*.—Several entomological specimens have been sent for identification from various quarters of the territory, and several have been caught and in some cases bred locally.

Additions are gradually being made to the nucleus of a small museum left by the Germans. The classification and labelling of specimens has been attempted as time and opportunity afforded, and Mr. Hammond has artistically mounted a number.

Ticks.—Numerous specimens were sent in for identification or corroboration, some from native huts and encampments, others from animals. The following were identified:—*Ornithodoros moubata*, *Hæmaphysalis leachi* and *punctata* and *Hyalomma ægyptium*. Most of the specimens of *Ornithodoros moubata* proved non-infective.

Flies.—One or two specimens of *Stomoxys calcitrans*, *Muscina stabulans*, *Phorinæ* and several *Tabanids* have been collected. In the "mango season" dermal myiasis is commonly met with, and the larvæ of late instars have been bred in sand in the laboratory into imaginal *Cordylobia anthropophaga*.

Flies of the *Glossina morsitans* group are occasionally sent in from the districts, *Culex*, *Stegomyia* and *Anopheline* mosquitoes are common. A gnat of the family *Tipulidæ*, stated to be plentiful after the rains, and to cause irritating bites was sent from one station.

Fleas.—A large number of these was submitted for identification from all quarters.

Lice, Bugs.—One or two specimens of *Pediculus pubis* and *Cimex lectularius* and hemipterus were received, both from Indian sources.

(h) *Helminths*.—*Ascaris lumbricoides*; a tangled mass of these was found in the stool of an Indian child treated with a vermifuge. Single specimens have been found on occasions.

Proglottides of *Tænia* are of common occurrence, but the scolices have been recovered from sifted stools in the case of three Europeans only, in whom *tænia* was diagnosed. All three were *Tænia saginata*.

Ankylostome ova were found in the stools of three European children, and the aggregate of ankylostomes recovered after treatment approached two hundred. In a field swarming with *Strongyloides stercoralis* larvæ, one adult female was recognised.

An interesting case of hernia in the native hospital furnished us with a specimen of *Dracunculus medinensis*. The worm was found lying loosely coiled in the hernial sac, and was removed entire. It was immersed in dilute serum in a Petri dish and deposited in the incubator at blood heat. With occasional changes of medium, it was kept alive for twelve days in the laboratory.

Schistosomum cercariæ, not however fork-tailed, were found in large numbers from two types of fresh water snails as yet unidentified, which were obtained from streams in the Gerezani and Msimbazi valleys.

(j) *Autogenous vaccines*.—From time to time during the year, but more especially in the hotter months, demands for autogenous vaccines arise, in every instance hitherto from Europeans. The condition for which they are in greatest demand is furunculosis, but vaccines have been made for intractable rhinitis and recurring abscesses. Ten autogenous vaccines have been made. The organism most frequently isolated in *Staphylococcus aureus*, and when colonies of more than one organism have been found, *Staphylococcus aureus* has invariably been present. It has not been possible to follow all the cases treated with vaccine of this nature, but in three, undoubted benefit has followed its subcutaneous administration.

In two cases, where auxiliary treatment in the form of local applications were carried on concomitantly with the injections, benefit resulted, but whether from the one or the other or both, it is impossible to say. Four left the station before treatment was completed or its value could be gauged. Two of the vaccines were made for children under one and seven years of age respectively. One was frankly a failure, and though a cure was eventually effected, it could in no way be attributed to the autogenous vaccine, which in fact, appeared to markedly aggravate for a prolonged period the focal condition on each occasion on which it was used.

(k) *Calculi*.—A vesical calculus, the size of a walnut, was found to consist of uric acid and phosphates. A few smaller ones from another patient contained calcium oxalates and urates.

C. CHEMICAL EXAMINATIONS.

I. Milk Analysis.

(a) *Tinned Milks*.—Fourteen samples of tinned milk were analysed. The fat content of twelve exceeded the standard. Two, labelled machine skimmed condensed milk, showed a percentage of 1.1, and 0.1 of fat by weight respectively. The Gottlieb process of analysis is employed with condensed milks.

(b) *Natural Milks*.—The number of analyses of natural milks has reached a total of thirty-nine. It is gratifying to record that not one was found "wanting" in fat content. The vigilance of the Health Authorities is responsible for this to a great extent. Milk is not infrequently found mixed with water in the homes, but this is accounted for by the petty pilfering of domestic servants. The scientific sophistication of milk is an art the local vendor has not yet acquired. The nearest approach to it, and one presenting great difficulties in detection in the present circumstances unless gross, is the addition of goat's to cow's milk. For purposes of control, a series of guaranteed samples of cow's and goat's milk respectively were analysed last year, and the average fat content of each recorded.

Search was made in one sample of milk for *B. tuberculosis*. The milk was found to be free.

