

Box E. Piroplasmosis, Trypanosomiasis and Malta Fever

Publication/Creation

c.1884-1903

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ON HER MAJESTY'S SERVICE

Lantern Slides

Sir David Bruce







1242

5



1	1. E
2	2. E
3	3. E
4	4. E
5	5. E
6	5 & 6. E
7	6. E
8	8. E
9	9. E
10	10. E
11	11. E
12	12. E
13	13. E
14	14. E
15	15. E
16	16. E
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31	31. E
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41	41. E
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43	43. E
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46	46. E
47	47. E
48	48. E
49	49. E
50	50. E

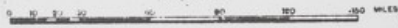
1. Map. Piroplasmosis distribution.
2. " Veterinary Map of Transvaal
3. Piroplasma Parvum
4. Brown Tick
5. Life Cycle - East Coast & a Markwater
6. Rhipicephalus decoloratus -
7. 2 female ticks -
8. Piroplasma biguttatum. Drawing
9. " " " Blood.
10. Rhi. annulatus - attached to skin of steer
11. Rhi. annulatus. Male
12. " " female
13. " " "
14. Life cycle of tick. Biliary fever. horse
15. Piroplasma canis: blood
16. " (African tick)
17. Ticks.
18. Tick larva -
19. Tick - H. Lushie. ♂
20. " " ♀
21. Head of tick
22. H. Lushie - female ovipositing
23. Life cycle - " " - Biliary fever. dog
24. Trypanosomes in stomach of the tsetse fly.
25. Lump char. horse sickness
26. Tryp. Theileri -
27. " " "
28. H. Ruffipes
29. Horse dead of horse sickness
30. Lump char. Dog. Magaal
31. Lump char. horse sickness
32. Stomach horse sickness
33. Life cycle - Spiridosis. redwater ticks.
34. " " " "
35. Goats being milked. Malta - (dark)
36. " " " " (light)
37. " " " " "
38. Goats on edge of hill - Malta.
39. " Porti Rette Malta -
40. Incidence of M F in 1899 to 1905 & 1905 (1907)
41. " among Officers, men & women
42. View Grand Harbour, Malta -
43. Incidence among civil population of Malta
44. " of M F in 1899 & 1905 & 1905 -
45. " " " 1907.
46. Fording Capt. of M F -
47. Like Soldier light print - M F
48. Incidence of M F 1899 to 1905. 1905.
49. " " " "
50. Zeyphoid. SA War & Great War

Col. Bruce C. B., F.R.S.



After L. H. F. Nuttall.

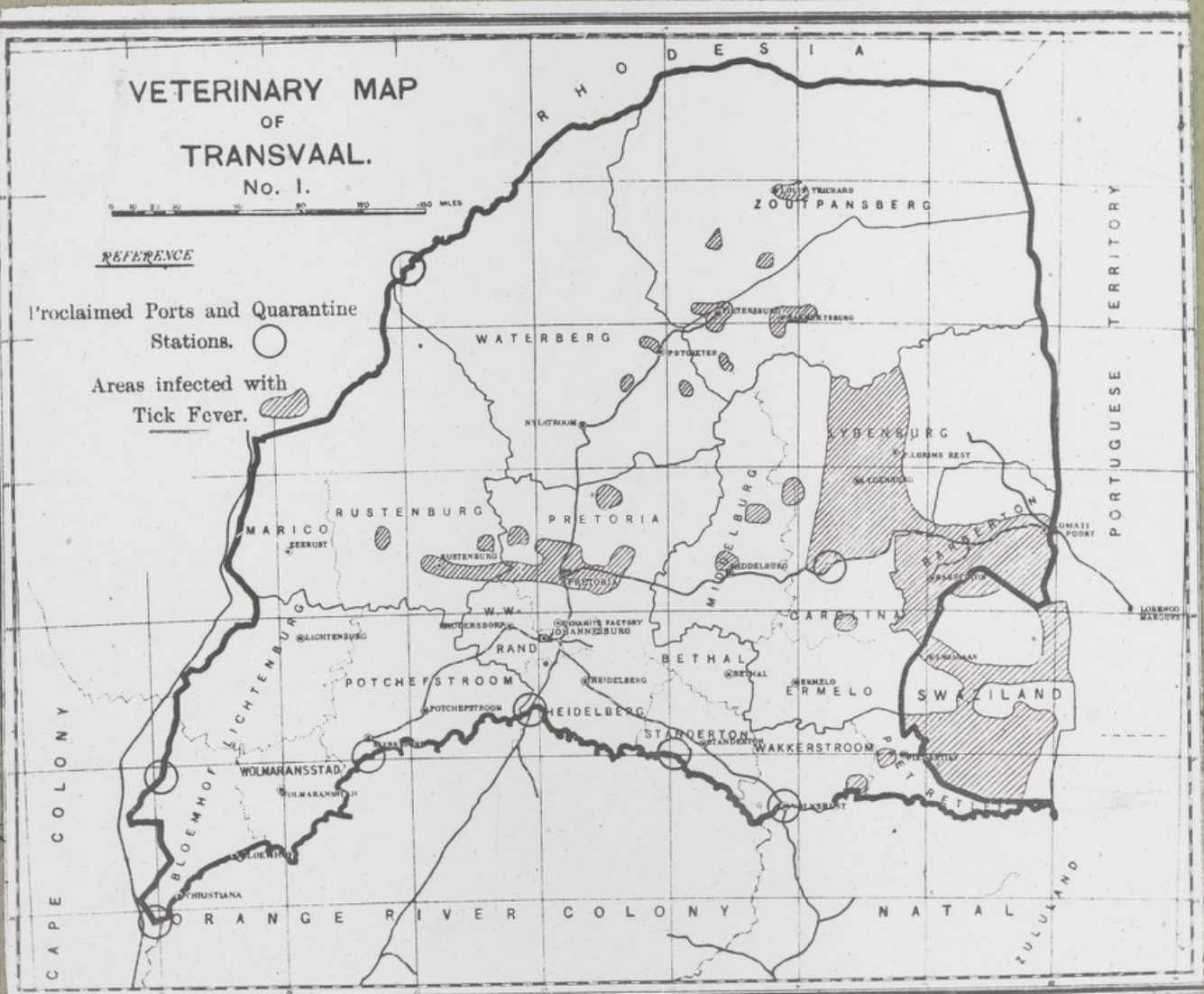
VETERINARY MAP
OF
TRANSVAAL.
No. 1.



REFERENCE

Proclaimed Ports and Quarantine Stations. ○

Areas infected with Tick Fever. ▨





PIROPLASMA PARVUM.

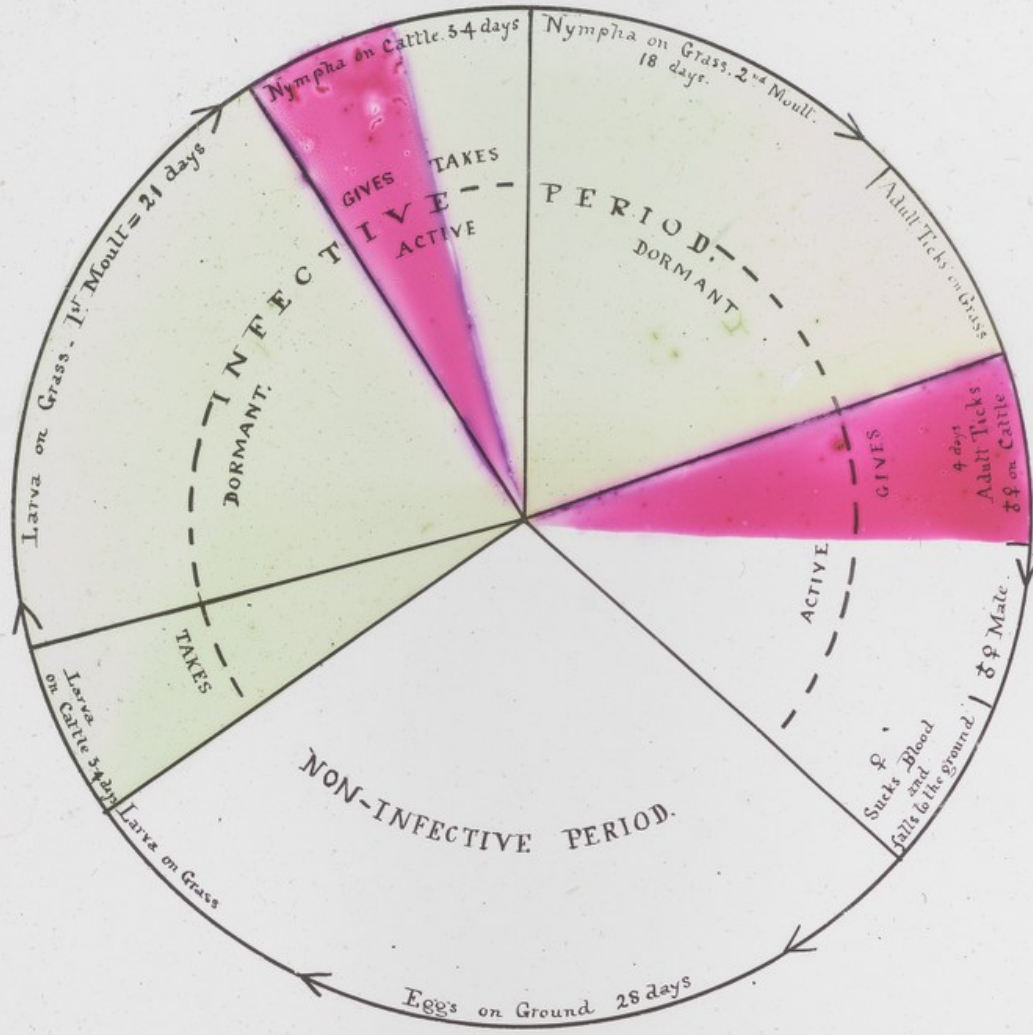
4E Brown tick



Sol. Bruce C.B., F.R.S.

Brown ticks

E 5. Cycle of brown tick.



LIFE CYCLE OF TICKS WITH 3 HOSTS.

EAST COAST FEVER } RHIPICEPHALUS APPENDICULATUS. 73 days
 " " SIMUS.
 HEART-WATER. AMBLYOMA HEBRAEUM.



Col. Bruce C.B., F.R.S.

Boophilus decoloratus
155. *Rhip. rosia* ♂ & ♀
after Koch 1847.

Pont leg ticks.

