

EAST AFR. PROT.
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 No 29376

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 REC
 16 AUG 05

No. 415
 1905
 22 July
 last previous Paper.

(Subject.)

Report of medical Dept, 1904.

Transmitted

(Minutes.)

Mr. Read This is most important matter here is to. *Mr. Read*
 Perhaps you see the varying condition of the various stations

Send the Report in regard to the Royal Society, calling attention to the reference to sleeping sickness at p.p. 42-47 + to the Appendix which deal with the same matter - I wish that the Report may be returned when done with.

Appendix - my to Royal Society 14/10/05
 Bond 5/14 15 Nov 05
 Subsequent Paper
 1/4/05 (1905 Edition)
 S-R
 17/8

24 August 1904

DRAFT.

The Secretary,
Royal Society

MINUTE.

Mr. McGuire 20/8

Mr. Read 21/8

Mr. Ansdobun

Mr. Cos.

Mr. Lucas

Mr. Graham

Sir H. Osmani

The Duke of Marlborough

Mr. Lytton

msd 3980

Sir,

I am directed by Mr. Sec. Lytton to transmit to you for the use of the Royal Society the Report of the Medical Department of the East Africa and Uganda Protectorate for 1904, and I am to call attention to the reference to 'Sleeping sickness' at pp 42-47 and to the Appendices which deal with the same matter. I am to ask that the Report may be returned when done with no longer required.

I am, Sir,
Yours faithfully,
J. C. C. C.

Report in original



ANY REPLY TO THIS COMMUNICATION
SHOULD BE ADDRESSED TO
"THE SECRETARIES
OF THE ROYAL SOCIETY"

Burlington House,

London. W.

August 25, 1905.

Sir,

I have to acknowledge the receipt of Mr. Lucas' letter of yesterday enclosing the Report of the Medical department of the East Africa and Uganda Protectorates for 1904. I beg leave to return the thanks of the Royal Society to Mr. Lyttelton for his courtesy in affording the Society a perusal of this valuable document. The references to Sleeping Sickness in the body of the Report and in the Appendices will be of much interest to the Tropical Diseases Committee before which the Report will be laid at its first meeting. As nearly all the members are now absent on vacation, it will not be possible to hold a meeting for some weeks hence, but care will be taken to return the Report after it has been considered by the Committee.

I am, Sir,

Your obedient servant,

W. G. Pittie

The Under Secretary of State,

Colonial Office,

S. W.

Secretary R. S.

29376
1905

44
No. 25/1.

P.M.S.'s Office

NAIROBI

4th July 1905

29376
REC
Aug 16 AUG 05

Sir,

I have the honour to forward the Annual

Report for the Medical Department of East Africa and Uganda for 1904 in which are included the following appendices:-

- No. I. Report by Dr. P.H. Ross, on experiments conducted at Makindu and Nairobi on the transmissibility of Trypanosomes by different species of Tsetse fly - with a note on the Natural Occurrence of Piroplasmiasis in the monkey, marked I.
- No. II. Report by Dr. A.D.P. Hedges on Sleeping Sickness in Unyere and the Nile valley with an appendix marked IIa.
- No. III. A Resume of the work done at the Royal Society's Laboratory, Entebbe, during 1904 by Lt: A.C.H. Gray, R.A.M.C.

I have the honour to be,

Sir,

Your most obedient,
humble servant,

Principal Medical Officer,
East Africa & Uganda Protectorates.

(MDS)

Deputy Commissioner,
NAIROBI.

The Medical Staff of the Protectorate

Principal Medical Officer.

Senior Medical Officer, Uganda.

Health Officer, Kabon.

Two Assistant Principal Medical Officers.

Bacteriologist.

Twenty Medical Officers.

Two temporary Medical Officers, representing the Royal Society's Commission on Sleeping Sickness, carrying out investigations into that disease at Entebbe.

Committee:-

1. Dr. H. E. Huxley died at Kisumu on May 15th from Blackwater Fever. He was possessed of considerable scientific attainments and his death is a distinct loss to the Department.

2. Dr. W. E. Budge was invalided to England on 7th September for Tubercle of lung and had been recovered to November 7th, 1935.

Exchanges:-

Dr. A. J. H. Paine exchanged with Dr. S. Long, Senior Medical Officer, Swaziland, and left on October 25th, the latter arrived for duty on December 2nd.

Leaves:-

The following officers proceeded on leave and returned on the dates mentioned:-

	Left.	Returned.
Dr. W. J. Radford,	24 - 4-04	25 - 2-04
" H. H. Walker,	25 - 7-03	25 - 2-04
" A. D. P. Hodges,	19 - 2-04	16 - 11-04
" C. A. Wiggins,	14 - 4-04	14 - 10-04
" A. G. Bagshaw,	30 - 4-04	16 - 11-04
" H. U. Moffat,	11 - 5-04	14 - 10-04

New Appointments:-

Dr. F. L. Henderson, arrived on November 25th, and was posted to Kisumu.

Government Officials.

510

The health of the Government Officials has on the whole been good, and, although statistics for comparison are not available, it may safely be said that during the past year or two it has been undergoing a steady improvement in both Protectorates. This improvement is due to various factors, the chief of which are better housing, greater facilities for procuring suitable food, and a more intelligent appreciation of the proper precautions to be observed to guard against disease in the tropics.

Deaths:-

Three deaths are recorded for the year viz:

1. Mr. J. V. Tritton, C.M.C., Sub-Commissioner for Seyidie Province, from exhaustion the result of chronic gastritis of long standing.

2. Mr. H. H. Hill, already referred to.

3. Mr. G. J. Yorke, Assistant Collector, Waucho, from Septicæmia following multiple injuries by an Elephant.

Invaliding:-

Six Officials were invalided to England during the year,

One case of	Tubercle of Lung	from	Matobbe.
One " "	Blackwater Fever	"	Kalua.
One " "	Mental unsoundness	"	Wadala.
One " "	do do	"	Wimla.
One " "	Neurasthenia	"	Matobbe.
One " "	Syphilitic Paresis	"	Naivasha.

Prevailing Diseases:-

The commonest diseases among Officials were Malarial Fevers, and Dyspepsia. The former were recorded chiefly from the Nile Province and the Province of Kavirondo, and the majority of the cases were of the benign Tertian variety. Dyspepsia was formerly a very common ailment among the Government Officials.

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the had to subsist largely, often entirely, on the food of the country such fresh meat, milk, and vegetables were unobtainable, and its production was no doubt assisted by the then universal habit of constant tea - drinking. Suitable food is now more easily procured and the tea - drinking habit is dying out, but it is very noticeable how many of the older officials suffer from some form of Dyspepsia or Gastritis, most probably due to the causes above mentioned.

The following statistical tables are given, but with the exception of those for Troops and Police, cannot, in the absence of an accurate estimation of the population, be taken as indicating the state of health of the general community. They may be useful however in showing the prevailing diseases and the amount of work done by the department during the year. Indoor and outdoor cases are grouped together.

Tables I. and II. show the number of Europeans who came under treatment in East Africa and Uganda respectively, and include both Officials and non-officials.

EUROPEANS.

Diseases.	Remain- ing 1st Jan: '04	Admitted during the year	Died		Discharged		Remain- ing 31st Dec: 1904
			In Hospts:	Out of Hospts:	Cured	Improved	
Brought forward	1	162	1	3	162	14	3
PERSONS examined	.	1	.	.	1	.	.
Baria:-
TUBERC:-
TUBERC:-
TUBERC:-
TUBERC:-
PHYSIOLOGICAL DISEASES:-
PHYSIOLOGICAL DISEASES:-	.	3	.	.	3	.	.
PHYSIOLOGICAL DISEASES:-	.	4	.	.	4	.	.
Grand Total	1	190	1	3	170	14	3

The only diseases that call for special notice are :-

520

1. Blackwater Fever - 7 cases were under treatment with 2 deaths. One of the deaths has already been referred to, the other was the Chief de Post, old Wadelai, in the Congo, who was attended by the Medical Officer, Wadelai.

This disease appears to be decreasing in frequency among Europeans in both Protectorates, its decrease being no doubt due to the greater care now exercised against malarial infection. Comparatively little is known of its cause beyond the fact that frequent attacks of Malarial Fever, especially if neglected, or the patient is subjected to a chill during recovery, predispose to it. Malaria plasmodia are almost invariably found in the blood in the early stage of the disease, and it appears to be associated with the milder forms of malaria rather than the severe. In some tropical countries where fatal epidemics of malaria occur, Blackwater fever may be unknown. Its etiology requires further elucidation.

The most successful treatment in these Protectorates seems to be Quinine in the early stage and later Cardiac tonics.

2. Relapsing Fever - 9 cases are recorded, all in Uganda. It has not been reported so far in East Africa, although it is probable it does occur in that Protectorate.

This disease was first observed and recorded in Uganda by Dr. Hedges in October 1903, but there is no doubt it had existed for years prior and been overlooked owing to the symptoms being somewhat similar to those of malaria and the spirillum not unlike the free flagellum of malaria.

The disease is caused by the bite of a tick, hence it is also called "Tick Fever" and the usual

history of a case is that the patient had been on the march and sleeping in rest houses. The rest houses and porters' camps in Uganda are infested with ticks and other vermin.

3. Malaria - This was mostly of the intermittent type.

4. Ulcers - At certain seasons of the year especially in East Africa, slight abrasions take on ulceration which is troublesome to heal, and although more tractable than is not unlike the velvet Sore of South Africa.

5. Gastritis and Dyspepsia have already been alluded to.

6. Hepatitis or enlargement of the Liver with a certain amount of tenderness over the region of that organ and slight pyrexia is not uncommon. 14 cases are recorded with one death.

7. Bronchitis of a subacute nature and Bronchial catarrh are prevalent in the highlands of East Africa during the dry season, and are caused by the dry atmosphere and particles of dust carried by it.

Tables III. and IV. show the cases of sickness among the Troops in East Africa and Uganda respectively.