Exclusive of the above, three samples of cow's milk were forwarded from Dodoma, and two were found to have been liberally diluted with water.

II. Samples of butter, ghee, flour and dried fruit were received, and the latter (flour) in one or two instances proved to be mixtures of maize and cassava flour. Weevils were found in many. No adulterants encountered in the others.

III. *Salt Deposits*.—Two samples were forwarded. One contained caustic soda about 90 %, with a remainder of sodium carbonate formed probably from exposure to the air. The other sample contained 95 % of sodium chloride with several other salts in small quantities.

IV. *Drugs*.—Samples of seven drugs procured in an Indian shop were submitted for examination, five were identified.

The stalk and leaves of a plant supposed to have narcotic properties, and alleged to be in common use amongst the natives, was forwarded from Bagamoyo. In micro- and macroscopic appearance, odour and taste, it bore so close a resemblance to *Cannabis indica* that it was considered to be an African variety of the plant, though physiological and chemical tests, with their many fallacies, in regard to this particular drug failed to uphold this opinion. Some weeks later a packet of native made cigarettes, alleged to have hypnotic qualities, were submitted for examination, and found to contain tobacco and the dried leaves of the plant previously reported as being an African variety of *Cannabis indica*. A crystalline powder used as a medicine locally we failed to identify and information of a negative nature only was gleaned from its examination. A tuft of leaves sent with the above was recognised as belonging to the order *Chenopodiaceæ*.

D. MEDICO LEGAL.

In this branch of the laboratory's activity thirty-three separate examinations of material have been made in the year, representing seventeen cases of which Dar-es-Salaam has supplied nine, five concerning Europeans.

The materials requiring scrutiny have been articles of wearing apparel for blood, gonococci and spermatozoa ; smears, vaginal or uréthral for gonococci and spermatozoa ; human viscera, and bark, leaves etc., for poison ; and native weapons for blood.

Cases may be classified under the following heads:—

(a) *Murder*.—Eight cases come into this category, all from districts in the interior.

A bush knife, a small knife and a sack ; stains of blood found on the first and last, and of rust only on the small knife. A weed, extracts of which are alleged to have caused death ; no poisonous substance detected.

A stain on a shirt, suspected to have been blood, proved to be due to vegetable juice or "pombe."

Four articles of clothing in another case showed blood stains on three.

In two cases stomachs and contents were despatched to us with the request that poison be looked for. None was found. A piece of bark sent with one of the above, and supposed to be *Erythrophloeum guinense* showed no poisonous properties. A native sword with stains that responded to tests for blood was reported on.

A native medicine received from Shinyanga, with some dried ginger, was shown to contain no toxic principles.

(b) *Attempted Suicide in delirium*.—A relatively large amount of quinine was recovered from the vomit of a patient showing signs of cinchonism. The quinine had been taken in tablet form, apparently at intervals ; one or two tablets were recovered whole.

(c) *Rape*.—Four cases have occurred during the year, all four being in Dar-es-Salaam. In two, no blood, spermatozoa or gonococci were discoverable. In each of the other two cases, the victim was a girl under five years of age, and gonococcal infection of both children and two accused was discovered, clinically and microscopically.

(d) *Post mortems*.—A case of alleged suicide. Early in the year, a Belgian woman died from a gunshot wound in the head. Post mortem examination revealed a .22 bullet embedded against the inner table of the skull, above and behind the right ear, the skin round the wound of entrance on the left temple was smoke and powder stained.

(e) *Suicide*.—In August, the body of an adult European male in an advanced state of decomposition was discovered on a pathway to a native village at Kurasini, south of the King's African Rifles' Depot. The body was swarming with maggots, and had been

attacked by a small animal of the jackal type. Examination showed a bullet wound on the right temple, a gaping wound of exit exuding brain matter was found above and behind the left ear. Revolver bullets were found in the pockets of the coat, of a size compatible with the assumption that one of the same type had caused death.

The revolver was not found. The evidence pointed to *felo de se*, and this was shortly after confirmed.

(f) *Poisoning*.—Towards the end of the year, an English woman and child were taken ill within half an hour after the evening meal, and succumbed within four hours. Post mortem examination revealed nothing marked, but disintegrated fish roe was observed in the stomachs. Feeding experiments with vomited matter, stomach contents and extracts did not adversely affect the laboratory animals used. The police unearthed from the garden of the deceased, a fish, the roe of which had been removed, and sent it to us. Reference to text books enabled us to identify the fish as belonging to the *Tetrodon* group. It is common knowledge with the coast natives that this fish (which they call the "Bunju") is poisonous. It is not generally known that it is the roe which contains all the poison, nor that the roe is poisonous only at certain seasons of the year. Presumably the acquisition of venomous properties is a natural defence against aggression or annihilation during a vulnerable period of the existence of the young. The active principles, tetrodonin and tetrodonic acid are stated to have a three-fold toxicity directed against the cardiac, respiratory and nervous systems; and clinical evidence in the above cases affords corroboration of the statement.