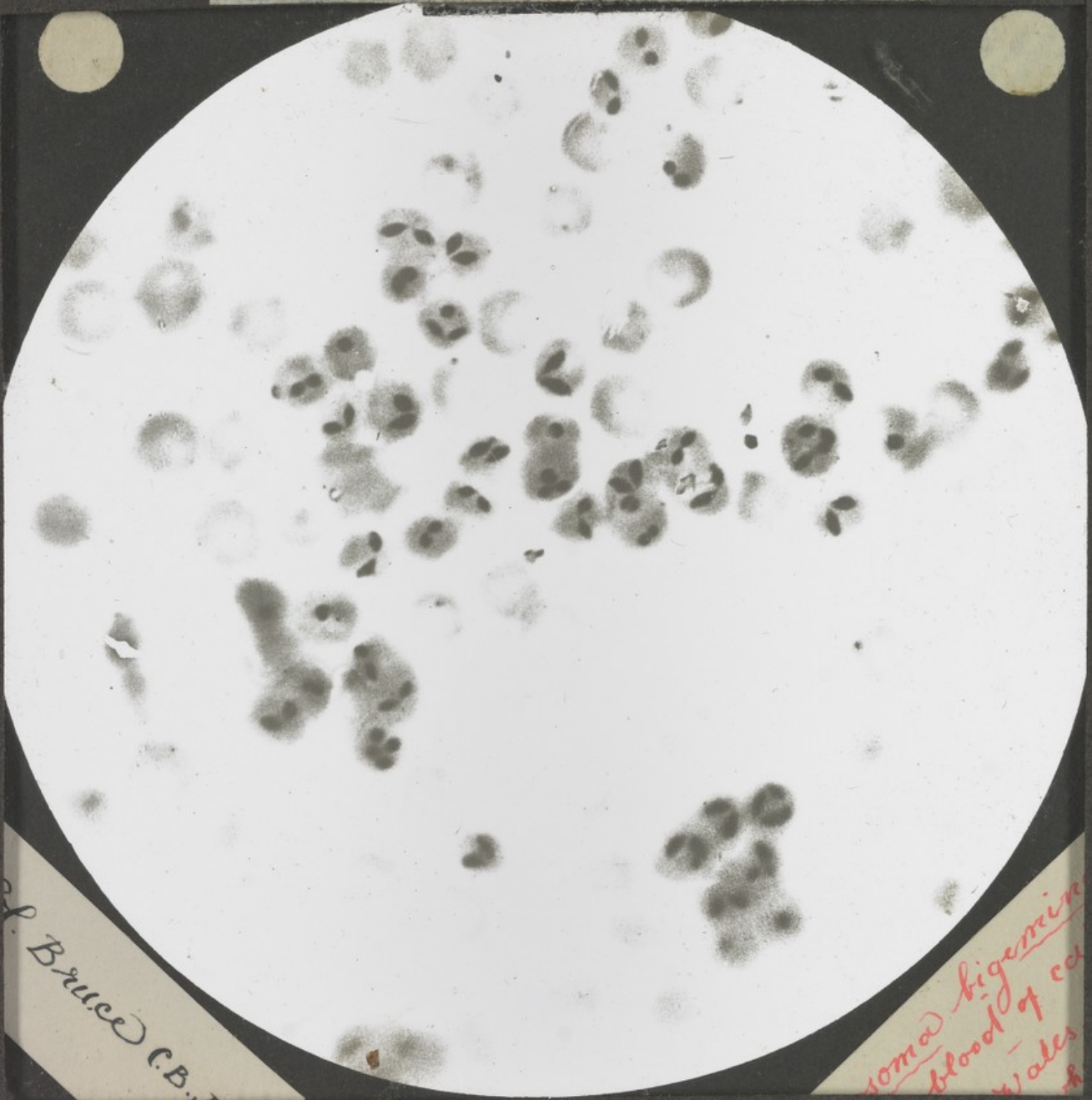


Col. Bruce C.B., F.R.S.

Two female ticks
(*Argasomma aegyptium*)
ovipositing. Natural
size.



PIROPLASMA BIGEMINUM.



Dr. Bruce C.B.

Some bigemina
blood of cat
water



Col. Bruce C.B., F.R.S.

Rhinicephalus annulatus.
attached to skin of steer.



Col. Bruce C.B., F.R.S.

Rhipicephalus ♂
annulatus
after Salmon & Stiles
1900 P. 176

43



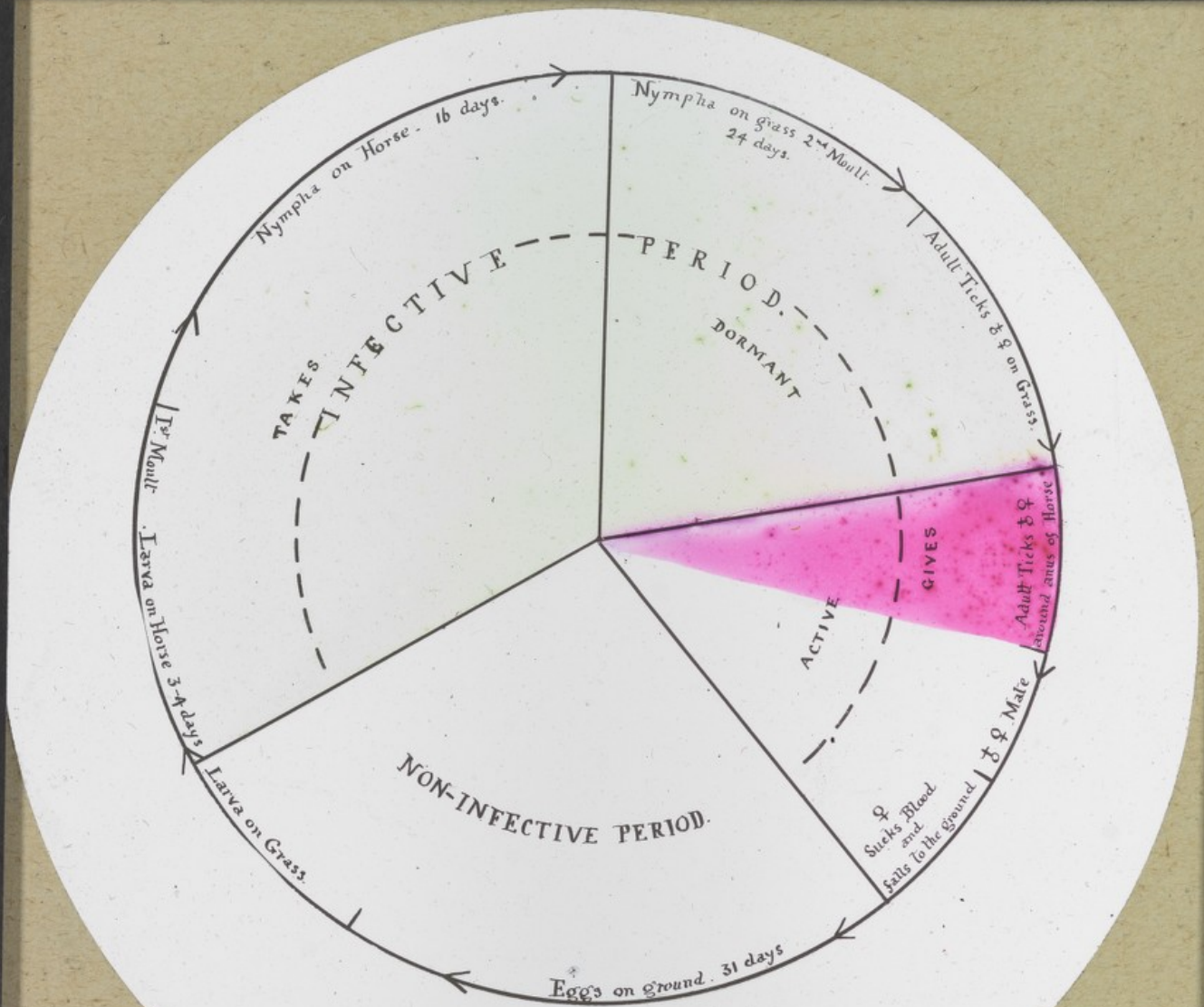
44



A. Hoen & Co., Lithographers

Phipicephalus
annulatus ♀
gorged. Dorsal & ventral
aspect.

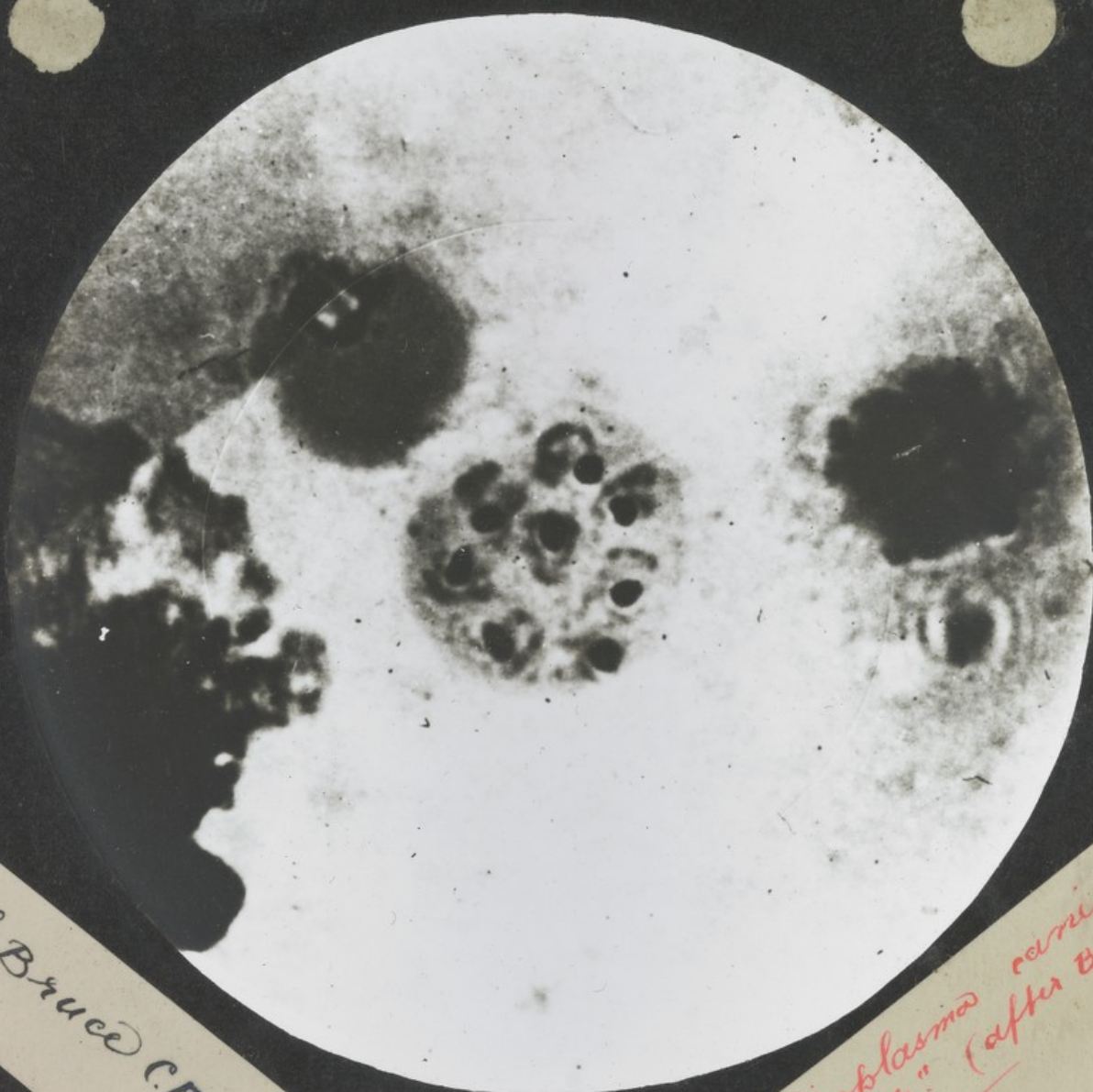
C. P. D. C. P. E. P. S.