Troops

Diseases.	Remain- ing 1st Jan: 04	Admitted during the year	Died		Discharged		Remain- ing Dec 31st 1904.
			In Hospital	Out of Hospital	Cured	Im- proved.	
Brought forward,	25	646	3	0	609	274	107
POISONS
MALARIA:-
ENTOMES:-	.	5	.	.	3	.	.
HEMATODES:-	.	32	.	.	32	.	.
HEMATODES:-
ZOOLOGICAL DISEASES:-
VEGETATIONAL DISEASES:-
HYGIENE:-
ALL OTHER DISEASES:-
Grand Total	25	646	3	0	609	274	107

Diseases.	Remain- ing 1st Jan:04.	Admitted during the year	Died		Discharged		Remain- ing 31st Dec: 1904.
			In Hospts:	Out of Hospts:	Cured	Improved	
Light forward	29	1896	2	0	1556	32	34
RESPIRATORY SYSTEM:-							
Diphtheria		1			1		
Whooping Cough		55			59		
Sore Throat		315			317		1
Bronchitis		159			157		2
Pneumonia		196			194		2
Emphysema							
Tuberculosis							
Pleurisy		5			5		
Pericarditis		4			4		
Pneumothorax							
Emphysema							
Bronchitis		4			4		
Laryngitis							
Tracheitis		10			10		
Pharyngitis		14			14		
Dysphagia							
Tonsillitis		6				6	
RESPIRATORY SYSTEM:-							
Catarrh of External Meatus		33			32		1
Otitis Media		8				7	1
Tympanitis							
Eustachian Tube							
Otitis Externa							
Otitis Media		112			110		2
Otitis Interna		12			12		
RESPIRATORY SYSTEM:-							
Leucorrhoea		1				1	
Gonorrhoea		25			25		
Chlamydia		1			1		
Discharge of Urethra		1			1		
Retention of Urine		1				1	
Hemorrhoids		1				1	
RESPIRATORY SYSTEM:-							
Croup		5			5		
Whooping Cough		1				1	
Sore Throat		16			12	1	3
RESPIRATORY SYSTEM:-							
Inflammation of Lymphatic Glands		5			5		
Tuberculosis		2			2		
Light carried over	36	2592	2	0	2580	49	46

ops.

Diseases	Remain- ing 1st Jan: '04	Admitted during the year	Died		Discharged		Re- main- ing 31st Dec: 1904.
			In Hospts	Out of Hospts:	Cured	Im- proved.	
Brought forward	61	3831	4	1	3774	55	58
LEISNONS:-	.	.	.	.	.	.	.
MALARIA:-							
Ferstans	.	3	.	.	.	.	3
Medinensis	1	13	.	.	14	.	.
PROTOZOES:-							
Amia Medicamentata	.	2	.	.	2	.	.
PROTOZOES:-	.	.	.	.	.	.	.
PROTOZOES:-	.	.	.	.	.	.	.
ZOOLOGICAL DISEASES:-	.	.	.	.	.	.	.
ENTOMOLOGICAL DISEASES:-	.	.	.	.	.	.	.
VERMIN:-	.	.	.	.	.	.	.
OTHER DISEASES:-	1	114	.	.	114	.	.
Total	63	3965	4	1	3904	55	59

The average strength of Troops in East Africa was 1,334 and the number who came under treatment 6,401 or 4,824.54 per 1,000 strength the number of deaths 5 or 3.74 per 1,000 and the number invalided 11 or 8.24 per 1,000.

The cases invalided were:-

Malaria	2	Dysentery	2
Secondary Syphilis	1	Chronic Bronchitis	1
Hydrocele	1	Rheumatism	2
Debility	2		

In Uganda, the average number of Troops was 1,380 (including 210 Indian Troops and 269 armed porters). The number treated was 4,026 or 2917.39 per 1,000 strength. There were 5 deaths or 3.62 per 1,000 and 5 or 3.62 per 1,000 were invalided. The invalids was for:-

Gonitis	1	Heart Disease	1
Rheumatism	1	Syphilis	1
Progressive Muscular Atrophy			1

Although the admission rate appears high, it will be noted that many of the diseases recorded are of a trivial nature not requiring hospital treatment and not incapacitating from duty.

Tables V. and VI. show the admissions to among the Police of both Protectorates.

TABLE V

POLICE, BASE AFRICA PROTESTORATE,

Yearly Sick Return, 1904.

BRIDGE STRENGTH,
1,000.

Diseases.	Examined in Jan 1904	Admitted during the year	Died		Discharged		All Dead '04
			In Hosp:	Out of Hosp:	Cured In-prov. sd.	Not Cured	
Abscess	.	95	.	.	94	.	1
Actinomycosis
Anaemia	.	6	.	.	5	1	.
" pernicious
Blackwater fever
Bari-Bari
Bubo (non-venereal)	.	10	.	.	10	.	.
Carbuncle
Cellulitis	1	36	.	.	37	.	.
Chicken pox	.	24	.	.	23	.	1
Debility	.	18	.	.	18	.	.
Delirium tremens
Dengue
Dysentery	1	60	.	.	79	.	2
Echinococcosis
Erysipelas	.	2	2	.	.	.	.
Glanders
Gonorrhoea	6	100	.	.	103	1	2
Gout
Influenza
Insect-bites	.	1	.	.	1	.	.
Leprosy
Lymphangitis	.	9	.	.	9	.	.
Malaria acute	9	948	.	.	922	21	14
" recurrent fever	.	101	.	.	98	.	3
Nasals	.	3	.	.	3	.	.
Nipples
New Growths, malignant	.	2	.	.	2	.	.
" no-malignant
Plague
Pruritis
Pneumatic fever	.	1	.	.	1	.	.
Rheumatism	.	239	.	.	228	11	.
Rickets
Rubeola
Scarlet fever
Scurvy	.	7	.	.	7	.	.
Septicæmia
Striasis
Sleeping Sickness
Small-pox	.	3	.	.	3	.	.
Snake-bite
Syphilis, Primary	2	24	.	.	24	0	1
" Secondary	3	40	.	.	34	6	5
Tetanus
Tuberculosis
Tubercle of Lung	.	9	.	.	9	.	.
Typhoid	6	411	.	.	410	.	7
Urticæ	.	6	.	.	6	.	.
Varicella	.	6	.	.	6	.	.
CIRCULATORY SYSTEM:-							
Aneurism
Endocarditis
Pericarditis
Alvular Dis. of Heart
Arterio

Diseases.

Diseases.	Admitted		Died		Discharged		Remain- ing Decr 31st 1904.
	Male	Female	In Hospital	Out of Hospital	By Cure	By Other	

Brought forward	52	3461	2	0	3091	59	41
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NERVOUS SYSTEM:-

Epilepsy
Paralysis	11
Mania
Melancholia
Insanity
Idiocy
Alcoholism	.	.	.	.	.	.	.
Drug habit	.	.	.	.	.	.	.
Senility	1	113	1	7	113	.	.

RESPIRATORY SYSTEM:-

Whooping Cough	4	765	.	.	765	5	3
Pharyngitis	.	.	.	.	.	.	.
Tracheitis	.	.	.	.	.	.	.
Bronchitis	.	123	.	.	123	.	.
Pneumonia	.	32	.	.	32	.	1

OF THE THROAT:-

Acute Pharyngitis	1	45	.	.	45	.	.
Chronic Pharyngitis	1	25	.	.	25	.	.
Acute Tonsillitis	1	34	.	.	34	.	.
Chronic Tonsillitis	.	2	.	.	.	.	.
Acute Laryngitis	.	.	.	.	.	.	.
Chronic Laryngitis	.	.	.	.	.	.	.
Acute Epiglottitis	.	.	.	.	.	.	.
Chronic Epiglottitis	.	25	.	.	25	.	.
Acute Pharyngitis	.	60	.	.	60	.	.

URINARY SYSTEM:-

Bright's Disease	.	1	.	.	1	.	.
Albuminuria	.	1	.	.	1	.	.
Haematuria	.	1	.	.	1	.	.
Stricture of urethra	.	2	.	.	2	.	.
Gonorrhoea	.	2	.	.	2	.	.

SKIN:-

Scalds and Scalds	.	12	.	.	12	.	2
Burns of feet	.	50	.	.	50	.	.
Convulsion of brain	.	2	.	.	2	.	.
Scabies	12	300	.	.	300	.	7
Callosities	.	2	.	.	2	.	.
Warts	.	4	.	.	4	.	2
Ulcers injuries	.	60	.	.	60	.	.
Prurigo	.	.	.	.	.	.	.
Eczema	2	322	.	.	319	.	5
Scalds	.	.	.	.	.	.	.
Shot	.	1	.	.	1	.	.
Poisoned	.	.	.	.	.	.	.

Diseases	Remain- ing 1st Jan: '04	Admitted during the year	Died		Discharged		Remain ing 31st Dec: 1904
			In Hospital	Out of Hospital	Cured	Improved	
Brought forward	55	5421	6	1	5345	64	60
POISONS:-	.	.	.	.	.	.	.
TYPHOID:-	.	.	.	.	.	.	.
CESTODES:-							
Tania Mediocanell	.	2	.	.	1	1	.
TRICHINOSIS:-							
Tricunculus Medinensis	.	3	.	.	2	.	1
TRICHINOSIS:-	.	.	.	.	.	.	.
TRICHINOSIS:-	.	.	.	.	.	.	.
ZYCOBIOLOGICAL DISEASES:-	.	.	.	.	.	.	.
GONORRHOEAL DISEASES:-	.	.	.	.	.	.	.
GYNECOLOGICAL DISEASES:-	.	.	.	.	.	.	.
AMOEBA:-	.	.	.	.	.	.	.
ALL OTHER DISEASES:-	.	70	.	.	68	2	.
Total	55	5496	6	1	5414	67	61

TABLE VI

POLICE,
UGANDA PROTECTORATE,

Yearly sick Return,
1904

Diseases.	Remain- ing at Jan'y 04	Admitted during the year	Died		Discharged		Re- main- ing at Jan'y 1904
			In Hospitals	Out of Hospitals	Cured	Im- prov- ed.	
Malaria	1	54	1	.	54	.	1
Amoebiasis	.	1	.	.	1	.	.
Parasitic
Water fever
Beri
(non-venereal)	.	16	.	.	16	.	7
Cholera	2	15	.	.	17	.	.
Scarlet	.	2	.	.	2	.	.
Typhoid
Typhus	.	5	.	.	5	.	.
Dysentery
Cholera
Water fever
Amoebiasis
Cholera	3	69	.	.	70	.	2
Amoebiasis
Water fever	.	1	.	.	1	.	.
Amoebiasis	.	7	.	.	7	.	.
Cholera	3	110	.	.	109	.	3
Remittent fever	.	67	1	.	66	.	.
Cholera	.	3	.	.	3	.	.
Amoebiasis, malignant	.	1	.	.	1	.	.
Amoebiasis, non-malignant	.	7	.	.	7	.	.
Water fever	.	1	.	.	1	.	1
Amoebiasis	.	60	.	.	59	.	1
Cholera
Water fever
Amoebiasis	.	1	.	.	.	.	1
Water fever	.	5	2	1	.	.	2
Amoebiasis	.	14	2	1	11	.	.
Water fever	.	2	.	.	2	.	.
Amoebiasis, Primary	.	32	.	.	32	.	.
Amoebiasis, Secondary	1	30	.	.	31	.	.
Amoebiasis
Amoebiasis
Amoebiasis of Large	3	190	.	.	193	.	4
Amoebiasis	.	2	.	.	2	.	.
Amoebiasis	.	10	.	.	10	.	.
RESPIRATORY SYSTEM:-
Amoebiasis
Amoebiasis
Amoebiasis	.	1	.	.	1	.	1
Amoebiasis of Heart
Amoebiasis
Total carried over	14	696	5	3	679	1	21

os.