(g) *Cerebral Malaria*.—A young officer who had gone up the coast on a shooting expedition in a native sailing vessel was taken ill with symptoms that were considered to resemble heat stroke. He was hurried back to Dar-es-Salaam, but died a few hours before reaching the port. A post mortem examination revealed evidence of a severe attack of cerebral malaria.

E. WATER ANALYSIS.

(a) *Chemical Analysis*.—Water samples have been received from various quarters and sources. Out-stations have supplied 28, and Dar-es-Salaam 8, making a total of 36 analysed in the year. The samples have been taken from rivers, wells, springs, swamps, boreholes, and mains. The object of analysis of the majority of these samples has been to ascertain their fitness or otherwise for domestic use. A few, however, have been examined for commercial purposes, while one or two were stated to have medicinal properties, and were forwarded from the point of view of interest.

Lack of knowledge of the technique of collection and dispatch of samples, lack of transport and storage facilities, necessary delays in transmission and other reasons, incidental to a more or less pioneer existence in the tropics, have to a large extent precluded the possibility of a complete analysis being made of all waters sent to us.

A large number of waters from the interior are unfit in their natural state for human consumption, and the majority from all sources would be condemned on English standards. In the tropics, however, stringent English standards cannot be rigidly adhered to, and when reporting on water required for drinking purposes the strict injunction to "boil and filter" is invariably quoted.

It has been noted that waters from the vicinity of Tabora and a few other inland towns show a milky opalescent appearance, due to silica in a very fine state of division being held in suspension. Storage of such samples undisturbed for three months has not resulted in sedimentation to any marked degree, nor has filtration through double filter paper any appreciable effect on the clarity of the water. A summary of experiments conducted with such a sample is appended. (V.)

Some of the samples taken apparently from swollen rivers were a muddy brown colour, becoming opalescent on standing, with a sediment of mud $\frac{1}{2}$ " to $\frac{3}{4}$ " in depth.

The chlorine content of samples taken from wells and boreholes in the coastal areas was high, in one instance closely approximating to that in sea water.

Magnesium salts are frequently present in sufficient quantity to vitiate the estimation of the hardness of samples.

Nitrates and nitrites have been found in a few samples, traceable in a few instances to the iron mains.

Projected settlements in new sites has resulted in several water samples from new sources in the neighbourhood of Kibata, Kilwa and Lindi being sent for analysis.

From Mtagata Hot Spring, Bukoba, a bottle of water received was found to contain sulphuretted hydrogen. This water is the one referred to as being alleged to have medicinal properties—a spa in fact.

From Kigoma a short time ago a box was received containing small pieces of zinc that appeared to have been eroded by acid. It was stated that the water of Lake Tanganyika was having the curious effect of pitting boiler plates, and for experimental purposes a plate of zinc was placed in one of the boilers, and after three months immersion it was reduced to the condition in which it was received, scored as by acid, and in little chips. Samples of water were asked for and experimented with. The mineral content of the water included Sodium, Potassium and Calcium, Chlorides, Carbonates and Sulphates. The water had no markedly solvent action on zinc in vitro, either when boiled periodically or when left standing. It was believed and reported that the erosion of the plate was due, in all probability, to galvanic action.

(b) *Bacteriological Examinations*.—Ten samples of water were submitted to bacteriological examination, three being aerated mineral waters.

Indicator organisms were found in most in unit amounts of sample.

F. RAT EXAMINATIONS.

These are carried out daily. A total of 14,644 were received, including *Rattus rattus alexandrinus*, 14,608 were classed as *Rattus rattus*, and the remaining 36 as *Rattus norvegicus*.

The “break-back” variety of trap has replaced the “Everset” wire type, and many of the rats, as reported last year, arrive in a decomposed state. Splenic smears as formerly are taken of rats dissected, especially of those with any suspicious glandular enlargement. *B. pestis* has not been found in any.

Excision of the bladder and examination of contents, together with renal smears have been done in a few cases. Search for *Leptospira icterohæmorrhagiæ* has been futile.

(a) Rainfall.

G. METEOROLOGY.

Month.	Total in inches.	Number of days on which rain fell.	Maximum on any one day.
January	0·764	9	0·503
February	6·11	13	1·25
March	5·12	22	0·95
April	7·135	16	1·45
May	3·27	14	0·98
June	2·3	10	0·72
July	1·04	5	0·36
August	0·555	8	0·3
September	1·395	9	0·7
October	0·25	7	0·13
November	0·85	8	0·41
December	1·68	7	0·92
Total	30·469	128	—

The rainfall for 1924 exceeds that of last year by 5·259, but is approximately two inches less than that recorded in 1922. The number of days on which rain fell is 128, as compared with 103 and 104 in 1923 and 1922 respectively.