LIFE CYCLE OF TICKS WITH 2 HOSTS

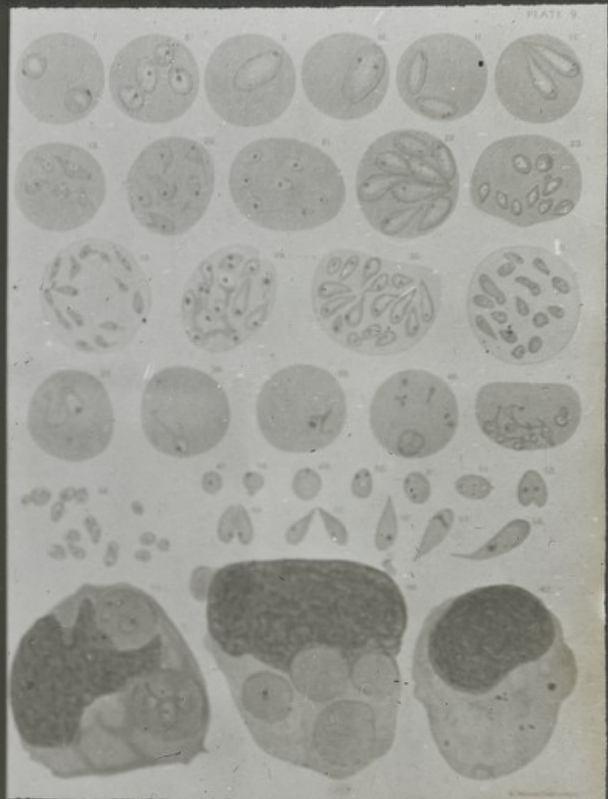
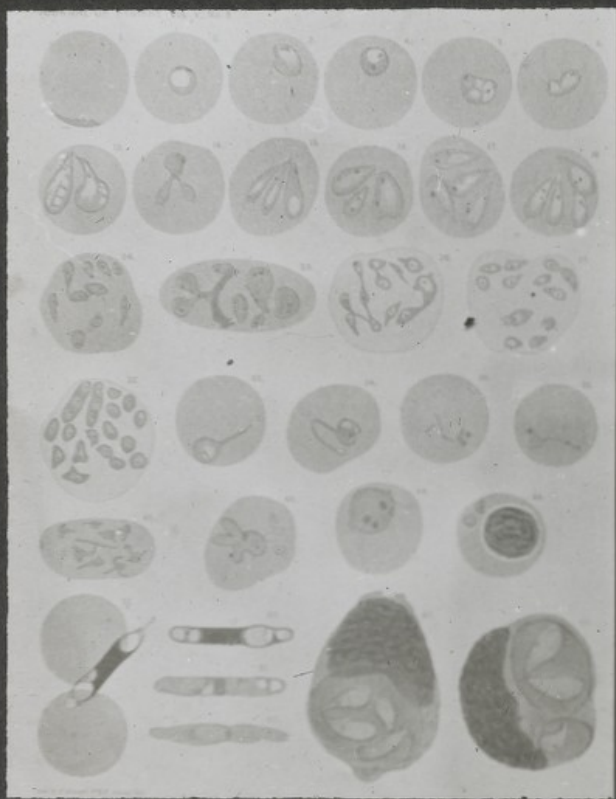
RHIPICEPHALUS EVERTSI

BILIARY FEVER OF HORSES.



H. Bruce C.B., F.R.

Piroplasma canis
"Rosette" (after Bowdler)



*Paroploasma of Dog
(African tick)*

? *Suertes*



Col. Bruce C.B., F.R.S.

African ticks.

? ~~Scutiger~~ Lezchi



Col. Bruce C.B., F.R.S.

Nick larvae

even after escape
from eggs. X 20

Leachia ? ~~Ferruginea~~

Col. Bruce C.B., F.R.S.



Nick ♂ x20

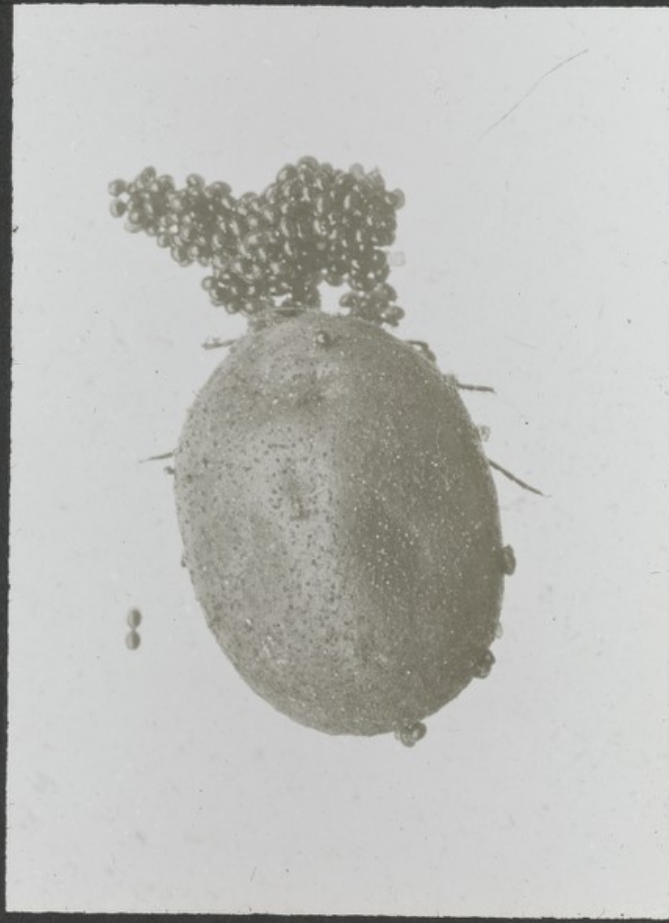


H. leachi, female

Col. Bruce C.B., F.R.S.