Diseases.	Remain- ing 1st Jan: '04.	Admitted during the year	Died		Discharged	Im- proved.	Remain- ing 31st Dec: 1904
			In Hospital	Out of Hospital			
Light Treatment	14	93	5	3	679	1	21
GENITIVE SYSTEM:-							
Acute dental	.	2	.	.	2	.	.
liver
glands	.	5	.	.	5	.	.
itis	.	7	.	.	7	.	.
Alipation	.	109	.	.	109	.	.
Acne	.	34	.	.	34	.	.
eczema	1	33	.	.	33	.	1
Pruritus
Acne in ano
Proctitis
Hemorrhoids	.	4	.	.	4	.	.
Fissures	.	1	.	.	.	.	.
Paronychia
Paronychia	.	3	.	.	3	.	.
Paronychia	1	10	.	.	10	.	.
Paronychia	.	12	.	.	12	.	.
Paronychia of Stomach
ENTOMOLOGICAL SYSTEM:-							
Inflammation of External	.	14	.	.	13	.	1
meatus	.	1	.	.	1	.	.
meatus-tympani	.	1	.	.	.	.	1
Other Ear Diseases
OPHTHALMIC SYSTEM:-							
Conjunctivitis	.	32	.	.	32	.	.
Cornea	.	1	.	.	1	.	.
Ulcer of Cornea	.	3	.	.	3	.	.
UROLOGIC SYSTEM:-							
Gonorrhoea	.	6	.	.	6	.	.
Gonorrhoea, non-gonorrhoeal	.	2	.	.	2	.	.
Stricture of Urethra
Retention of Urine	.	1	.	.	1	.	.
Prostate	.	1	.	.	.	.	.
RESPIRATORY SYSTEM:-							
Croup	.	3	.	.	3	.	.
Whooping Cough	.	1	.	.	1	.	.
Pneumonia	1	12	.	.	13	.	.
LYMPHATIC SYSTEM:-							
Inflammation of Lymph	.	4	.	.	4	.	.
Glands	.	3	.	.	3	.	.
Testis
Total carried over	17	1007	5	3	991	1	24

Diseases	Remain- ing 1st Jan: '04	Admitted during the year.	Died		Discharged	Improv- ed.	Re- main- ing 31st Dec: 1904
			In Hospita:	Out of Hospita:			
Brought forward	17	1007	5	3	991	1	34
RESPIRATORY SYSTEM:-							
Asthma
Bronchitis
Emphysema
Whooping Cough
Diphtheria
Scarlet Fever
Measles
Small Pox
Scarlet Fever
Whooping Cough
Consumption
Phthisis
Empyema
Hydrothorax
Pericarditis
Pleurisy
Pneumonia
OTHER DISEASES:-							
Cholera
Typhoid
Scarlet Fever
Measles
Small Pox
Scarlet Fever
Whooping Cough
Consumption
Phthisis
Empyema
Hydrothorax
Pericarditis
Pleurisy
Pneumonia
WOUNDS AND INJURIES:-							
Scalds
Burns
Cuts
Contusions
Fractures
Dislocations
Amputations
Other Injuries
Gunshot
Poisoned
Total carried over	34	1566	10	3	1544	1	34

ice. 4.

Diseases .	Remain- ing 1st Jan: '04	admitted during the year	Died		Discharged		Re- main- ing 1st Dec: 1904.
			In Hospts	Out of Hospts:	Cured	Im- proved	

sent forward	34	1558	10	3	1544	1	34
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GENS:-

ARIA:-

Madisonis	.	11	.	.	11	.	.
Paratans	.	1	.	.	1	.	.

TOES:-

TOES:)

TOES:-

Paria Hamyobia	.	1	.	.	1	.	.
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OLOGICAL DISEASES:-

ERICAL DISEASES:-

AT:-

OTHER DISEASES	.	14	.	.	14	.	.
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Total	34	1565	10	3	1544	1	34
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539

The average strength of Police in East Africa was 1,790; the number of admissions 3,414 or 3024.56 per 1,000; of deaths 7 or 3.91 per 1,000; and invalided 9 or 5.02 per 1,000.

The invaliding was due to:-
Malaria 1 Tubercle of Lung 6 Gonorrhoea 1
Addison's disease 1.

In Uganda the average strength of Police was 918 the admissions 1,619 or 1763.6 per 1,000; deaths 13 or 14.16 per 1000; and invalided 3 or 3.26 per 1,000. The cases invalided were one of each Syphilis, Colitis and Rheumatism.

Tables VII. and VIII. show the number of cases treated among the general native population and include Africans and Indians.

NATIVES

TABLE VII (AFRICAN AND ASIATIC)

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Yearly Net Return,

for 1904.

Disease	No. Admitted	Admitted during	Died		Discharged		Remain- ing Dec. 31st, 1904.
			In Hospts:	Out of Hospts:	Cured	Im- proved	
Cholera	5	704	2	0	661	31	15
Cholera	1	254	.	.	240	11	4
Cholera pernicious	.	8	.	.	8	.	.
Cholera (non-venereal)	2	75	.	.	74	.	1
Cholera	1	181	1	.	167	7	2
Cholera	2	109	.	.	107	3	2
Cholera	2	294	1	.	288	13	7
Cholera tremens	.	.	.	.	.	.	.
Cholera	4	563	13	.	566	9	10
Cholera	.	37	.	1	8	27	1
Cholera	.	7	.	.	7	.	.
Cholera	13	651	.	.	596	29	41
Cholera	.	4	.	.	4	.	.
Cholera	.	8	1	.	8	.	1
Cholera	.	25	3	.	21	3	1
Cholera	16	3608	3	.	3616	49	56
Cholera	3	924	2	3	907	.	18
Cholera	.	7	.	.	7	.	.
Cholera	.	2	.	.	2	.	.
Cholera	.	4	.	.	3	2	.
Cholera non-malignant	.	8	.	.	3	2	.
Cholera	.	1	.	.	1	.	.
Cholera	.	4	.	.	4	.	.
Cholera	12	1011	.	.	956	49	16
Cholera	.	2	.	.	.	2	.
Cholera	1	103	1	.	101	1	1
Cholera	.	20	2	.	18	.	.
Cholera	21	66	59	1	37	34	1
Cholera	.	37	1	.	5	.	.
Cholera	33	552	1	.	515	40	31
Cholera	12	716	1	.	614	80	33
Cholera	1	32	.	.	28	4	1
Cholera	1	3	1	.	2	.	.
Cholera	1	11	2	1	.	.	.
Cholera	3	73	10	2	17	45	2
Cholera	63	9662	1	.	9621	17	36
Cholera	.	132	.	.	132	7	5
Cholera	.	4	.	.	.	3	1

RESPIRATORY SYSTEM:-

atives.

Diseases.	Remain- ing last Janr '04	Admitted during the year	Died		Discharged		Re- main- ing last Janr 1905
			In Hospitals	out of Hospitals	Cured	Impro- ved.	
Brought forward	196	20025	165	10	19222	486	379
DIGESTIVE SYSTEM:-							
Abscess dental	.	248	.	.	246	.	2
" liver	.	1	.	.	1	.	.
Hepatitis	6	5	4	.	2	2	1
Gallitis	.	585	.	.	584	.	1
Cholecystitis	.	2	.	.	2	.	.
Constipation	6	3169	1	2	2934	231	10
Hemorrhoids	3	982	1	2	983	13	3
Dyspepsia	2	1088	.	.	903	121	6
Gastritis	.	3	.	.	1	2	.
Fistula in ano	.	3	.	.	3	.	.
Colitis	.	24	.	.	20	4	.
Hepatitis	.	37	.	.	29	7	1
Hemorrhoids	.	37	.	.	29	7	1
Hemorrhoids	.	10	2	.	2	.	1
Proctitis	.	1	.	1	1	.	1
Laryngitis	2	51	.	.	51	1	1
Pharyngitis	.	.	.	.	.	.	.
Stomatitis	.	155	.	.	145	4	6
Gingivitis	.	293	.	.	288	.	6
Ulcer of Stomach	.	.	.	.	.	.	.
Gastritis	.	15	.	.	7	8	.
EAR:-							
Inflammation of External							
Meatus	2	246	.	.	228	10	10
Memb-tympan	.	9	.	.	5	4	.
Middle Ear Disease	.	22	.	.	15	6	1
EYE:-							
Cataract	.	209	.	.	200	7	2
Conjunctivitis	11	618	.	.	506	10	14
Dacryocystitis	.	7	.	.	7	.	.
Iritis	.	19	.	.	14	5	.
GENITURINARY SYSTEM:-							
Hydrocele	.	75	.	.	29	45	1
Gonorrhoea non-gonorrhoeal	3	88	.	.	83	7	1
Prostatitis	.	5	.	.	5	.	.
Urethritis	.	7	.	.	7	.	.
Stricture of Urethra	.	20	.	.	8	12	.
Retention of Urine	.	4	.	.	4	.	.
Prostatecele	.	2	.	.	.	2	.
RESPIRATORY SYSTEM:-							
Croup	.	15	.	.	11	3	1
Whooping Cough	.	152	.	.	156	4	2
Scarlatina	.	5	.	.	5	.	.
Diphtheria	2	88	.	.	54	4	4
Measles	3	76	.	.	66	8	5
LYMPHATIC SYSTEM:-							
Inflammation of Lymph							
Glands	.	117	.	.	112	5	1
Tuberculosis	.	2	.	.	2	.	.