1924.

JAN. FEB. MAR. APR. MAY JUN. JUL. AUG. SEP. OCT. NOV. DEC.
 FROM BLOOD SLIDES
 MONTHLY DISTRIBUTION OF MALARIA
 IN % OF YEAR'S TOTAL.

%
40

35

30

25

20

15

10

5

0

% FAHR. HUM.%
30 85 85

25

20

15

10

5

0

%

20

15

10

5

0

I EUROPEANS

MALARIA%

RAINFALL AS %
OF YEAR'S TOTAL

II ASIATICS

MEAN
TEMPERATURE

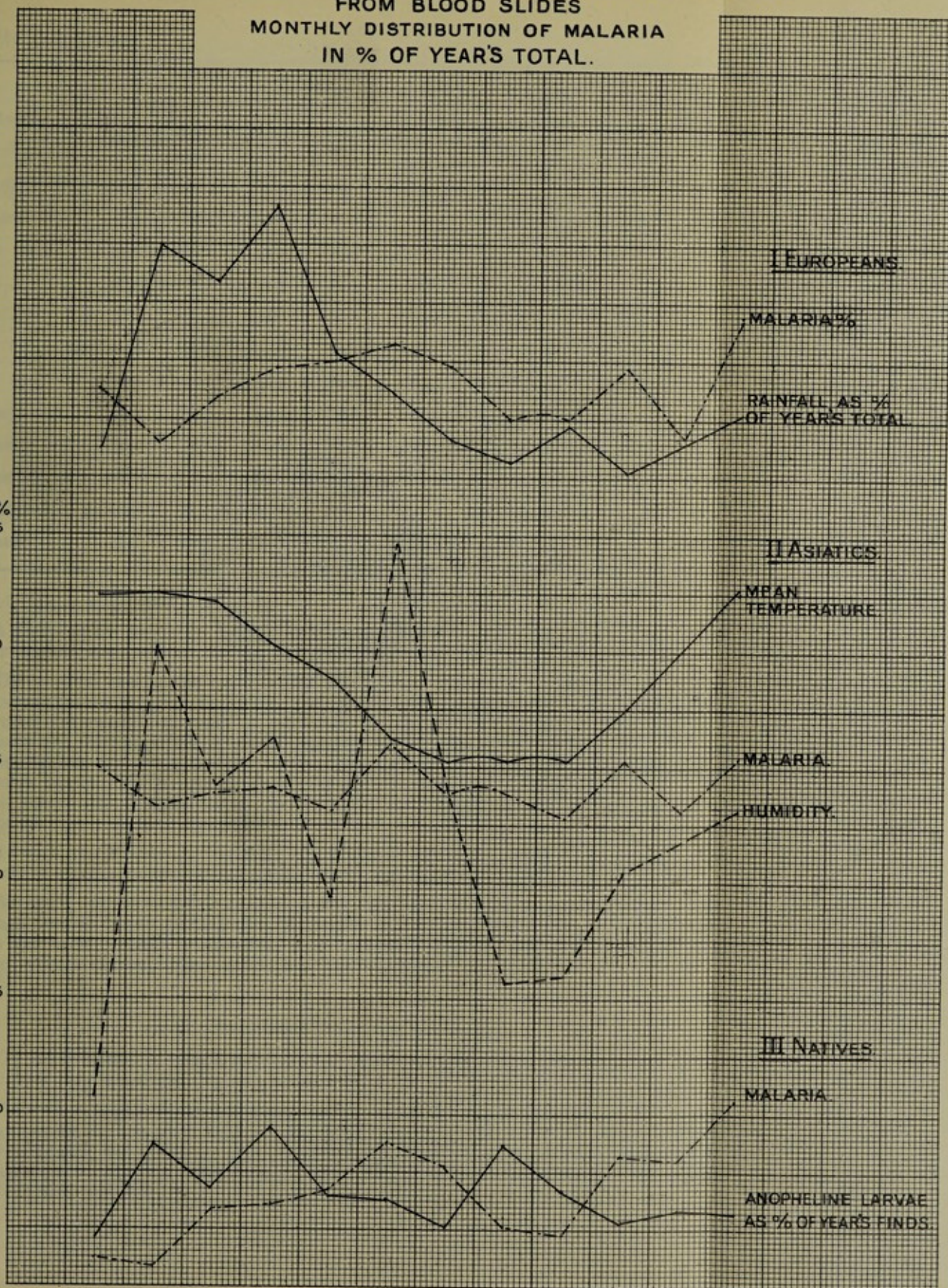
MALARIA

HUMIDITY

III NATIVES

MALARIA

ANOPHELINE LARVAE
AS % OF YEAR'S FINDS



1924
JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV
FROM BLOOD SLIDES
MONTHLY DISTRIBUTION OF MALARIA
IN N. OF YEARS TOTAL