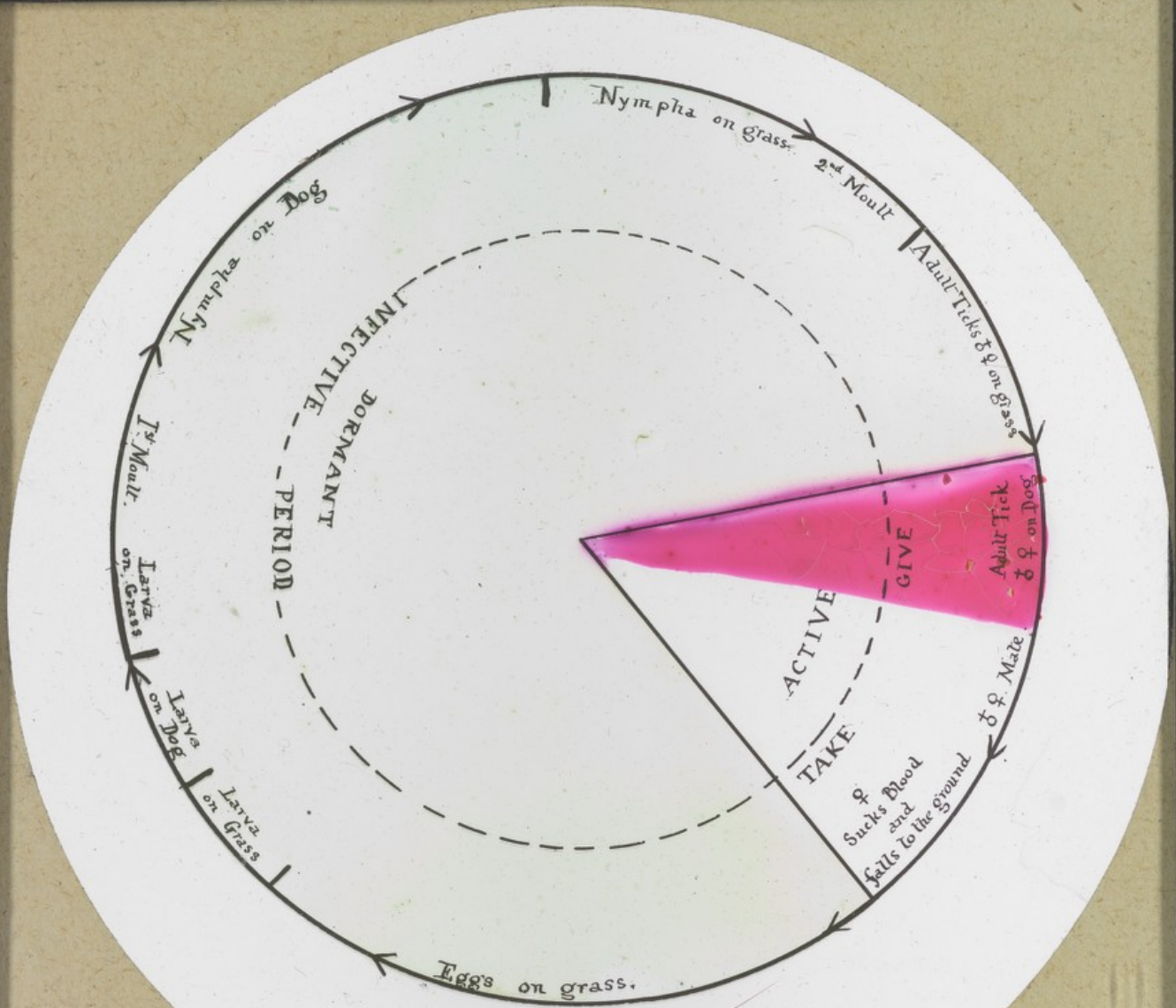


Head of rick x900

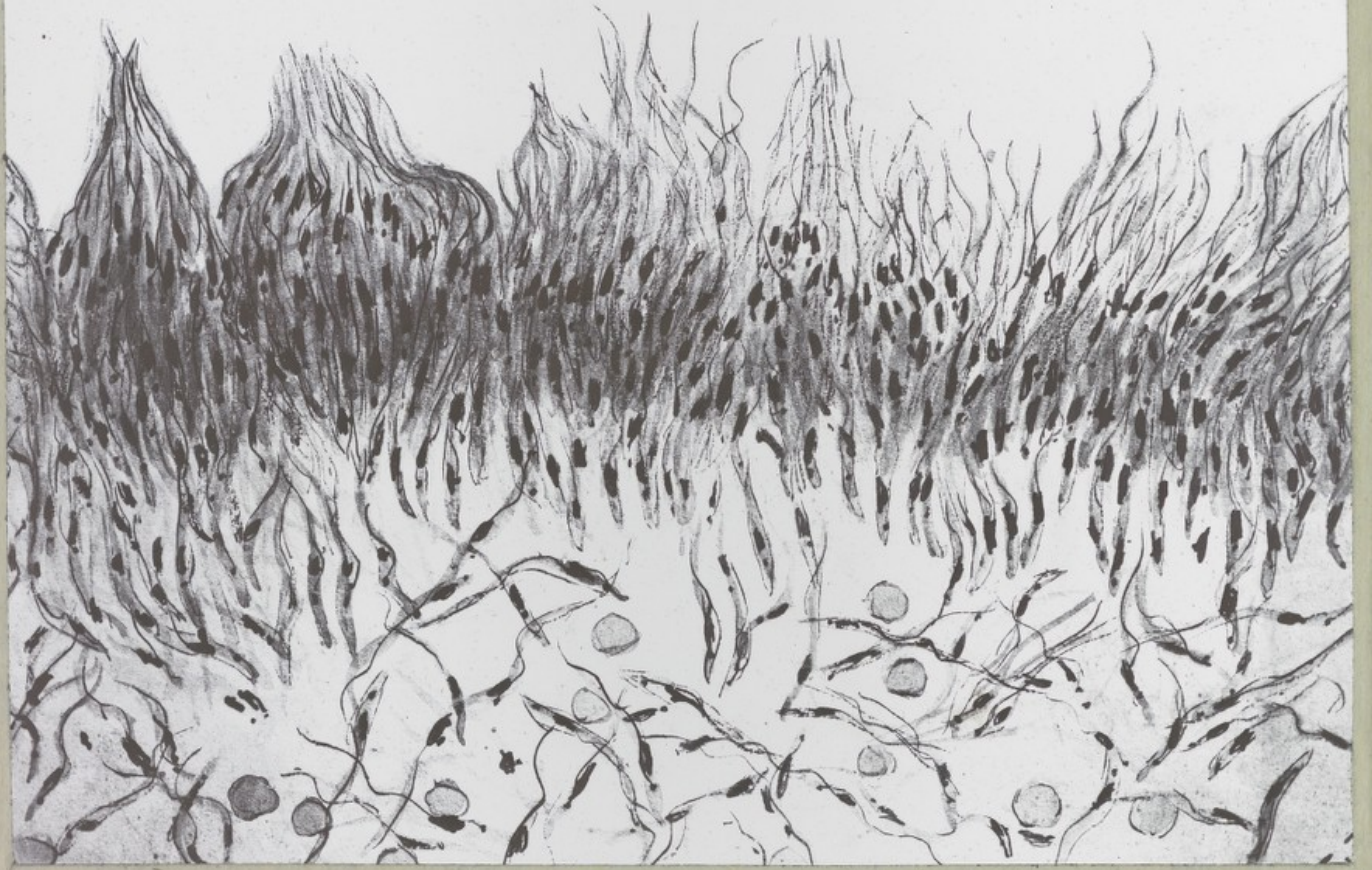


Col. Bruce C.B., F.R.S.

Chalc. Haemaphysalis
cacti. Female
ovipositing.



HAEMAPHYSALIS LEACHI
 BILIARY FEVER IN DOGS.



Horse Sickness

Day of Disease.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	
Date Jan. 1899	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
108°															
107°															
106°															
105°															
104°															
103°															
102°															
101°															
100°															
99°															
98°															
97°															
96°															
Red Blood Corpuscles		7440,000	6,880,000	6,240,000	6,370,000	6,980,000	7,370,000	7,180,000	7,230,000	6,560,000	6,720,000	6,600,000	6,880,000	13,690,000	15,350,000
White Blood Corpuscles		8,000	2,400	5,600	6,400	7,600	12,800	10,800	6,400	2,800	6,000	4,800	2,400	9,200	12,800
Specific Gravity of Blood		1055	1055	1060	1065	1065	1060	1052	1060	1052	1060	1055	1055	1067	1075
Pulse ^M		30	32	32	32	32	32	36	36	36	44	48	60		
Pulse ^E		34	40	40	32	38	40	38	48	44	56	64	76		

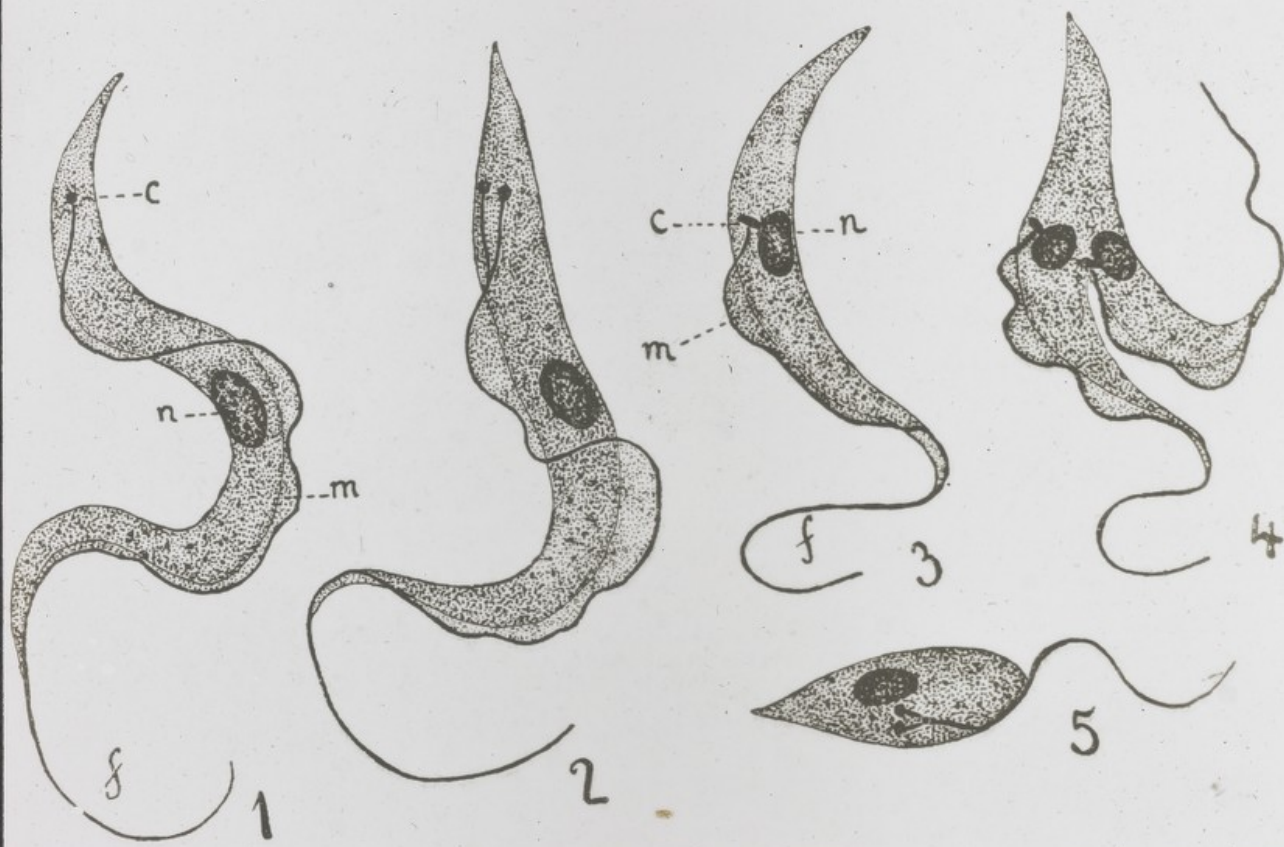
Inoculated 2.c.c. Virulent Blood

DIED 5 P.M.

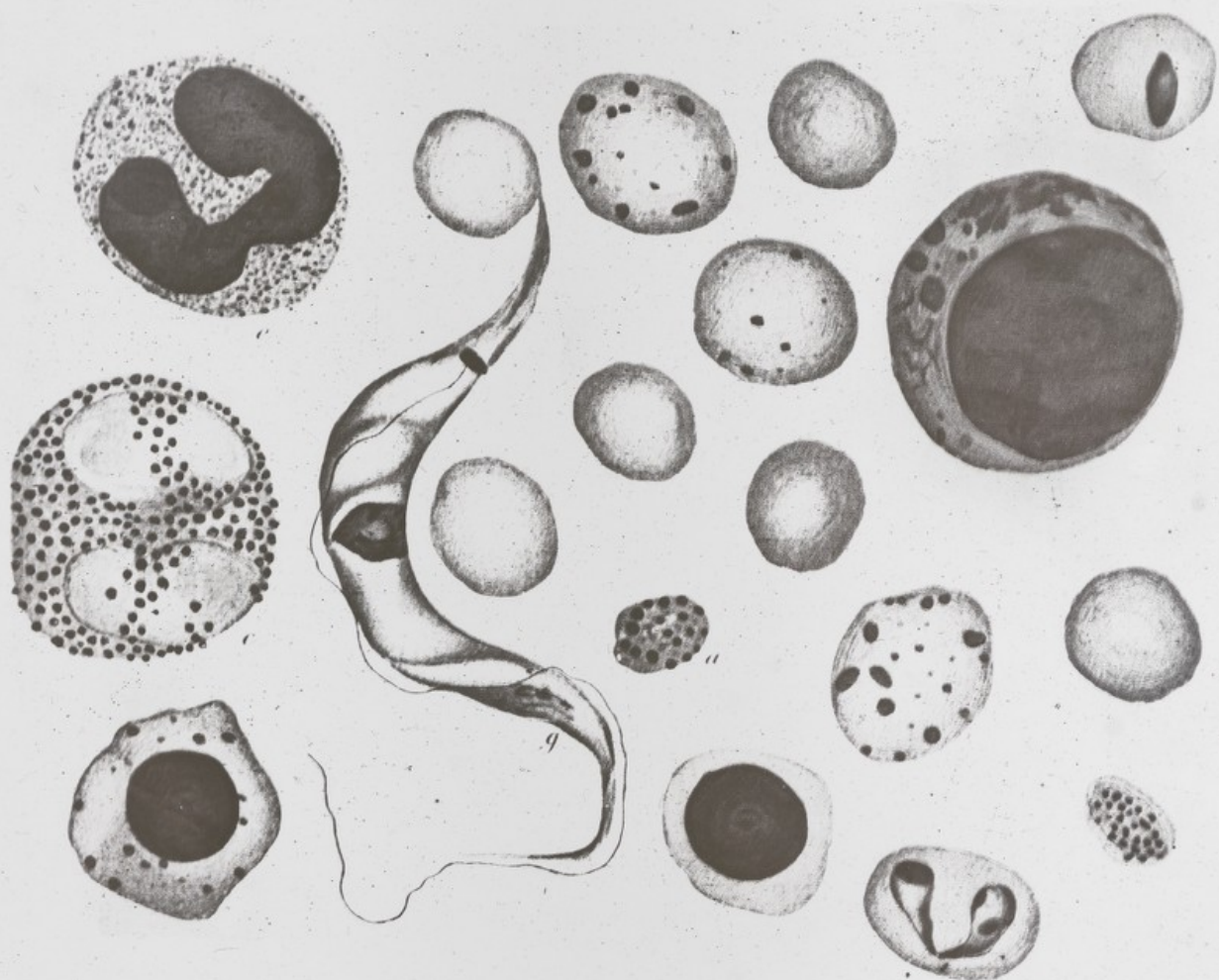
2.45 p.m.

3 p.m.

Col. Bruce C.B., F.R.S.