Diseases	Remain- ing Jan: '08	Admitted during the year	Died		Discharged		Re- main- ing Dec: 1908
			In Hospital	Out of Hospital	Cured	Improv- ed.	
Brought forward	235	28924	115	13	27495	1056	465
GENITOURINARY SYSTEM:-							
Gonorrhoea	.	1	1	.	.	1	1
Prostatitis	.	1	1	.	.	1	1
Leucorrhoea	.	3	.	.	.	2	1
Urethritis	1	3	.	.	1	1	1
Orchitis	.	1	.	.	1	1	1
Hydrocele	.	1	.	.	1	1	1
Phimosis	.	1	.	.	1	1	1
Paraphimosis	.	1	.	.	1	1	1
Stricture	1	490	.	.	477	14	1
Blennorrhoea	.	36	2	3	7	23	1
RESPIRATORY SYSTEM:-							
Whooping Cough	1	85	.	.	60	22	4
Acute Bronchitis	31	4435	4	1	4331	80	80
Chronic Bronchitis	.	1	.	.	.	1	.
Emphysema	.	.	.	.	.	.	.
Asthma	.	.	.	.	.	.	.
Pharyngitis	1	45	.	.	45	.	1
Tracheitis	1	450	149	6	235	.	20
SKIN DISEASES:-							
Scabies	3	177	.	.	173	4	3
Eczema	10	3925	.	.	3920	4	16
Psoriasis	5	69	.	.	69	.	.
Ringworm	5	395	.	.	389	6	6
Impetigo	.	60	.	.	60	.	.
Herpes	.	1	.	.	.	.	1
Scalds	.	3	.	.	3	.	.
Ulcers	.	1	.	.	.	.	1
Warts	.	3	.	.	3	.	.
Pruritus	.	20	.	.	15	1	1
Ringworm of the scalp	1	143	.	.	143	5	1
Ringworm of the body	9	2066	.	.	2071	.	4
EAR, NOSE AND THROAT SYSTEM:-							
Otitis Media	.	5	2	.	.	3	.
Otitis Externa	.	4	.	.	5	4	.
Discharge of Ear	.	1	.	.	1	1	.
Otitis Interna	1	10	2	.	3	1	.
WOUNDS AND INJURIES:-							
Cuts and Scalds	.	249	3	1	234	1	10
Burns of feet	.	21	.	1	21	.	.
Contusion of brain	.	2	.	.	2	.	.
Contusions	41	2394	.	.	2393	20	22
Amputations	.	8	.	.	8	.	.
Fractures	1	48	.	.	40	4	5
Multiple injuries	.	15	.	.	10	4	1
Wounds	.	200	.	.	252	2	1
Prostration
Shock	36	4766	.	1	4689	25	89
Gunshot	.	9	1	.	7	.	1
Poisoned	.	21	1	.	20	.	.

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NATIVES
(Africans and Asiatic)
UGANDA
Yearly Sick Return,
1904.

TABLE VIII

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Diseases.	Remaining	Admitted	Died		Discharged		Re- main- ing Sick Dec: 1904.
			In	Out	Cured	Impro- ved.	
		during the year	Hospts:	Hospts:			
Acne	3	186	.	.	184	1	4
Actinomycosis	2	7	.	.	6	2	1
Actinia	.	6	1	.	5	.	.
Actinobacillary	2	105	.	.	104	2	7
Actinomyces (non-venereal)	2	119	.	.	118	3	2
Actinomyces	4	39	.	.	39	.	.
Actinomyces	.	33	.	.	36	.	.
Actinomyces	.	13	.	.	4	7	2
Actinomyces	.	3	.	.	3	.	.
Actinomyces	19	524	.	.	500	24	9
Actinomyces	.	13	.	.	13	1	1
Actinomyces	.	43	.	.	41	.	2
Actinomyces	15	937	.	.	916	9	27
Actinomyces	4	446	1	1	447	.	1
Actinomyces	.	9	1	.	8	.	.
Actinomyces	.	10	.	.	10	.	.
Actinomyces	.	3	.	.	3	1	.
Actinomyces	.	7	.	.	7	.	.
Actinomyces	.	1	.	1	.	.	.
Actinomyces	.	15	2	.	13	.	.
Actinomyces	8	502	.	.	463	7	40
Actinomyces	.	1	.	.	.	1	.
Actinomyces	.	.	.	.	.	.	.
Actinomyces	.	.	.	.	.	.	.
Actinomyces	2	53	.	.	55	.	.
Actinomyces	.	2	2	.	.	.	.
Actinomyces	2	61	10	.	.	12	41
Actinomyces	.	158	62	.	92	.	3
Actinomyces	.	21	.	.	21	.	.
Actinomyces	25	922	.	.	926	.	21
Actinomyces	9	439	.	.	417	20	11
Actinomyces	.	1	.	1	1	1	.
Actinomyces	.	2	1	.	1	1	.
Actinomyces	57	2466	.	.	2440	21	53
Actinomyces	6	478	.	.	451	12	21
Actinomyces	.	.	.	.	.	.	.
Actinomyces	.	.	.	.	.	.	.
Actinomyces	.	12	.	.	11	1	1
Actinomyces	.	3	.	.	2	.	1
Actinomyces	161	7623	.	.	7463	153	250

atives.

Diseases.	Remain- ing 1st Jan. '04	Admitted during the year	Died		Discharged		Re- main- ing 31st Dec: 1904
			In Heaps:	Out of Heaps:	Cured	Im- pro- ved.	
Brought forward	161	7688	80	8	7308	15	250
RESPIRATORY SYSTEM:-							
Diphtheria	.	10	.	.	10	.	.
" liver	.	1	.	.	1	.	.
" rhinopharyngitis	.	.	.	.	.	.	.
" tracheitis	1	149	.	.	149	.	1
" bronchitis	15	10	.	.	10	.	.
" asthma	15	1715	.	.	170	3	15
" croup	2	483	.	.	478	3	19
" pertussis	7	347	.	.	341	4	9
" epiglottitis	.	1	.	.	1	.	.
" laryngitis	.	4	.	.	4	.	.
" epiglottitis	.	8	.	.	8	.	.
" tracheitis	.	6	1	.	5	.	.
" bronchitis	.	1	1	.	.	.	.
" asthma	2	18	.	.	20	.	.
" croup	1	253	.	.	250	1	4
" pertussis	1	76	.	.	76	.	1
" epiglottitis	.	18	.	.	18	.	.
" laryngitis	.	15	.	.	15	5	.
EAR, NOSE AND THROAT:-							
Inflammation of External " Meatus	12	157	.	.	151	6	6
" middle-ear	1	22	.	.	10	12	1
" Middle Ear Diseases	1	15	.	.	.	15	.
OPHTHALMIC:-							
" conjunctivitis	19	9	.	.	1	7	1
" cataract	.	288	.	.	284	10	7
" glaucoma	.	1	.	.	.	1	.
" iritis	.	19	.	.	18	1	.
" Other Eye Diseases	.	32	.	.	32	.	.
GENITOURINARY SYSTEM:-							
" gonorrhoea	.	3	.	.	3	.	.
" gonorrhoea, non-gonorrhoeal	.	20	.	.	20	.	.
" prostatitis	.	2	.	.	2	.	.
" urethritis	.	11	.	.	11	.	.
" discharge of Urine	.	3	.	.	2	1	.
" hematuria	.	4	.	.	4	.	.
" pyelitis	.	1	.	.	1	.	.
DERMATOLOGICAL SYSTEM:-							
" eczema	.	4	.	.	4	.	.
" psoriasis	.	34	.	.	34	.	.
" scabies	.	1	.	1	.	.	.
" syphilis	.	3	.	.	3	.	.
" herpes	.	30	.	.	30	.	1
ARTICULAR SYSTEM:-							
Inflammation of Lymph " Glands	.	39	.	1	39	.	.
" glandular	.	27	.	.	18	8	.
" carried over	232	11766	82	8	11376	250	307

Diseases.	Remain- ing 1st Jan: '04	Admitted during the year	Died		Discharged		Remain- ing 31st Dec: 1904.
			In Hospita:	Out of Hospita:	Cured	Impro- ved.	
Brought forward	252	11769	82	5	11376	230	307
RESPIRATORY SYSTEM:-							
Asthenia	.	.	.	.	.	.	.
Bronchitis	.	10	1	.	.	.	.
Emphysema	.	1	.	.	1	.	.
Hemoptoe	.	1	.	.	.	.	1
Pharyngitis	.	1	.	1	.	.	.
Rhinitis	3	172	.	.	170	1	4
Tuberculosis	.	4	1	.	.	.	.
Whooping Cough	.	4	.	.	4	.	.
RESPIRATORY SYSTEM:-							
Asthenia	.	5	.	.	1	4	.
Bronchitis	31	2104	.	.	1927	163	45
Emphysema	.	1	.	.	1	.	.
Hemoptoe	.	1	.	.	.	.	.
Pharyngitis	2	110	.	.	110	.	2
Rhinitis	1	42	3	1	.	.	1
Tuberculosis	1	70	11	1	58	.	1
SKIN DISEASES:-							
Alopecia	1	41	.	.	42	.	.
Acne	4	272	.	.	261	.	14
Scabies	58	799	.	.	772	.	9
Psoriasis	2	155	.	.	175	2	6
Eczema	.	11	.	.	11	.	.
Herpes	.	2	.	.	2	.	.
Impetigo	.	5	.	.	.	5	.
Leprosy	.	9	.	.	4	2	3
Scabies	.	30	.	.	28	.	2
Syphilis	29	2576	.	.	2563	.	42
INTERNAL SYSTEM:-							
Alcoholism	.	.	.	1	.	.	1
Diabetes	.	3	.	.	3	.	.
Obesity	.	8	.	.	.	.	.
Retention of urine	.	.	.	.	.	.	.
Strabismus	.	1	.	.	1	.	.
EXTERNAL SYSTEM:-							
Blisters and Scalds	1	61	.	.	61	.	1
Blisters of feet	.	5	.	.	5	.	.
Concussion of brain	.	1	1	.	.	.	.
Contusions	7	198	.	.	201	2	4
Dislocations	.	2	.	.	.	.	.
Fractures	.	23	1	.	20	.	2
Simple injuries	.	4	2	.	.	.	1
Wounds	.	42	.	.	42	.	.
Amputation	14	717	3	.	715	.	12
Gunshot	1	9	1	.	8	.	1
Poisoned	1	14	1	.	14	.	1
Brought forward	309	19294	185	8	18632	420	457

Diseases	Remain- ing 1st Jan: '04	Admitted during the year	Died		Discharged		Remain- ing 31st Dec: 1904.
			In Hosptls:	Out of Hosptls:	Cured	Un- cured	
Brought forward	389	19234	186	8	18632	420	457
TRICHOCEPHALIA:-							
<i>Trichocephalus</i>	.	2	.	.	2	.	.
MALARIA :-							
<i>Medinensis</i>	.	68	.	.	68	.	.
<i>Diurna</i>	.	1	.	.	1	.	.
HYDROCOEL:-							
<i>Mediocancellata</i>	.	7	.	.	7	.	.
HYDROCOEL:-							
<i>Stylostoma Duodenalis</i>	.	1	.	.	1	.	.
<i>Tris Lumbrioides</i>	.	11	.	.	9	.	2
<i>Tris Vermicularis</i>	.	4	.	.	4	.	.
HYDROCOEL:-							
<i>Malaria Haematobia</i>	.	2	.	.	.	2	.
ZOOLOGICAL DISEASES:-		22	.	.	21	.	1
HYDROCOEL:-							
NEURALGICAL DISEASES:-		7	.	1	6	.	.
OTHER DISEASES:-		116	.	.	96	17	3
Grand Total	389	19476	186	9	18646	429	463

Tables III, IV, V, VI, VII, and VIII will be discussed together, the general remarks applicable to Troops and Police being equally applicable to the natives from whom, with the exception of the Indian Contingent, the Troops and Police are drawn. 548

The admission rate for both Troops and Police is shown higher in East Africa than in Uganda. So far as the Police are concerned the lower sick rate in Uganda is accounted for by there being more outposts in that Protectorate at which there is no medical establishment and from which sick returns are not received.