(b) *Temperature.*

Months.	Mean.		Highest Recorded.		Lowest Recorded.		Mean Humidity.	Mean 9 a.m. Humidity.	Mean 4 p.m. Humidity.
	Cent.	Fahr.	Cent.	Fahr.	Cent.	Fahr.			
January ..	28.0	82.4	33.5	92.3	22.5	72.5	60.8	70.8	50.9
February ..	28.1	82.5	34.0	93.2	21.0	69.8	80.1	78.0	82.3
March	27.9	82.2	33.5	92.3	22.0	71.6	74.1	78.4	69.8
April	26.8	80.2	33.5	92.3	21.0	69.8	76.3	79.4	73.2
May	26.1	78.9	32.0	89.6	19.5	67.1	69.3	75.4	63.3
June	24.5	76.0	31.0	87.8	19.0	66.20	84.7	86.5	83.0
July	24.0	75.2	31.5	88.7	16.5	61.70	73.6	83.0	64.2
August ..	24.1	75.3	31.0	87.8	16.5	61.70	65.7	74.2	57.2
September ..	24.1	75.3	31.0	87.8	17.5	63.5	65.9	67.6	64.2
October ..	26.3	77.5	31.0	87.8	18.5	65.3	70.5	70.2	70.8
November ..	26.7	80.0	32.0	89.6	20.5	68.9	71.7	70.6	72.4
December ..	28.1	82.5	33.5	92.3	22.0	71.6	73.0	76.0	70.0

(c) *Malaria and Meteorology.*

A graph of the monthly malaria incidence in the different races concomitantly with meteorological observations during the same periods is here given for comparison.

The gradual rise in the malaria curve in relation to the non-immune nationalities, Europeans, commencing in February, and reaching its zenith in June, two months after the maximum rainfall attained, is explained by the height reached by the rainfall in February and sustained till late April, leaving the earth water-logged, and with numerous breeding places for mosquitoes. The final rise in the malaria curves for all races in December appears to be out of proportion to the rainfall, humidity and temperature curves, though the last named in the tropics is not considered to have any marked influence on the disease or its vectors.

As with the Europeans, Asiatics and Natives less susceptible to the malady show an increase of malaria corresponding though in a lesser degree with the rainfall.

We were, unfortunately, unable during the year to obtain continuous humidity readings, and as those plotted are the means of morning and afternoon observations, it has not been possible to ascertain with accuracy whether humidity has any bearing on the subject of anopheline mosquitoes and malaria.

H. ANTIVARIOLOUS LYMPH VACCINE.

The manufacture of lymph vaccine was carried on by Mr. W. A. Irvine in the first half of the year, and continued by Mr. Hammond on his return from leave.

The lymph is glycerinated and made according to the Hendon method. Its potency is maintained by alternate transmission from calf to monkey at intervals of a week. Before despatch the lymph is kept a month and cultured aerobically and anaerobically. An anthracoid organism innocuous to laboratory animals, and probably *B. subtilis*, is occasionally isolated.

Thirty-six stations scattered over the Territory have been supplied with lymph to the extent of 173,550 doses. The table below sets out distribution and results:—

Station.	Amount of Doses issued.	Number Vaccinations accounted for.	Positive.	Modified.	Not seen again.	Percentage of takes.	Percentage of takes, Positive & Modified combined.
Arusha	2,100	1,599	934	—	200	66·0	—
Bagamoyo	2,200	705	315	127	90	71·5	—
Bukoba	10,400	1,046	—	—	—	—	Not reported.
Dodoma	9,400	8,664	7,282	—	354	87·6	—
Handeni	200	200	146	—	—	73·0	—
Iringa	8,400	7,679	2,801	2,231	507	70·0	—
Kasanga	1,100	1,100	—	—	—	—	Statistics not reported & lymph forwarded from Kasanga to sub-districts.
Kilwa	4,350	3,254	1,833	—	729	72·5	—
Kilosa	1,200	1,130	613	280	—	79·3	—
Kigoma	3,200	325	149	36	80	52·0	—
Kidugalo	1,700	—	—	—	—	—	Not reported.
Kondoa-Irangi ..	1,100	920	473	189	25	76·0	—
Lindi	2,900	1,026	367	213	148	66·0	—
Lushoto	1,200	1,119	517	263	187	76·0	—
Moshi	12,100	5,380	933	14	500	19·4	—
Masoko	1,100	—	—	—	—	—	Not reported.
Mahenge	1,800	1,205	776	80	—	71·0	—
Mafia	300	—	—	—	—	—	Not reported.
Mikindani	900	629	368	9	95	70·0	—
Mbulu	200	200	130	—	—	65·0	—
Musoma	200	—	—	—	—	—	Not reported.
Namanyere	2,200	1,809	350	34	320	25·7	—
Morogoro	1,300	492	395	52	8	99·3	—
S.M.O.H., Dsm. ..	21,100	19,003	7,958	1,082	—	59·2	—
Mwanza	9,200	7,486	5,624	981	9	88·4	—
Mheza	100	—	—	—	—	—	Not reported.
Pangani	4,500	4,210	3,783	—	176	87·0	—
Shinyanga	1,200	556	290	—	12	53·3	—
Songea	1,300	860	550	187	—	85·6	—
Singida	1,200	1,265	814	234	98	89·78	—
Tabora	22,800	17,697	4,617	2,278	—	89·3	Certain amounts of this was used in sub-districts of Tabora.
Tanga	13,100	11,184	1,281	110	9,428	84·0	—
Tunduru	1,100	813	214	167	300	74·2	—
Tukuyu	6,600	2,409	1,287	—	482	66·7	—
Utete	4,900	4,800	2,911	688	596	85·3	—
Zanzibar	16,000	—	—	—	—	—	—