Trypanosoma theileri

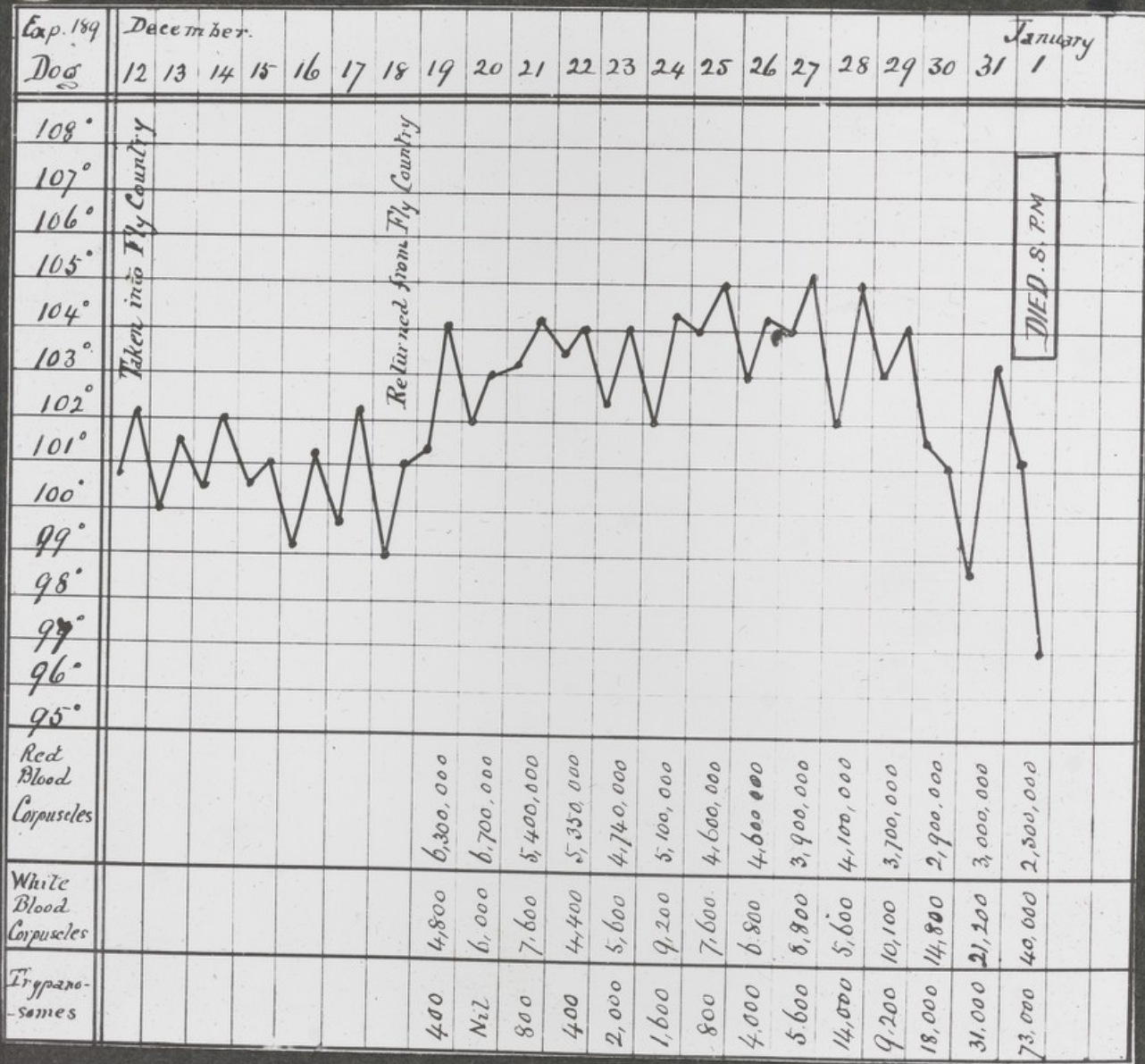


H. Rufipes

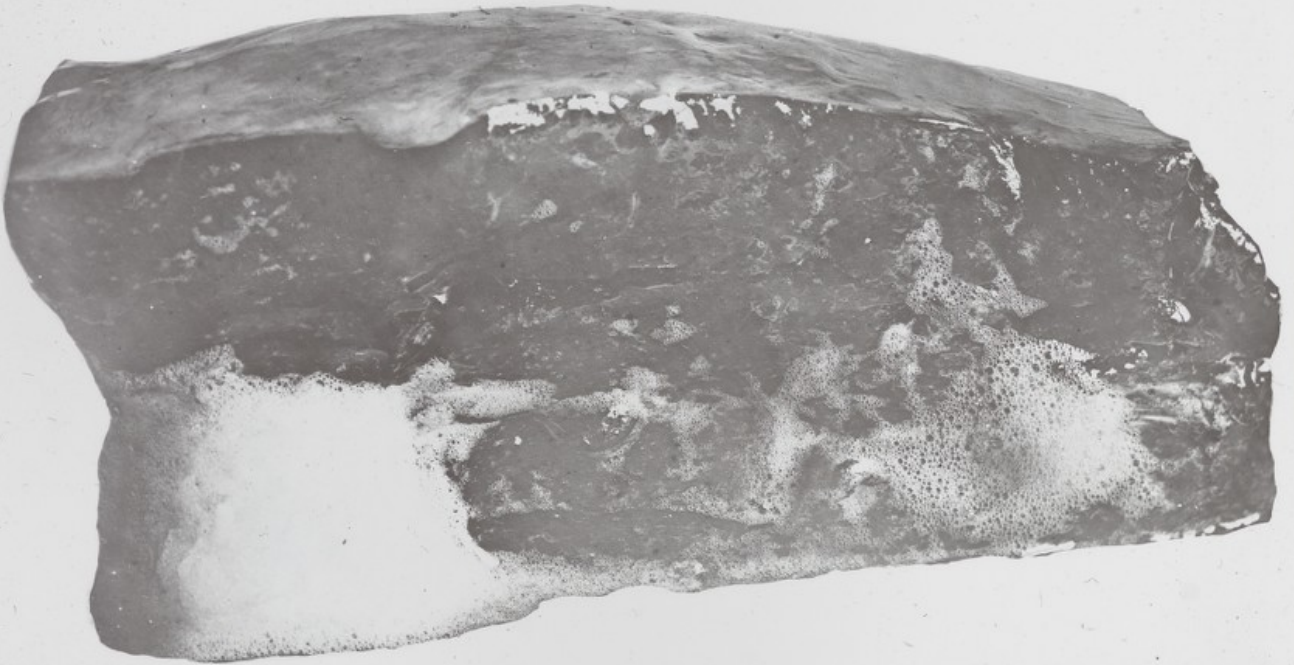


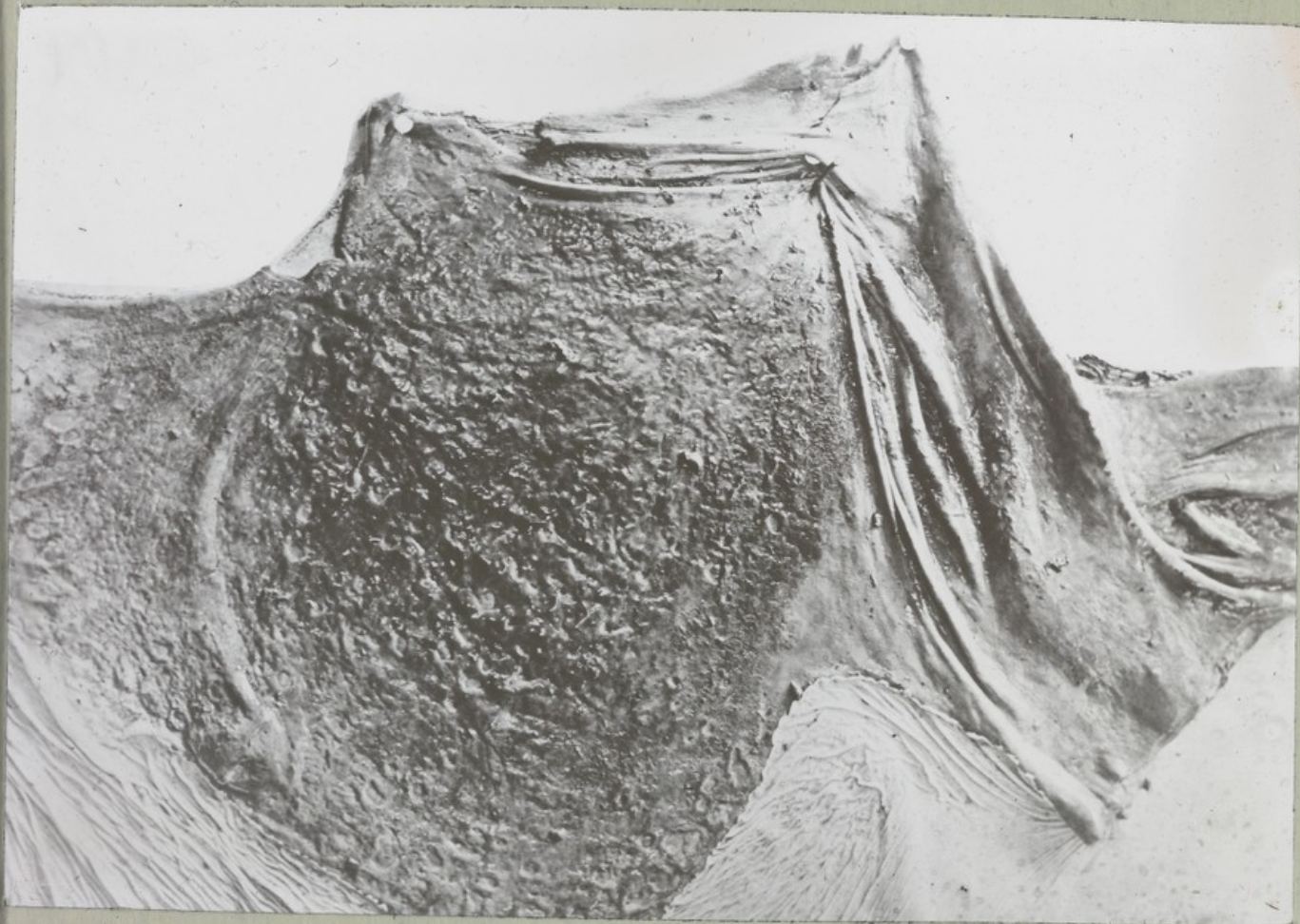


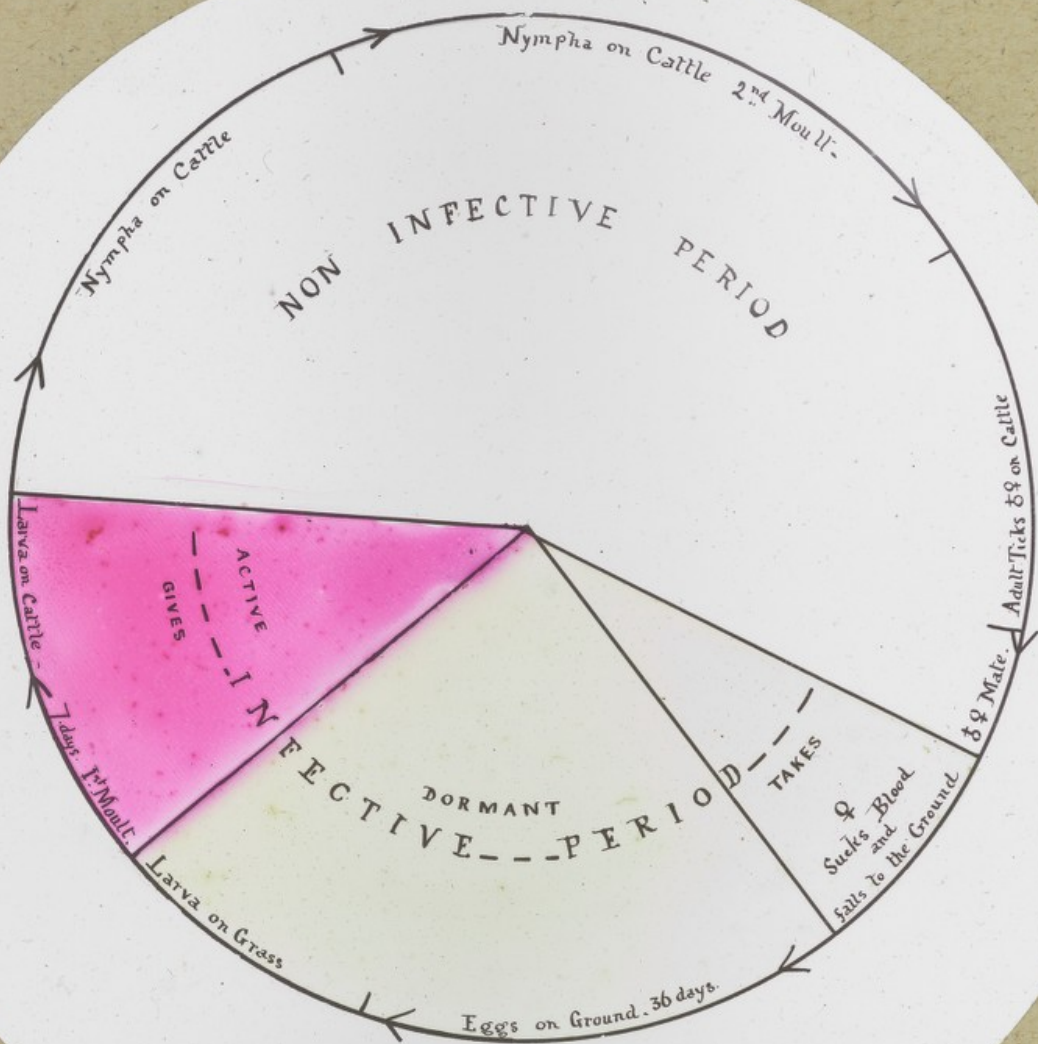
Temp. Chart dog - Nagana



Lung - Horse Sickness







INFECTION GOES THROUGH EGG.

RHIPICEPHALUS DECOLARATUS

SPIRILLOSIS AND REDWATER.

Goats. Malta