The total number of natives and Asiatics treated during the year was 87,545.

General Diseases- the most numerous were Ulcers, Abscesses, and Cellulitis. When a native meets with an abrasion of the skin or even a thorn prick, from neglect & entire absence of cleanliness sepsis sets up and the result is one of the 3 conditions above mentioned. Fleets were responsible for 15,906 admissions, Abscesses for 1,126 and Cellulitis for 425. Next in frequency comes Malaria - giving a total of 8,701 admissions, and 11 deaths. The greatest number of admissions are recorded from the Nile Province in Uganda and the Province of Kavirondo in East Africa. The type is chiefly the benign tertian variety. The percentage of deaths to admissions was .12.

Syphilis and Venereal Diseases.

The admissions for Syphilis were 2,808. The disease is extremely common over the whole of Uganda with the exception of the Nile Province, where the natives appear to be more virtuous, and prevails to a great extent among the tribes in East Africa, except among the Kavirondo who are of Asiatic origin. It is especially prevalent among the Masai.

Rheumatism.

There is a good deal of Rheumatism of a subacute

Rheumatic Fever is rare, only 9 cases having been recorded.

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Dysentery.

The number of cases recorded was 846, with 14 deaths or a mortality of 1.66 per cent: a result so favourable that one must come to the conclusion that the great majority of the cases was not of the type formerly known as Tropical Dysentery which used to be considered next in importance among tropical diseases to malaria.

It is to be regretted that microscopical examination of the stools in these cases was not more generally and systematically carried out, and that practically nothing has been discovered towards elucidating the special etiological factor in this important disease. There is every reason to believe that under the name "Dysentery" several distinct diseases are included and this term can therefore only be looked upon as applicable to a group of symptoms due to a variety of causes. Although many parasites have been incriminated, little is as yet known of the real cause of the malady, and its etiology requires further elucidation. There is no doubt that in many cases it is a ^{water-}borne disease, yet in East Africa, where the water as a rule is of better quality than in Uganda, it is more prevalent than in the latter Protectorate but in less severe form.

Yaws.

There were 665 admissions for this disease which is met with over both Protectorates, but is more prevalent in the Nile Province and Kavirondo than elsewhere. As syphilis is less prevalent in these 2 Provinces it may be argued that Yaws is not of syphilitic origin; nevertheless most of the cases are amenable to Potassium Iodide internally and the local application of Sulphate of Copper.

Small Pox. 230 cases are recorded with 65 deaths.

This disease is endemic in many districts of both Protectorates, and epidemics occurred at Witu, Mumias, Kisumu, Kampala and Mbarara. Epidemics may be expected to break out for many years to come or at least till greater facilities can be obtained for efficient vaccination. Not that natives as a rule object to be vaccinated, on the contrary, when it is explained to them that the operation may prevent them acquiring smallpox, a disease they have a great dread of, they are keen enough to have it done, but the greatest difficulty is to get them to come in for this purpose.

Vaccinating tours have therefore been carried out in some of the districts with marked success.

Scurvy. Isolated cases of this disease occur in both Protectorates, due no doubt to deficient and bad food with bad hygienic conditions.

Sleeping Sickness. 132 admissions are reported with 73 deaths. These numbers represents only a tithe of the cases which have occurred and died during the year. Very few come for treatment and they are mostly in the last stages of the disease.

The disease has been known for well over 100 years on the West Coast of Africa, from Senegambia to Angola, and in recent years, owing to the development of trade, spread to the Congo basin from where it is supposed, and the supposition is probably correct, it was conveyed by the survivors of the Emin Pasha expedition to Usoga where all the conditions favourable to its further development already existed. It appeared in Usoga in 1897 and since then has spread along the Northern shores of the Victoria Nyanza and along the rivers flowing into it,

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Recently it has been discovered that the disease has existed in endemic areas along the western shore of Lake Albert in the triangle between Rutuba and Foveira, and cases have been reported on the White Nile as far north as Nisule.

It is not possible to estimate even approximately the number of deaths since its out break, but many thousands of the inhabitants of Uganda, Usoga, and Kavirondo have perished, while the Sese group of islands, the island of Buvuma, and many of the smaller islands in Lake Victoria have been practically depopulated.

It continues to spread in South Kavirondo and there appears to be no abatement of its ravages in Uganda. In Usoga, the chiefs state that making every allowance for the reduction of population already caused by it, the disease is dying out.

Judging by the rapidity of its course from West Africa to Usoga, unless some preventive or curative measures are discovered a further spread to localities possessing conditions favourable to its existence must be expected.

It has now been conclusively proven that the disease is due, as pointed by Bruce in 1903, to the presence of a Trypanosome in the blood, and that the Trypanosome is conveyed from the infected to the healthy by means of Tsetse fly. It has also been proven that the Tsetse fly *Glossina palpalis* is a carrier of the Trypanosome but has not yet been definitely determined whether other species of *Glossina* or other biting flies are not also capable of carrying it. Dr. P. H. Ross has been engaged for the last 12 months on experiments with the object of discovering whether other species of Tsetse fly besides the *Glossina palpalis* can carry the Trypanosome. His report (appendix No. 1), is attached.

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It was at first supposed that the Trypano-552
some infection was directly from the proboscis and
that there was no increase of the Trypanosomes
in the body of the fly similar to the malarial
plasmodium in the mosquito, but, if this is so,
it is difficult to see how infection on the ex-
tensive scale which has been experienced in this
epidemic could be possible. The trypanosome is not
at any time very numerous in the blood, and in
regard to this Lt. Gray states in his summary of
work done in the Sleeping Sickness Laboratory *Appendix*
that a certain percentage freshly caught flies
have been found to contain large numbers of
Trypanosomes also that flies ~~and~~ artificially
infected showed a large increase, pointing to
the probability of there being a cycle of evolu-
tion within the body of the fly.

In the end of the year Dr. Hodges investi-
gated the occurrence of Sleeping Sickness in W.
Uganda and on the Nile. In his Report (appendix
11.) he points out that the fly is found in much
smaller areas than was at first imagined and
that he never found it at any distance from open
water and shady bush, which appear to be the con-
ditions essential to its existence. He does not
apprehend in this part of the Uganda Protectorate
an epidemic of any magnitude such as has been
experienced on Lake Victoria, the conditions for
a wide spread epidemic being absent.

Treatment. With regard to treatment there is unfortunately little or no progress to report.

Arsenic in large doses has been tried in a limited number of cases at Entebbe, and in early infections causes a temporary disappearance of the Trypanosomes from the blood and a slight improvement in the general condition. On ceasing its administration, Trypanosomes again appear.

Trypanrot - an aniline substance introduced by Professor Ehrlich, has also been tried at Entebbe. Its results are entirely disappointing.

Serum Injections - Dr Haran made intramuscular injections of the serum of the goat, an animal supposed to be immune to the disease carried by the fly. A temporary improvement was noted in some cases but was not maintained.

Laveran has recently published the results of experiments carried out on white rats and dogs infested with Trypanosomiasis, by injecting alternately Arsenic and Trypanrot, and reports a certain amount of success. This method of treatment is also being tried at the Sleeping Sickness Laboratory, Entebbe, and the result is awaited with interest.

Prevention. In the absence of more knowledge of the habits and life history of the Tsetse fly - the intermediate host - its extermination is not at present a practicable measure.

In these localities, in north Unyore and on the Nile, where the fly belt is patchy and very narrow and where the natives do not reside close to the rivers but get bitten when crossing the fly belt to draw water as it would be quite feasible to clear away a sufficient length of the fly infested scrub opposite native villages to ensure access to the rivers without being bitten.

On the shores of Lake Victoria the fly belt is wider and more continuous, the natives do not live

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live in villages but on their patches of cultivation, and the population is much more numerous. Here the clearing away of sufficient scrub would be a colossal undertaking and hardly practicable.

Having regard to the enormous mortality already caused by and still taking place from this disease, to the now established fact that Europeans are not immune to it (it is stated that 14 Europeans have been infected in the Congo Free State), and to the consequent loss of revenue to the Government, as well as to the serious question of future labour supply in Uganda, it is most desirable that some comprehensive measures should be instituted having for their object the discovery of a remedy or of means of prevention. Practical measures for the extermination of the fly are, for the present at least, beyond hope of realisation, but there does not appear to be any reason why some medicinal or other remedy should not be discovered which would destroy the Trypanosome in the blood and thus remove the source from which the fly becomes infected - The generation of infected flies would in course of time die out. Our greatest hope of success would undoubtedly be in treating the early or Trypanosomiasis stage.

The number of cases treated with arsenic have been far too limited to base any conclusion of either success or failure on. It would therefore be necessary to institute a fresh series of experiments altogether apart from the purely scientific work being carried out at the Royal Society's Laboratory at Entebbe. These experiments should be carried out in the fly areas among the infected population which could then be systematically examined and recorded according to the stage of the disease the individual is in, and a prolonged and extensive trial of arsenic and other drugs made - at the same time observations could be made

prevalence, seasonal, or other, &c. Larvae could be collected and hatched out. This ~~is~~ cannot be done in captivity as all the pregnant females abort soon after being caught and experiments with the fly before it has had an opportunity of tasting blood have therefore been impossible hitherto. Accurate mapping of the fly infested areas could also be done, although measures of quarantine based on this are altogether impracticable.

Laboratory. The Sleeping Sickness Laboratory at Entebbe should be removed from its present site. When the site was selected little was known about the disease and nothing whatever about the cause and mode of propagation. With the infected experimental animals it is situated within a few yards of the European and Native Hospitals and practically in the centre of the township, its existence in this position is therefore a probable source of danger and its removal is very desirable.