The largest issues have been made to the three principal towns, Dar-es-Salaam, Tabora and Tanga, and outside the Territory to Zanzibar. Of thirty-six stations, to which lymph has been despatched, thirty report results fairly regularly.

CASES OF SMALL-POX NOTIFIED

DURING

1924

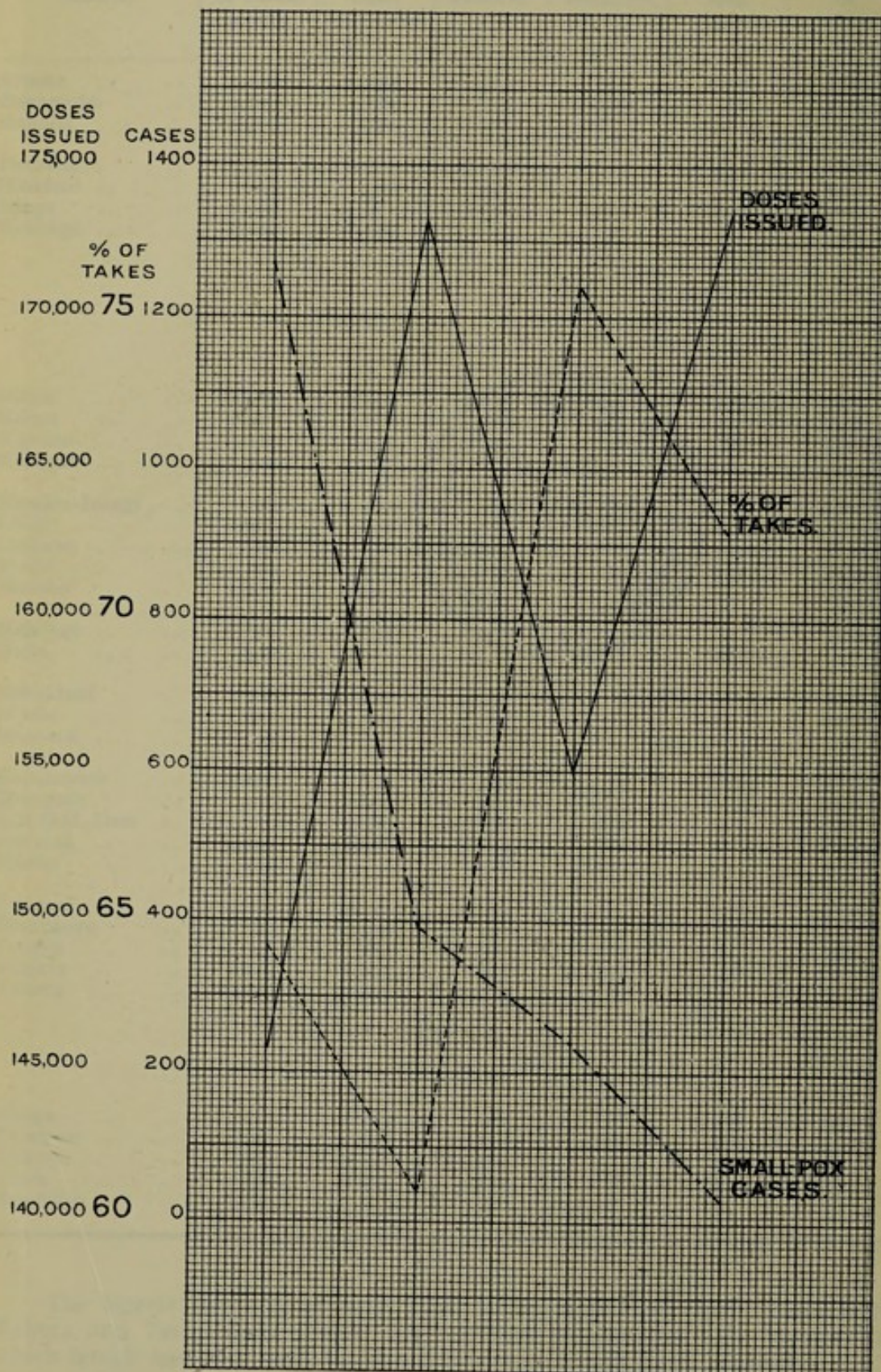
1923

1922

1921



CASES OF SMALL-POX NOTIFIED DURING 1921 1922 1923 1924



In gauging the efficiency of the lymph, it has to be remembered that the vaccine is sent in many instances to towns in the interior, several days journey from the coast; that conditions of temperature obtaining in the tropics adversely affect the activity of the vaccine; that the lymph may be stored in conditions far from ideal for some time before use; that it has often to be sent to sub-districts, where dressers or compounders are required to scarify; that subjects who have suffered from small-pox or been previously vaccinated, must in certain cases be taken indiscriminately; that errors in technique are not always avoidable in the numbers dealt with; that not all who have been vaccinated return for inspection; and lastly that the subjects themselves are ignorant as a rule, and by accidentally or intentionally rubbing their arms after the operation, defeat the purpose intended.

An instance illustrative of the actual value of the vaccine lymph, where most of the above-mentioned objections can be disregarded, is available in the results obtained by the Senior Medical Officer of Health, Dar-es-Salaam, using vaccine lymph from the same source during the year under review. Of 19,003 men, women and children (some previously protected) who were vaccinated between June and December, and of whom 15,268 and 3,735 were re-inspected on and after the 8th day respectively, 7,958 showed successful, and 1,082 modified results, giving combined a percentage of 59.2.

Successful results reported from many stations exceed this figure, while two or three are much below.

The Zanzibar Government discontinued its demand for vaccine lymph from September; 16,000 doses were supplied them in the first eight months of the year, representing a revenue of £160.

The number of calves inoculated during the year totalled 58, being 24 fewer than in the previous year; the amount of pulp yielded was 398.7 grammes, representing 157,450 doses, an average yield per calf of 6.87 grammes or 2,701 doses. The maximum yield per calf was 23.5 grammes, and the minimum one gramme. This improvement in the yield is probably due to the fact that the rainfall was distributed fairly evenly over the year, and green fodder was never entirely lacking.