Goats. Mallá

12



F 36



Goats. Malta

11



E 37



Goats. Malta



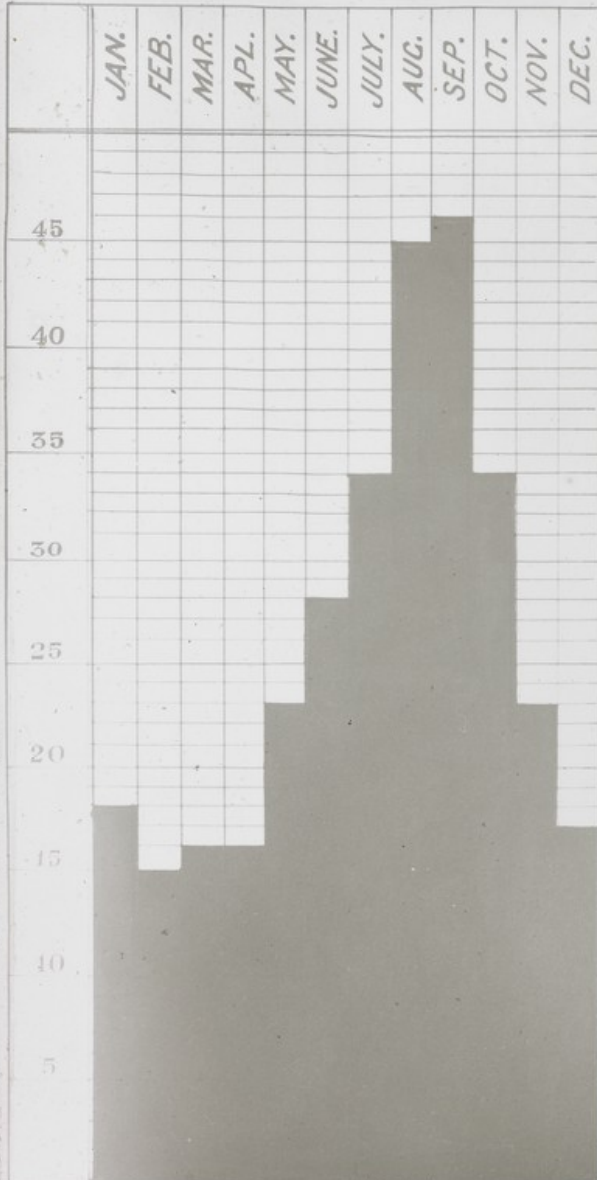
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Porte Reale
Malta.

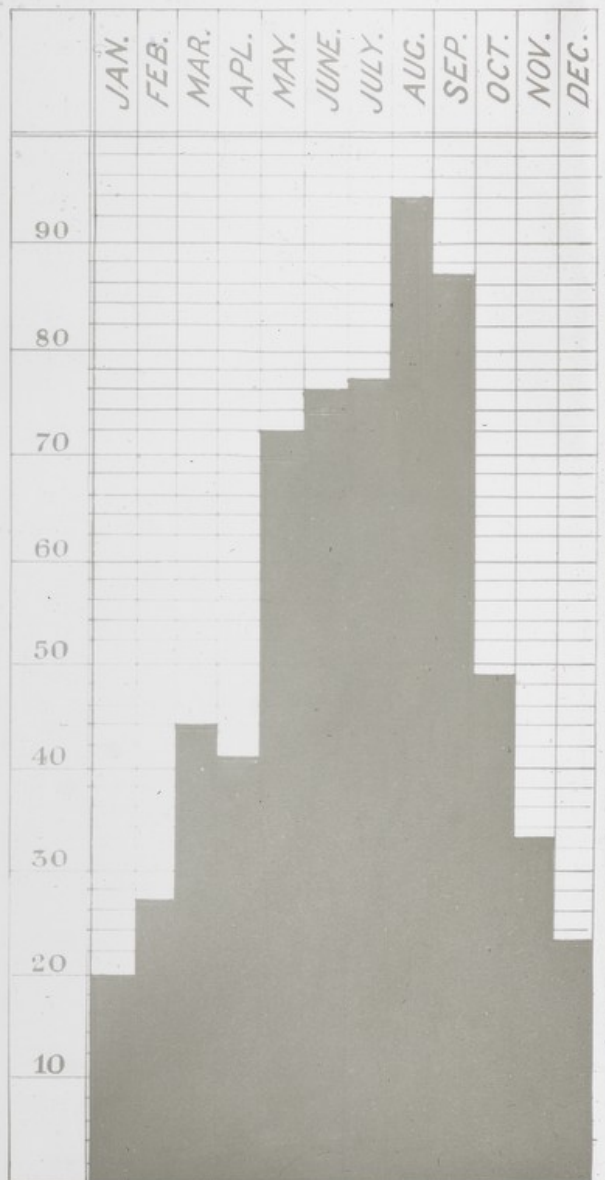


1899 to 1905

1899 TO 1905.

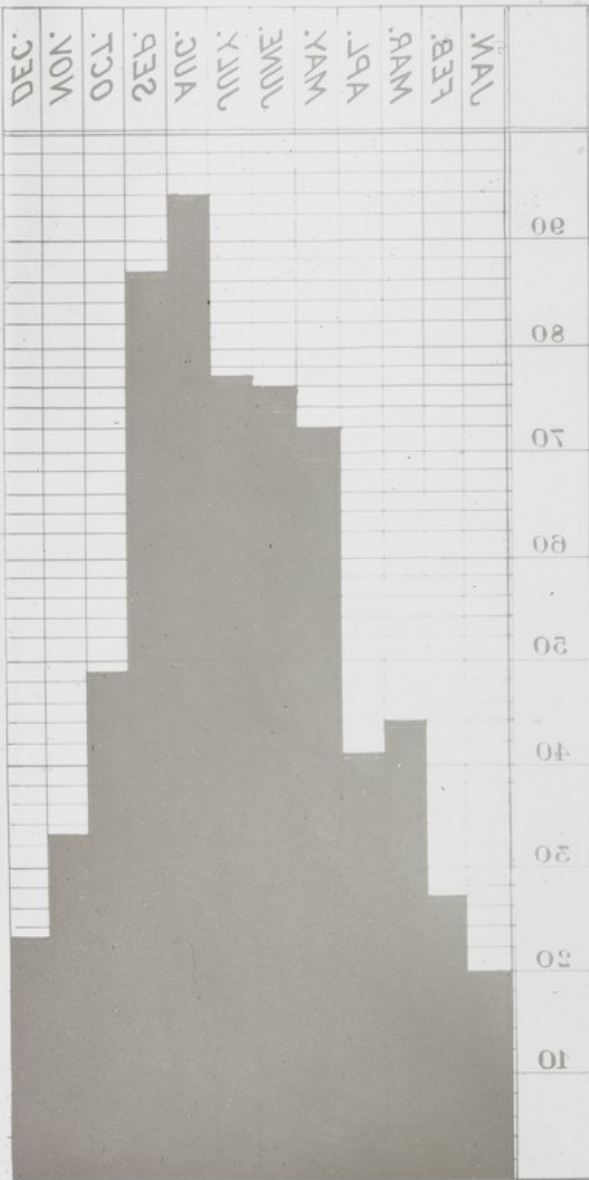


1905.

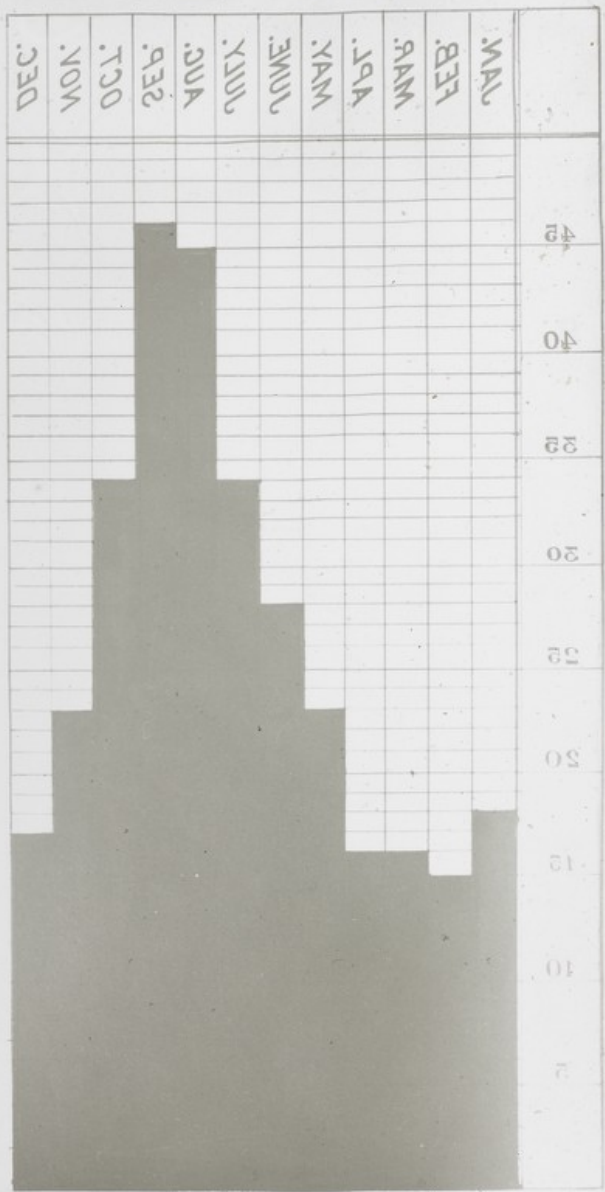


707. 1905₂

1902.