Floor Maggot. It may be mentioned as a matter of interest, but so far as we know, of no pathogenic importance that Dr. Pooley, when investigating the fly area in North Uvoro, discovered the existence of the Congo Floor Maggot at Mwangas.

Blackwater Fever - there were 21 admissions and 1 death, showing that natives are not immune to this disease as was at one time supposed.

Tubercle of Lung. 25 cases were admitted, and there were 15 deaths. This disease is less common among the natives than would be expected considering the bad hygienic conditions under which the majority live and the bad and often insufficient food.

Enteric Fever. 2 cases are reported, both fatal. Both occurred in the Police at Mombasa.

Leprosy.

There were 10 admissions and 1 death.

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Isolated cases occur in both Pro-terates, but the disease is reported as being very prevalent in the eastern portion of the Nile Province in Ogwal's country and among the Pajule. Ogwal has been advised to form segregation villages for his lepers and has promised to do so. The Pajule country can be entered only with a strong escort and for the present may be considered outside the pale of medical advice.

Plague.

One case occurred and died on board the Lake Steamer "Sybil". The patient was a Swahili, a native of Mombasa, named Masini - age about 27 - and had been employed for about a year as a Sailer on board the Sybil, during which time he had lived with the other Sailer in the fore-cabin. The ship was 14 days in Kisumu and left for Entebbe on the 13 May. He reported sick to Chief Officer on the 14th and died between Entebbe and Bukoba on the 17th. The body was taken ashore at Bukoba on the same day and an Autopsy carried out by Dr Feldman who declared the case one of true Bubonic Plague.

The usual precautions of disinfection and quarantine were carried out and no further case occurred.

The origin of infection was not discovered.

Some months prior to the occurrence of this case there had been epidemics of Plague at Bukoba and Shigati, lake ports in German territory.

Plague, called by the natives "Kampuli", has existed in Uganda for many years, a fatal epidemic having occurred in the capital during Mtesa's reign, and gradually spread south and east. It has been endemic in Buda for some 10

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The first reliable report of its existence was furnished by the German Doctor Laspitz in 1897 in the vicinity of Bukoba, his observations being confirmed by Professor Koch.

Feldman reported an epidemic in Bukoba in 1902.

Hodges in his Report (see appendix No. 11) states that he found a village, recently deserted and burned and on enquiring the cause comes to the conclusion that it was on account of an epidemic of Plague which had carried off 40% of the inhabitants. The disease therefore appears to be widely spread in Endemic form throughout Uganda, on the Nile, and in German East Africa, and the origin of infection in the case on board the "Sybil" was most probably in food brought from Bukoba or Shirati.

Relapsing Fever. 55 cases occurred with 2 deaths, all in Uganda. No case of this disease has been reported from East Africa; although it is quite possible cases do occur in that Protectorate. The disease was first observed and reported from Entebbe by Dr. Hodges in 1903. There is no doubt it had existed for many years previous to that date, but had been returned as malaria owing to the symptoms being somewhat similar and the parasite not unlike the free flagellum of the malaria plasmodium.

It is due to the bite, of a tick which has been identified as the *Gnathodorus Savignyi* supposed to be the same as that which causes the disease on the Zambesi, but there is a slight difference in the clinical features of the disease as met with in the two localities. A series of cases reported by Capt. Price, I. M. S., occurred in a detachment of the Indian contingent.

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escort duty between Kampala and Heima. All the cases were fairly typical, and the following is a brief summary of one of them:-

Sapey Rand Singh - aged 23 years - 4 years service had been to Heima on escort duty and slept in the usual rest camps. He was seized with fever on the 2nd October with nausea and violent vomiting, temperature a.m. 104, p.m. 103.4. Rejects everything taken by the mouth.

Spirilla found in blood.

- 3rd Nausea and vomiting continued, temperature a.m. 101.8, p.m. 100. Fed on nutrient enemata.
- 4th. Nausea and vomiting stopped. Temperature a.m. 99.2, p.m. 98.
- 5th. Complained of some nausea, temperature a.m. 97.6, p.m. 98, very weak.
- 6th. Better, temperature normal.
- 7th. Better, temperature normal, discharged.
- 10th. Readmitted with symptoms same as on the 2nd temperature 106.
- 11th. Nausea and vomiting continued. Spirilla found.
- 12th. Nausea and vomiting not so severe. Temperature 102.6, a.m. 101.6. p.m.
- 13th. Better. Temperature a.m. 98.8, p.m. 99.2.
- 14th. Temperature a.m. 97. p.m. 97.2.
- 15th. Temperature normal.
- 16th. Temperature normal.
- 17th. Discharged.
- 19th. Readmitted, violent vomiting, temperature p.m. 102.2.
- 20th. Vomiting continued, temperature a.m. 103.6, p.m. 104.
- 21st. Nausea & vomiting less severe, temperature a.m. 100.8. p.m. 102.8.

22nd. Temperature a.m. 97.1 p.m. 97.2. no vomiting,
but very weak.

23rd
to Convalescent.
30th

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Nov: 1st. Discharged.

Diseases of the Digestive System all years

figure largely among the ailments of natives, who appear to suffer alternately from Constipation, Diarrhoea, and Dyspepsia, due chiefly to the quality of their food and also to the habit they have of going to repletion whenever they have the opportunity.

Hepatitis is not uncommon.

Stomatitis of a severe form with ulceration of the gums and lips is very common and is no doubt due to bad food and hygienic surroundings.

Ear Diseases - from absence of ordinary cleanliness inflammation of the External Meatus is very prevalent and inflammatory conditions of the Tympanic membrane and Middle ear are not uncommon.

Eye Diseases - chiefly conjunctivitis due to filth.

Generative System - the most common is Orchitis, swollen testicles are very commonly met with, but the cause is not very apparent.

Splenitis. Enlarged spleen, as would be expected where so much malaria exists, are not uncommon.

Respiratory Diseases - Bronchitis of a subacute nature is common especially at the end of the rainy season. It is due to the absence of protection against chills in the paucity of clothing worn by the native.

Pneumonia is another disease very frequently met with due to the same cause.

Skin Diseases are, as would be expected from filthy habits of the natives, common.

Scabies is the commonest, and under this heading the

cases returned under the heading

have been included as it is extremely doubtful if Crow Craw, as described by Olweil and others on the West Coast, exists in this part of Africa.

Injuries. The most frequently recorded are contusions and wounds. Most were of a trivial nature, 560

Filaria Perstans affect a very large proportion of the population throughout Uganda and is very much less commonly met with in East Africa. Few cases come under treatment, and the affection is usually determined when the patients are under treatment for other diseases.

Filaria Medinensis is very prevalent among the tribes in the Nile Province and among the Troops and Police stationed on the Nile.

Bilharzia Haematobia appears to be commoner in East Africa than in Uganda.

Diseases of Women - only 70 cases were admitted. As yet the native women have not learned to appreciate the benefits of European treatment.

Deaths . The total number recorded among Troops, Police and Natives in both Protectorates was 463, but as already stated these statistics do not pretend to give an accurate account of the health or death rate of the general community, and the number of deaths here given are only those who died in the Hospital or were brought to the notice of the Medical Department.

Except in the neighbourhood of administrative stations the native seldom seeks medical treatment but relies on his own medicine man, and when he dies it is the custom, except in a few tribes, to throw him into the jungle to be devoured by Leopards and Hyenas. Some tribes are ashamed of their sick and will on the approach of strangers hide them away in the jungle.

All deaths coming under the notice of the Administration Medical Department and Police

are registered and a certificate of the 561
cause furnished.

Compulsory notification of deaths is
desirable, so that the outbreak of epidemic
diseases may be at once detected.

Vaccinations.

Table IX. shows the number vaccinated during the
year.

Source of Lymph.	Number vaccinated.	Number success- ful.	Number failed.	Result unknown.
Half on Ivory points (Imported)	1,496	914	569	15
Half locally prepared.	257	225	32	.
As to Arm	5,393	4,601	471	121
	7,146	5,940	1,072	136

The number of failures from vaccine on
Ivory points is noticeable, yet lymph imported
on Ivory points has been found more satisfactory
than in any other form.

It is hoped that during next year a Vaccine
Institution under the Veterinary Department will
be established in Nairobi and that a greater
number of vaccinations will be carried out and
better results obtained.

Some difficulty is experienced in getting
the natives to come in for vaccination, not that
they object to the operation as a rule, their
non appearance is ~~frankly~~ due ^{more} to the in-born
nervous apathy. Vaccinating tours have been success-
fully carried out in several districts.

The following Table, No. X, shows the operations performed. The list does not include such minor operations as opening abscess, extraction of teeth &c.

Organs of Locomotion.

	Number	Recovered	Died.
Amputation of arm	1	1	.
Forearm	2	2	.
Hand	1	1	.
Fingers	1	1	.
Thumb	1	1	.
Leg	3	2	1
Thigh	1	.	1
Ligature of Radial artery.	1	1	.
Removal of Lipoma	1	1	.
Tapping Kneejoint	1	1	.
Suturing Tendons	1	1	.
Tenotomy	1	1	.

Eye operations.

Cataract	7	7	.
Iridectomy	1	1	.
Trichiasis	3	3	.
Pterygium	3	3	.

Digestive System.

Fistula in ano	1	1	.
Hernia (radical cure)	1	1	.
Laparotomy for appendicitis	1	1	.
Laparotomy for wound	1	.	1
Liver abscess, opening	3	3	.
Liver removing carcinomatous	1	1	.
Paracentesis abdominalis	1	1	.

Total carried over.

38

35

3

	Number	Recovered	Died.
Brought forward	38	35	3
Uterine - Urinary System.			
Amputation of Penis (Ecthelioma)	1	1	.
Circumcision	27	27	.
Curetting Uterus	1	1	.
Hydrocele	6	6	.
Removal of Scrotum (Elephantiasis)	2	2	.
General operations.			
Removal of glands	1	1	.
" Cyst	1	1	.
" Necrosed Bone	2	2	.
" Tumours	3	3	.
" Upper jaw (Sarcoma)	1	1	.
Sequestering caries bone	1	1	.
Total	64	61	3

Three of the operations proved fatal, one amputation of leg for gangrene following compound dislocation of the ankle, one amputation of thigh also for gangrene, and one case of penetrating wound of the abdomen in which the intestine was sutured but Peritonitis set up and proved fatal.

Hospitals and Stations.

Sanitary condition and general description.

The sanitary condition of most of the stations has been gradually improving, but much remains still to be done before they can attain to modern ideas of sanitation.

Mombasa the principal sea-port for these Protectorates, has in

1. A European Hospital containing 8 wards and capable of accommodating 10 patients. This is sufficient for the present needs of the district.