The amount of lymph issued during the year exceeds that made, the difference representing the surplus carried over from the previous year.

7,000 doses were used for seed purposes.

1.5 c.c. Glycerinated emulsion is still being issued as 100 doses.

Subjoined is a table of comparison for the years 1921 to 1924. It is satisfactory to note the increase in the "total reported on," the percentage being 68.4 as compared with about 50 % in the previous year:—

	1921	1922	1923	1924
Calves Inoculated	87	51	82	58
Grammes of Pulp	386.22	388.0	510.2	398.7
Lymph in c.c.'s.	1692.5	1787.5	2760.0	2361.75
Total Doses	169,250	178,750	184,750	157,450
Doses issued	145,875	173,450	155,050	173,550
Percentage of "takes"	64.6	60.5	75.4	71.5

The steady decline in cases of small-pox notified throughout the territory during the last four years is illustrated in the graph shown opposite.

APPENDIX I.

EXPERIMENTS IN GERMINATION OF CEREALS AND PULSES.

I have the honour to submit the results of experiments in the germination of certain pulses and cereals in common use, and more or less generally procurable in the territory.

Preparatory to the receipt of seeds from the various institutions addressed, experiments were made with a few procured locally.

The pulses treated were Njugumawe, Kundi, Chiroko, Gram Mioth and Maharagwe, and the cereals Mtama, Uwele and Maize.

The method adopted was briefly as follows :—

A few grains of each article were placed in a beaker and washed by swilling them round in two or three changes of tap water. They were then permitted to soak for about twelve hours at room temperature, which varied between 20° and 30° C., and finally placed on moistened blotting paper in covered Petri dishes, to minimise loss of moisture by evaporation. Each dish was appropriately labelled. By this method the smaller grains that had been attacked by insects were seen to float, affording an easy means of discarding the bad seed. The larger grains were not rendered sufficiently buoyant to float, by the bubble of air enclosed in the tunnel made by the insects, but these were found in the experiments to be easily compressible between the fingers after soaking, and were pasty to the feel. Each grain so affected, moreover, exuded a foul smelling viscid milky fluid, easily seen against a dark back ground. This milky fluid, while not actually inhibiting growth, had the effect of retarding to the extent of a day or two, the germination of good seed in close proximity.