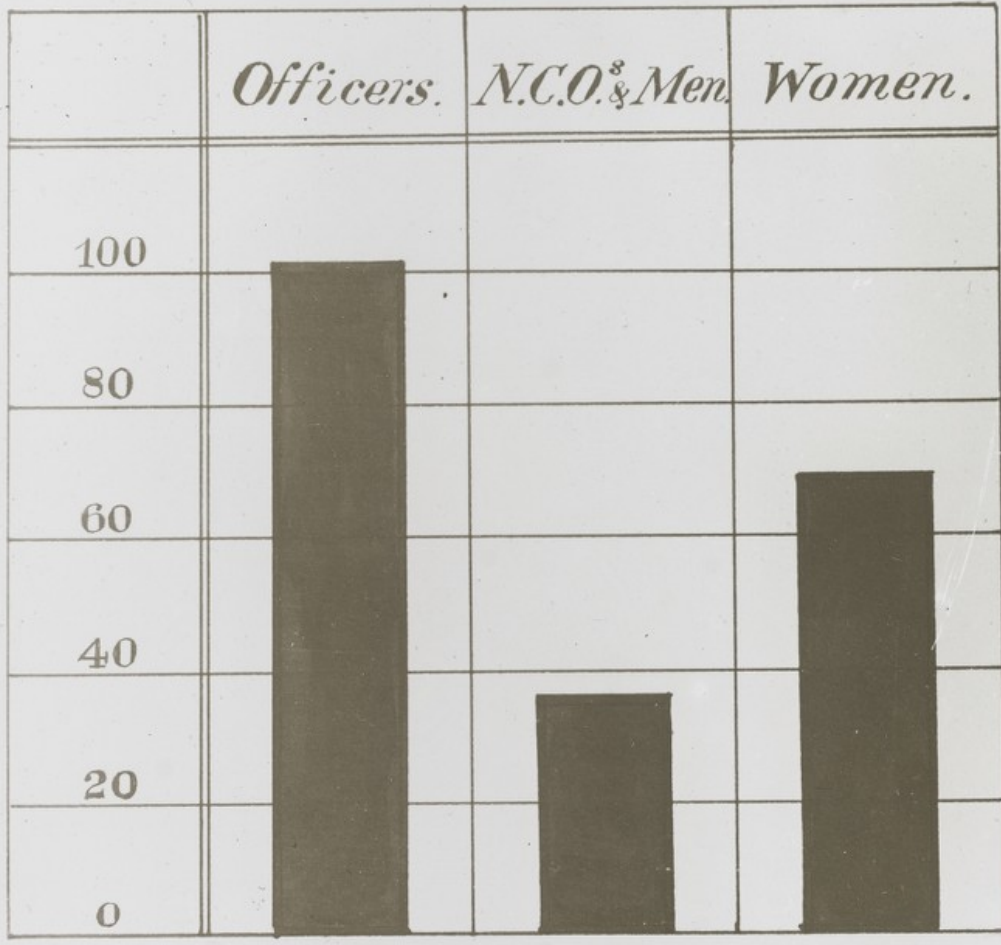


1899 to 1902.



Officers, Men & Women

MALTA FEVER IN THE GARRISON
RATIO per 1000.
1897 TO 1905

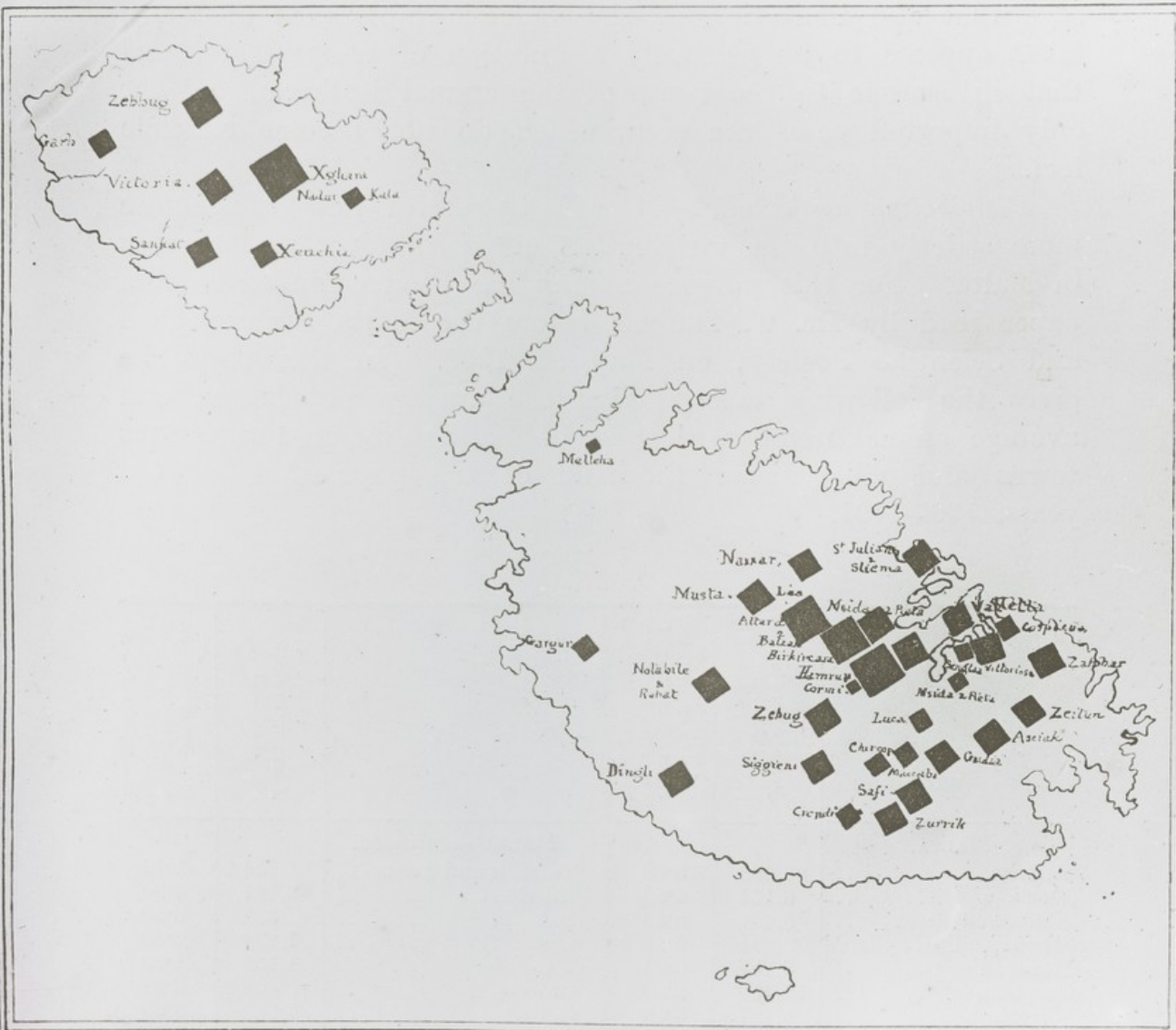


Grand Harbour
Mala.

4



9
Civil population



Map of Malta and Gozo, showing the Distribution of Malta Fever in the various Towns and Villages of the two Islands.

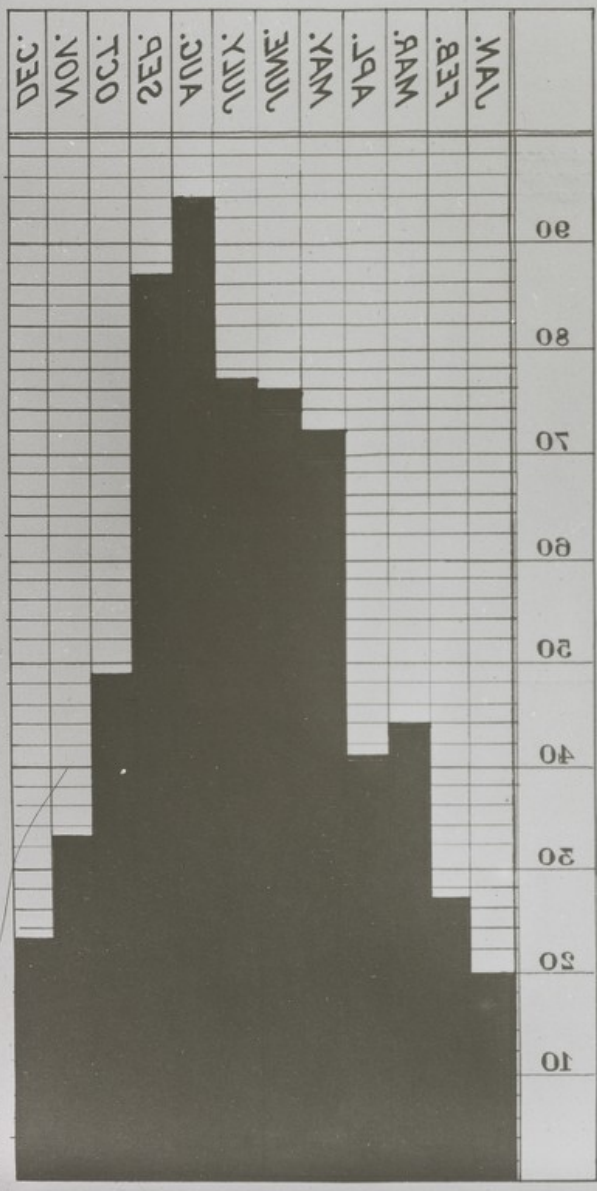
Malta Fever



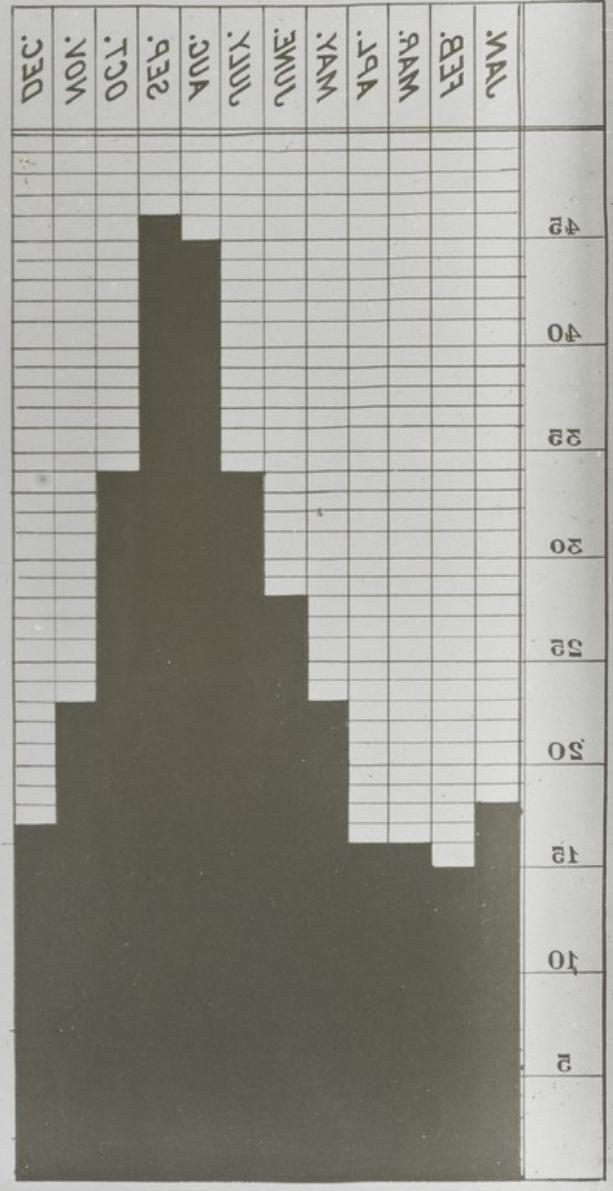
Map of Malta and Gozo, showing the Distribution of Malta Fever in the various Towns and Villages of the two Islands.