2. Police Hospital - consisting of one ward inside the Goal. The accommodation is sufficient but the arrangement is not a satisfactory one as the relatives of Sick police men have to be admitted to visit them inside the Goal.

3. Prison Hospital - one ward for male prisoners only. Female prisoners are treated in their cells. A separate ward for female prisoners is required.

4. An out door Dispensary where subordinate officials and the general Public attend.

Nos. 1,2, and 3 are in charge of Dr. J.T.T.C. Johnson No.4 of Dr. C.A. Wiggins.

The sanitary condition of Mombasa is far from satisfactory. The Health Officer in his report states that compared with Maser Town in general the sanitary condition of Mombasa is not bad, but this does not imply that it is by any means good, or great improvements are not necessary in many ways. We recommend as of first importance a good water supply, as much of the success of Mombasa depends largely on a good supply of water being at all times procurable, at present it is not possible to supply ships with water, consequently, altho' Mombasa has an excellent harbour and there is even a better one at Kilindini, a source of trade and revenue is lost.

The water used by the natives is entirely from wells sunk in the coral of which the island is wholly formed, and contains a large percentage of Soda and Lime salts, which are chiefly responsible for the large number of bowel complaints from which the natives suffer at certain seasons of the year, particularly the dry season.

The system in use in connection with most of the European buildings is roof collection and storage in cemented tanks, and where the tanks

Kismayu - is the capital of the Province of Jubaland 665
built on a low sandy flat and is cooler and more
free from malaria than the rest of the Coast
Towns.

It has a small Hospital for native Troops
and Police, It has the usual wells common to
the Coast, and its Sanitary condition, altho' not
good, is better than the places already mentioned.

Gobwen and Yente are both military stations on the
Juba, at both there is a small Hospital for
Troops and their followers, each in charge of a
Hospital Assistant. The water supply is derived
from the Juba, and they are both fairly healthy.

Voi - here there is a Dispensary, in charge of an
Indian compounder for the benefit of Railway
Employees. With the exception of a certain amount
of malaria it is fairly healthy.

Makindu - there is a Hospital and Dispensary for
Railway employees in charge of an Assistant
Surgeon. The water supply is from roof collection.
The conservancy here and at Voi is managed by
the Railway. The station is healthy.

Nairobi - This is the head quarters of the Railway and
is midway between Mombasa and Lake Victoria.

There is a European Hospital and a small
Military Hospital both in charge of Dr Radford,
also a Native Hospital in charge of Dr Bodeker,
and a Dispensary in the railway yard in charge of
an Indian compounder.

The European Hospital was constructed some
years ago by the Railway and is unsuitable in
every detail for the purposes of a Hospital. A
new European Hospital is much needed.

The Military Hospital is suitable for the
present needs of the station.

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The Native Hospital has during the year had its accommodation increased to 50 beds by the addition of an extra ward, and 3 small wards have been provided for the treatment of subordinates. The outlays in connection with it are inadequate but provision has been made for additional in next year's estimates. 566

The European residences are situated on one of the spurs of the Kikuyu hills, and at the foot of this on an almost level plain is the township. The site of the township is bad, it has next to no natural drainage and in the rains becomes a swamp.

During the year there has been a very considerable increase in the number of inhabitants and the Conservancy Department has experienced some difficulty in coping with it.

The Municipal Medical Officer in his report states the removal of nightsoil is carried out with some degree of success by the Conservancy, but its disposal leaves much to be desired. During 1904, 1,095 tons of nightsoil have been conveyed by carts to the trenches situated within a mile of the Municipal boundary where it is thrown into the trenches and covered with earth. Owing to the nature of the soil this is not absorbed and the surplus infects the rivers in the vicinity. It is not sufficiently oxidised by the sun, consequently many complaints have been made of the stench from the dumping grounds, which are too close to the townships. I am informed that to run a tank train to some place in connection with the railway (say 6 miles from here) necessitates the maintenance of a staff at the siding on the dumping ground, costing Rs100 to Rs200, per mensem. This expense cannot be met by the

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present conservancy staff be increased without
a Government grant-in-aid.

The number of men engaged in conservancy work is 75, and the number of nightsoil buckets emptied daily 742. Twelve carts are employed, and the roads within the Township area alone traversed by the carts are 204 miles daily.

Fifteen refuse carts are daily employed and the amount of material removed by them in 1904 was 3,295 tons. Owing to the climate and other causes this material cannot be properly destroyed by fire. Refuse destructors are therefore an urgent necessity.

Drainage. Much has been done towards the removal of surface water, but the work is not satisfactory as a whole. There is no system of deep drainage in any part of the Township, and the existing means of disposing of the soiled "washing water" from the Indian latrines is most unsatisfactory, especially in the Indian Bazaar, where it constitutes a danger to the public health. - A considerable amount of this material at present finds its way into open drains where it stagnates in the dry season and during the rains is deposited all round the buildings.

Public Health. No practical or useful system of registering Births and Deaths within the Municipal area exists.

Municipal authorities have no means of ascertaining the numbers or causes of deaths among the native population.

Powers have been applied for under the Municipal regulations to have rules drawn up making it compulsory for all deaths occurring within the Municipal area to be reported to the Medical Officer of Health, also to make it compulsory that all infectious diseases be reported

Nairobi

Water. Within the year, water has been laid on to all parts of the town to the great advantage of the Public.

Deaths. Among the native population 50 deaths only were reported during 1904 viz.

Bronchitis	1	Jaundice	2
Pneumonia	18	Peritonitis	1
Pleurisy	2	Puerperal Fever	1
Dysentery	2	Poison	1
Diarrhoea	1	Meningitis	1
Hemiplexia	2	Ascites	1
Tubercle of Lung.	1	Unknown	1

Very great improvements have been effected in Nairobi during the past year especially in its drainage, but as pointed out by Dr Radford a system of deep drainage is urgently required. Its most pressing need, from a sanitary point of view is the erection of a Refuse destructor - This has been recommended from time to time and it is to be hoped that it will be supplied in the near future.

Fort Hall - the headquarters of the Administrative District of Kenya and with the exception of a little malaria is healthy.

There is a small Dispensary for Troops and Police under the charge of Dr. E. B. Adams.

Kitui - A native Dispensary was opened in December under the charge of an Indian assistant.

There are a good many cases of malaria and of bowel complaints, the latter due to the bad quality of the water.

During the rainy season water is plentiful, but in dry it is scarce and can only be obtained from water holes. It is then quite unfit for use.

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The adoption of roof collection & storage tanks has been recommended.

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Naivasha - is 6,230 feet above sealevel, cool and healthy. At certain seasons there is a strong wind which carries a good deal of fine dust and giving rise to Bronchial irritation.

There is a native Dispensary with 4 emergency beds under the charge of Dr. S. R. Walker.

The water supply is taken from lake Naivasha and is fair.

Nakuru - is at a slightly lower elevation than Naivasha. Formerly there was a good deal of malaria, but with better drainage this disease has almost disappeared.

There is a native Hospital originally built by the Railway and under charge of an Assistant Surgeon.

The sanitary condition is fair. The native Bazaar is difficult to keep clean and improvement might be effected in the housing of some of the Railway employees.

The water supply is good and is conducted in pipes from a mountain stream.

Eldama Ravine and Baringo - are two administrative stations in Naivasha Province at both of which are native Dispensaries in charge of Hospital Assistants. Both are healthy.

~~At the former a new house is greatly needed for the Hospital Assistant.~~
At the former a new house is greatly needed for the Hospital Assistant.

Soba - A Native Dispensary in charge of an Indian compounder was opened in the begining of the year. The station is cool and healthy.

Kericho and Nandi are both Military and administrative stations with Dispensaries in charge of Indian assistants. During the rains the climate is cold and damp and Rheumatism and chest complaints are

Kisumu - is a place of considerable importance, being the termination of the Uganda Railway and the 570 headquarters of the Steamers on the Lake Victoria. A considerable amount of traffic passes through it.

The site was determined by the Uganda Railway having its terminus here, but can in no way be said to be a happy selection. It is at the north east corner of Kavirondo gulf, a stretch of water some 40 miles long by 20 broad with an average depth of about 12 feet. The gulf opens into the Lake by two comparatively narrow channels one on either side of the Island of Rusinga, and through these all sorts of floating vegetation be drift and is carried by the wind till it comes to rest on the foreshore of the Township.

The gulf is fringed to a depth 3 to 30 yards with papyrus and reeds.

The residences of European Officials are situated on the ridge of low hill close to the Lake. There are more officials than houses except in the case of Railway employees. More accommodation is urgently needed.

To the south of the European quarters is an extensive papyrus swamp.

On the lower part of the same hill is the native Bazaar consisting of one main street and two cross streets. It has good natural drainage, but the plots 30 ft. x 30 ft. are too small and as a consequence the dwelling and cooking portions of the buildings are too cramped.

Between the Bazaar and the lake are the Landis for Railway coolies - New Landis were erected during the year; they are an improvement on the old, but instead of having earth floors cement ought to have been used so that they could be periodically and easily cleaned.

Kisumu

Stricter supervision is required so as to control the number of inhabitants and ensure greater cleanliness.

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Sanitary . The bucket system is in use, and the night soil is removed by carts and hurried. Water . This is taken from the Lake and pumped up to a service tank on the hill from which it is conducted to stand pipes. Owing to the shallowness of of the gulf the water is always coloured, contains a certain amount of suspended matter and smells and tastes rankish. A scheme for roof collection is about to be introduced.

Some improvement in the general sanitary condition has been effected during the year; better roads have been made, and a large amount of bush cleared away, but owing to the nature of the climate this rapidly grows up again.

The climate is not good; there is a considerable rainfall with frequent and severe thunder storms and the atmosphere is depressing.

Malaria/Fever and Dysentery prevail, and occasional cases of Blackwater Fever.

A scheme for constructing a sea wall and obliterating a portion of the papyrus opposite the European quarters and township has been approved and when carried into effect ought to lessen the number of cases of malaria. All old borrow pits in connection with the Railway ought to be filled in; at present they only form breeding places for mosquitoes.

There is a Native Hospital under charge of Dr Heran assisted by an Assistant Surgeon. A New Hospital was built and opened in December.

Mumias . This is an Administrative Station in north Kavirondo and has a Native Dispensary in charge of an Indian Compounder.

Mumias

The sanitary condition has been recently improved, but at one time it was so bad that the Swahili porters named it the "dirt camp". 572

It is not a healthy place, there is a considerable amount of malaria and occasional cases of Blackwater Fever, and Dysentery. A change of site is highly desirable.