The smaller grain were found to be attacked by one insect only. The larger grains were attacked, often more than one to a seed, by the grey mottled hunch-backed weevil. Some Maharagwe beans contained small oval powdery yellow pollen-like masses, revealing under the microscope the presence of acari. Careful scrutiny with the lens of the entire surface of several beans failed to show, except in two specimens, any opening, yet small insects identified as the unfledged imagines of the grey weevil, were found under the unbroken pericarp. In some, no weevils were apparent, but the cotyledons were brownish, and undergoing degeneration. The time taken by each seed to germinate varied according to the kind and the proximity in the same dish of bad seed, other factors being constant. Even seeds of the same kind varied within narrow limits in regard to the time of generation. The average period required by each is set out below, including twelve hours submersion.

PULSES.	Chiroko	..	..	..	..	..	18 hours.
	Njugumawe	..	..	..	..	..	3 days.
	Kundi	..	..	..	..	..	2 days.
	Mioth	..	..	..	..	..	2½ days.
	Cram	..	..	..	..	..	2½ days.
	Maharagwe	..	..	..	..	..	failed to germinate.
CEREALS.	Uwele	..	..	..	..	..	2½ days.
	Mtama	..	..	..	..	..	2½ days.
	Maize..	..	..	..	..	..	3 days.

The same experiment, using distilled water, resulted in the time of germination being slightly protracted.

In no case was Maharagwe successfully germinated, though drying in the sun for two or three days, and implanting in earth were resorted to.

Endeavours were made to ascertain whether mechanical damage to the beans was responsible for the inhibition of growth. To this end, several beans of Chiroko and Njugumawe were perforated, shelled, scooped or otherwise intentionally injured. Those in which the germinal area was damaged in the least degree, as also those in which the larger portion of both cotyledons was removed, failed to grow.

The remainder were unaffected.

Dissection of several beans revealed the fact that insects did not invariably attack the germinal area, being found in some cases at the end of a cotyledon away from it. Growth, however, was inhibited in every single instance where an insect was found in or to have attacked and left a bean, irrespective of its position in relation to the germinal area.

This would lend colour to the theory that it is a secretion of or excretion from the insect that destroys the vitality of the bean. A hundred per cent. of the Maharagwe beans apparently sound that were examined, contained imagines of weevils or acari. It is interesting to note too that the perforation of the pericarp in this bean takes place from within, the portion of the husk perforated to form the exit is in the form of a disc as though punched.

Beans were forwarded from Tabora, Tanga and Dar-es-Salaam, those from the former being Njugumawe, the remainder Maharagwe. The results of experiments with these were in every particular identical with those given above.

Feeding experiments with white rats, designed with a view to comparing the nutritive and vitaminic values of whole and weevil riddled seeds, had to be abandoned, as none of the white rats on arrival was in good enough condition.

APPENDIX II.

EXPERIMENTS WITH TABORA WATER.

With reference to the request that the minimum amounts of Sulphate of Alumina and Lime required to precipitate the silica in the samples of Tabora water forwarded, be ascertained with the time required to achieve this end, the following results emerge from experiments conducted in the laboratory.

Small amounts (100 c.c's.) of the water were used for each experiment, and it was found that slightly less than 0.01 gramme of Sulphate of Alumina completely precipitated the suspended Silica in about 3 to 4 hours.

Insufficient water was sent to ascertain the effects on precipitation, of varying amounts of lime, in conjunction with Sulphate of Alumina.

Observations made during the experiments point to the probability of proportionately less alum being required in dealing with larger volumes of water.

Further experiments were performed with a view to ascertaining the minimum amount of dried builder's lime and alum, separately and in combination, required to precipitate the silica in the water samples forwarded from Kidete (Tabora district).

The results of these experiments are as follows:—

- (a) 1. Using alum alone as precipitant the required result was obtained in 3 to 3½ hours with a minimum of 0.01 gramme of alum per 100 c.c. of water (10 parts per 100,000 or 7 grains per gallon).

2. Of ordinary builder's lime (dried by heat) 0.05 gramme was required, the result being obtained in $2\frac{1}{2}$ to 3 hours (50 parts per 100,000 or 35 grains per gallon).

3. Combinations of alum and moisture-free lime required the same minimum amounts as when used separately, and precipitation of silica was not accelerated.

4. Addition of alum or dried lime separately or in combination, in amounts less than the minimum did not produce precipitation of silica in the water sample, even when the minimum of 0.01 gramme and 0.05 gramme respectively were reached.

(b) 1. The total hardness of the original water sample is very low, viz., 0.7 parts per 100,000.

2. After effectual precipitation of silica with 0.1 and 0.05 grammes lime respectively, the total hardness reaches 6.5 and 3.3 parts per 100,000.

3. On filtration through a layer of dried lime with an average thickness of $\frac{1}{4}$ " at the rate of 100 c.c. per hour, the water emerges clear, and its hardness totals 6 parts per 100,000.

(c) The last sample of water forwarded to the Laboratory does not appear to have come from the same source as previous samples. It has a fairly thick sediment of mud, and requires twice the above amounts approximately of alum and lime.



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