Kurungu, in south Kavirondo, is situated on a small promontory and has the lake on 3 sides of it with a small swamp on either side. Malaria is the prevailing disease.

There is a Native Dispensary in charge of an Indian Hospital Assistant.

STATIONS IN UGANDA.

Entebbe - is the administrative headquarters of the Uganda Protectorate, situated on the northern side of Lake Victoria and built on an elevation close to the lake.

During the year considerable improvements have been carried out. The officials have been provided with well built brick houses, with corrugated iron roofs & mosquito proof doors and windows in place of the old vermine harbouring grass roofed bandas. The forest round the lake shore has been thinned and much of the undergrowth cleared away. This is now being extended to the Botanical Gardens, previously notorious as the home of the Tsetse fly.

A piece of lowlying ground at the back of the European quarters which, during the rains becomes practically a swamp requires draining or filling up.

Conservancy. In the European quarters the dry earth system is in use and is satisfactory. Mosquitoes exist in some of the native quarters; they should

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greatly wanted for the use of Native labourers.
Water Supply - this is from the Lake, and if taken at
a sufficient distance from the shore, is good.

During the year a windmill was erected at
the place to pump water for the use of the
inhabitants. It pumps the water into iron tanks
a few yards away. Dr. Moffat remarks with regard
to it, "I have not yet discovered what useful
purpose is attained by this ~~present~~ procedure and
in my opinion this attempt to solve the water
supply in Entebbe has only resulted in a futile
waste of money." What is really wanted is a
proper pumping station with a service tank near
the church or Police station and stand pipes
erected at convenient places throughout the town-
ship.

Dr. Moffat remarks that the sanitary condi-
tion is, speaking generally, fair, good but more
funds are wanted to render a more thorough
system of conservancy and street cleaning pos-
sible.

The climate of Entebbe is relaxing, but on
the whole healthy.

The Medical arrangements consist of a
European Hospital, opened in March, in charge of
Dr. Moffat, C.M.S., a Dispensary and Native
Hospital of one ward containing 24 beds, under
Dr Bagshaw. Owing to the growing needs of the
place more native accommodation is necessary;
another ward for males and a ward for females are
required.

Kampala - the native capital of the Kingdom of Uganda
is some distance inland. It is a very scatter-
ed place and very hilly, every separate political
and religious faction having a hill to itself.
Like the rest of Uganda it is an alternation of

malaria is prevalent.

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The medical arrangements, under the charge of Capt: R.H. Price, I.M.S., consist of a small Hospital for the Troops of the Indian Contingent and a native Dispensary. The latter is a sorry affair compared with the Church Missionary Society's Hospital 120 beds, on Namirembe Hill. Provision has been made for a new Hospital & Dispensary to be built next year.

Conservancy - The dry earth system is in use on the administration hill while in the native quarters the cesspit system prevails.

Water - This is derived from a swampy river flowing through the centre of the place - the quality is indifferent.

Jinja - in Usoga is situated on Lake Victoria close to where the Nile leaves it. Formerly malaria was very prevalent, now it is less so, due no doubt to the extensive clearing away of bush round the station and of papyrus and reeds on the Lake shore.

There is a native Hospital, old and dilapidated, and Dispensary in charge of Dr. Noble.

A new Hospital has been provided for the next year's estimates.

Hoima - is the capital of the kingdom of Unyore and is situated in the hills in the centre of that country.

It is fairly healthy.

Conservancy - The dry earth system is used by the Europeans - and trench latrines by the native troops.

Water - This is from springs which unite to form a small rivulet. It is good but in the centre of cultivation & liable to contamination.

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There is a Dispensary and so called Hospital in charge of Dr. G.H. Pooley. The Hospital consists of round native thatched huts, with neither light nor ventilation and quite unsuited for the reception of sick. A new Hospital is provided for in next year's estimates.

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Wadai - the most southerly station of the Nile Province is situated in a triangle formed by the Nile and the river Ume. The site is a bad one. Papyrus and reeds fringe the Nile and where the Ume flows into it there is an extensive swamp, consequently myriads of mosquitoes swarm in the station and prey on the unfortunate inhabitants night and day.

The European quarters are of wattle & daub, small, badly lighted and ventilated, and very inadequate.

The country in the vicinity of the station is very sparsely populated, consequently food is scarce and to augment this a grove of Bananas has been planted between the European houses and the Police lines. It forms an excellent resting place for mosquitoes and materially assists in spreading malaria of the severe type for which this station is noted.

Conservancy . The cesspit system is in use.

Water - this is taken chiefly from the Nile, also from the Ume. That from the Nile is taken from small pools among the reeds and is stagnant; a platform is required so that water can be drawn where there is a current. The water from the Ume is probably better than from the Nile, but the few inhabitants on its banks are given to bathing in it and otherwise dirtying it even in spite of the danger from crocodiles.

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The removal of this station to a high plateau some 60 miles inland in the centre of the Acheli, a large and wealthy pastoral and agricultural tribe, is under consideration. Considering that Wadelai is extremely unhealthy and its chief use at present is as a transport forwarding station, there does not appear to be any good reason why the administrative station should not be moved inland where it would be ^{at} closer touch with the natives in the district.

The medical arrangements consist of a Native Dispensary and Hospital huts under the charge of Dr. G.C. Strathairn. They are all constructed of elephant grass and thatched and are of a very temporary nature, each thunderstorm generally carrying away the Dispensary or some of the Hospital huts.

A New Hospital has been provided for in next year's estimates, and it is to be hoped this will be erected with a new station in the interior of the district.

Nimule - the central of the 3 Nile stations is, like Wadelai, situated on a triangle between the Nile and a river flowing into it, the Nyama. The administrative station, Military and Police lines are on rising ground which is very rocky. At the junction of the Nyama and the Nile is a large swamp and to the East of the former a level plain which in the rains becomes a swamp.

In the dry season, mosquitoes are comparatively few, but in the rainy they swarm, bred in the swamps above mentioned and in the hollows among the rocks. Malaria is prevalent in the rains, and is mostly of the remittent type, but less severe than that found at Wadelai.

70

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Bowel complaints are very common among the natives, especially at the beginning of the rains. The severest of these are Dysentery and Colitis and have been ascribed to the food guinea-corn (motama), and its method of preparation. The grain is ground between 2 stones and the grit from the latter has been blamed. This may be a factor in their causation but other causes are probably contaminated water and Malaria.

Conservancy. The cesspit system is used by Europeans, trench latrines by the troops, and the latter have been introduced for the Police. Prior to the introduction of latrines for the Police, the surrounding jungle was used and is still to a certain extent, probably not so much by the Police as by their numerous followers. It ought to be stopped.

Water - this is derived chiefly from the Nile, also from the Nyama, and in both cases necessary precautions are boiling and filtering.

During the year considerable improvement has been effected in the housing of the Europeans and in the construction of roads in the station.

In the vicinity of the administrative quarters the bush should be cleared away, but it must be admitted that to do this effectively is by no means an easy task owing to its extent and the rocky nature of the ground.

There are 2 porters' camps near the Nyama: both are dirty and should be moved to new sites.

Medical establishment - consists of a Dispensary and Hospital; the latter of the usual grass huts, but a new Hospital constructed of stone and clay is in process of being built also a new Dispensary. The Medical arrangements are in charge of Dr. R. Stoney.

Gondokere - the most northerly of the Nile stations is situated on a sand bank on the brink of the Nile. The eastern bank of the Nile is steep and gradually slopes back to land in ground which soon in the rainy season becomes a marsh. 579

The houses of both the Civil and Military are built of burned brick held together with clay, are provided with mosquito - proof doors and windows and are satisfactory except that white ants, being able to tunnel through the clay, are very destructive to all wood work. Cement floors would obviate this.

The sanitary condition of the station is on the whole good. During the year a considerable extent of ground in the immediate vicinity of the station, previously covered with thick bush, has been brought under cultivation in small plots by the Troops and Police. Since this has been done and a decrease in the number of mosquitos has been noticeable.

Conservancy - The Europeans use the bucket system - & the Troops and Police trench latrines.

Water - This is entirely derived from the Nile and is fairly clear except in flood time. The Egyptian "Iehr" is largely used as a filter and appears to be satisfactory if kept covered throughout and thoroughly clean.

The natives in the vicinity (Nari) live exclusively on cereals and do not keep live stock, hence there is great difficulty at this station in obtaining fresh meat.

The health of the station is good - there is very little malaria, but a considerable amount of dysentery among the natives.

The medical establishment consists of a Native Dispensary in charge of Dr. C.J. Baker.

Mbarara - is the headquarters of the district of Ankole and is built on a rounded hill with good natural drainage and absence of swamp very close to the station.

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There are 2 houses built of brick with tin roofs, both occupied by Military Officers; the other houses are of cattle and goub and thatched, obviously only temporary structures which should be replaced as soon as possible by the more sanitary brick building.

The Troops, Police, &c are housed in huts, & those for the former having been removed during the year on a new and better site.

The Bazaar is in the centre of the station and too near the European quarters. In all the bazaars in both Protectorates, the plots are too limited in area and there is more or less over crowding, while restricted ground area limits the adoption of necessary sanitary measures.

Conservancy - The bucket system is in use in the European quarters, in the others pit latrines.

Water - This is derived entirely from the Ruwesi which flows in a very tortuous course through numerous marshes and along the foot of the hill on which the station is built. It is always of a pronounced brown colour due to vegetable matter in suspension derived from the papyrus swamps through which it flows. Boiling and filtering render it fairly palatable but only remove a portion of its colour. In the dry season it is muddy and on standing forms a thick deposit. Within two miles of the station the river receives the surface drainage of many native plots of cultivation, ^{several millions} of Mulumbé (the King's Hill) which is densely populated, and, about $\frac{1}{2}$ of a mile from where it is drawn for the station, of a

of some nature
The Ruwezi is the only available source
water supply - Wells have been tried but without
success.

581

Although of originally indifferent quality
and liable to pollution from the sources above,
mentioned, diseases such as Dysentery & Diarrhoea
traceable to the quality of the water, are not
very prevalent, but those that do occur are
usually of a severe type.

Boiling and filtering are necessary pre -
cautions, and to avoid so many sources of pollu-
tion the advisability of running a small canal
from a point ^{West} East of the King's hill to opposite
the station is worth considering. The current is
stated to be 4 to 5 miles an hour and a canal
for the supply of the station seems to be practi-
cable.

The health of the station is good; the pre-
vailing diseases among the natives are chiefly
these due to want of cleanliness.

The medical establishment consists of a
Dispensary and Hospital huts, in charge of Dr.
L. B. Lowlesy.

Nauro
June 1895
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Brno