1905-117

1902.



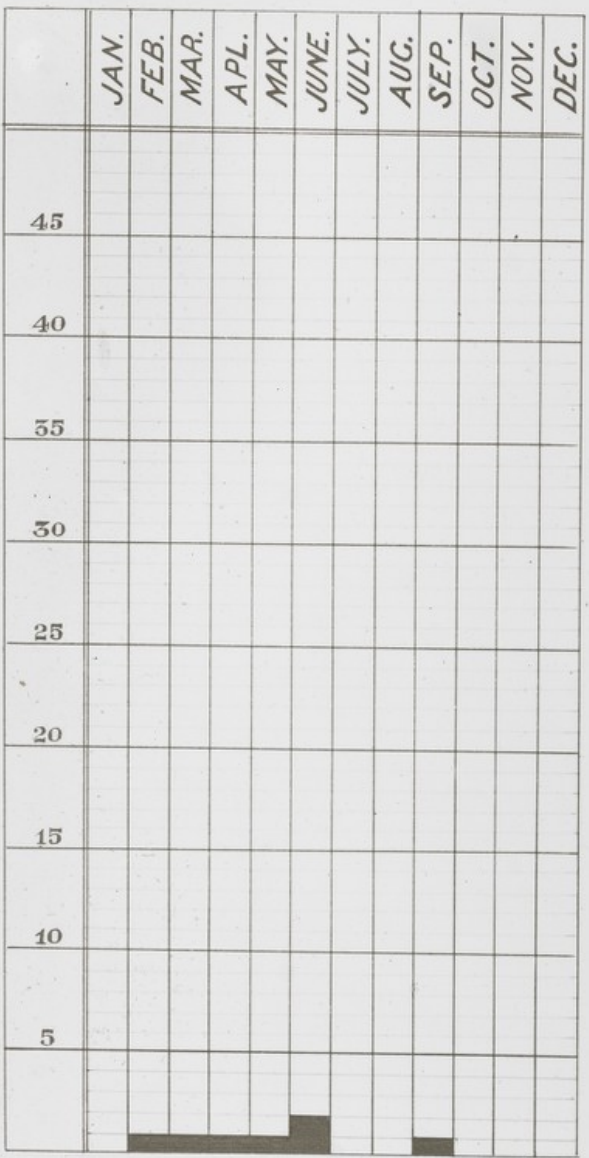
1899 to 1902.



No. 2

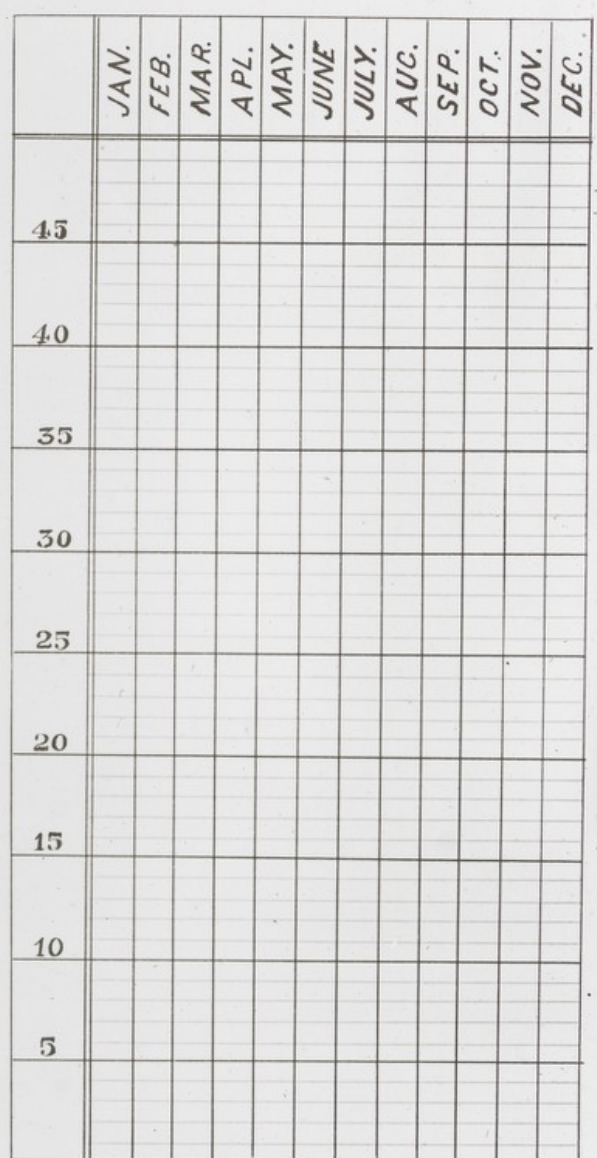
1907

ARMY 1907.



7 CASES.

NAVY. 1907.



NO CASES.

Malta Fever

ARMY
1907.

	42	40	32	20	52	50	12	10	2
.MAL									
.BEB									
.RAM									
.JPA									
.YAM									
.MUL									
.XUL									
.JUA									
.Q32									
.T30									
.NOM									
.DEC									

2 CASES

NAVY
1907.

	42	40	32	20	52	50	12	10	2
.MAL									
.BEB									
.RAM									
.JPA									
.YAM									
.MUL									
.XUL									
.JUA									
.Q32									
.T30									
.NOM									
.DEC									

NO CASES

Feeding Expts

Malta Fever

10

Species of animal	Mode of infection. M. = <i>M. melitensis</i>	Probable time which elapsed before infection took place in days	Result. + Infection - No infection
Monkey 39	Feeding on potato containing M.	30	+
„ 40	Do. do.	31	+
„ 66	Accidental feeding	+
„ 72	Milk + M. ; stomach tube	..	+
„ 113	Dust + Mediterranean fever urine. Dried	..	-
„ 114	Do. do.	..	-
„ 119	Dust + Mediterranean fever urine. Moist	..	+
„ 124	Potato + M. from spleen	..	+
„ 125	Do. do.	..	+
„ 126	Potato + M. from urine	..	+
„ 127	Do. do.	..	+
„ 2	Milk + M.	..	+
„ 4	Do.	..	+
„ 5	Do.	..	+
„ 99	Do.	..	+
„ 6	Culture	..	+
„ 7	Do.	..	+
„ 8	Do.	..	+
„ 9	Do.	..	+
„ 19	Do.	18	+
„ 19a	Do.	32	+
Kid 9	Milk	..	-
„ 19a	Mother's milk	-
Goat 12	Culture from milk	+
„ 13	Mediterranean fever urine and dust	..	+
„ 14	Do. do.	..	+
„ 4	Milk + culture	+

Malta Fever

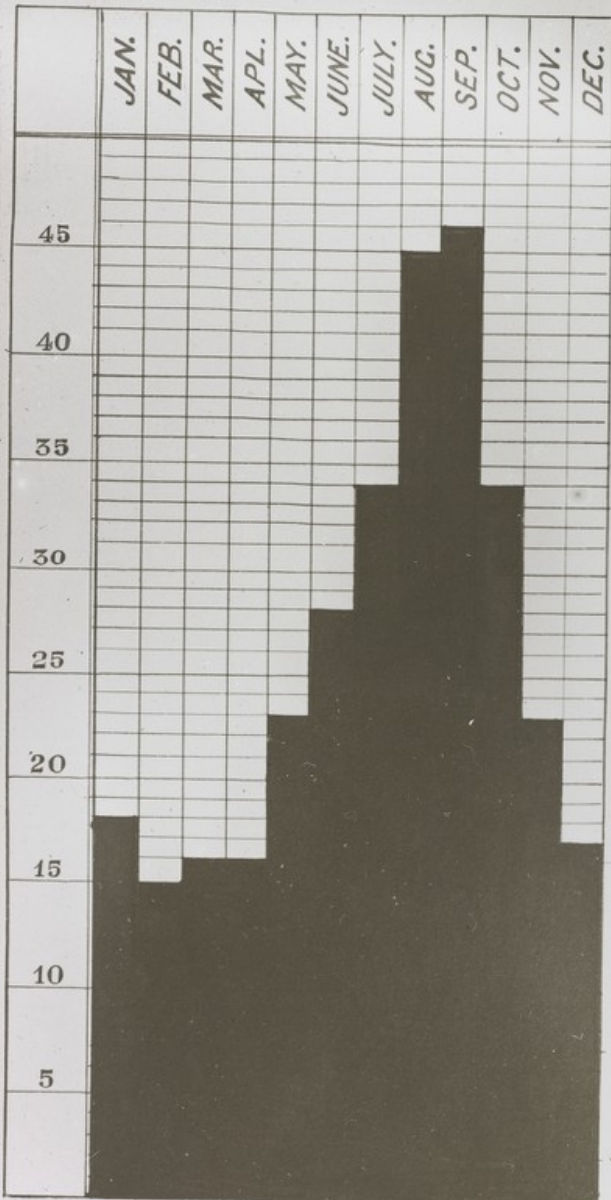
Malta Fever

Species of animal	Mode of infection. M. = M. mediterranea	Probable time which elapsed before infection took place in days	Result. + Infection - No infection
Monkey 39	Feeding on potato containing M.	30	+
40	Do. do.	31	+
60	Accidental feeding	+
72	Milk + M.; stomach tube	..	+
113	Dust + Mediterranean fever urine. Dried	..	-
114	Do. do.	..	-
119	Dust + Mediterranean fever urine. Moist	..	+
124	Potato + M. from spleen	..	+
125	Do. do.	..	+
126	Potato + M. from urine	..	+
127	Do. do.	..	+
2	Milk + M.	..	+
4	Do.	..	+
5	Do.	..	+
39	Do.	..	+
6	Culture	..	+
7	Do.	..	+
8	Do.	..	+
9	Do.	..	+
19	Do.	18	+
19a	Do.	32	+
9	Milk	..	-
19a	Mother's milk	-
12	Culture from milk	+
13	Mediterranean fever urine and dust	..	+
14	Do. do.	..	+
4	Milk + culture	+

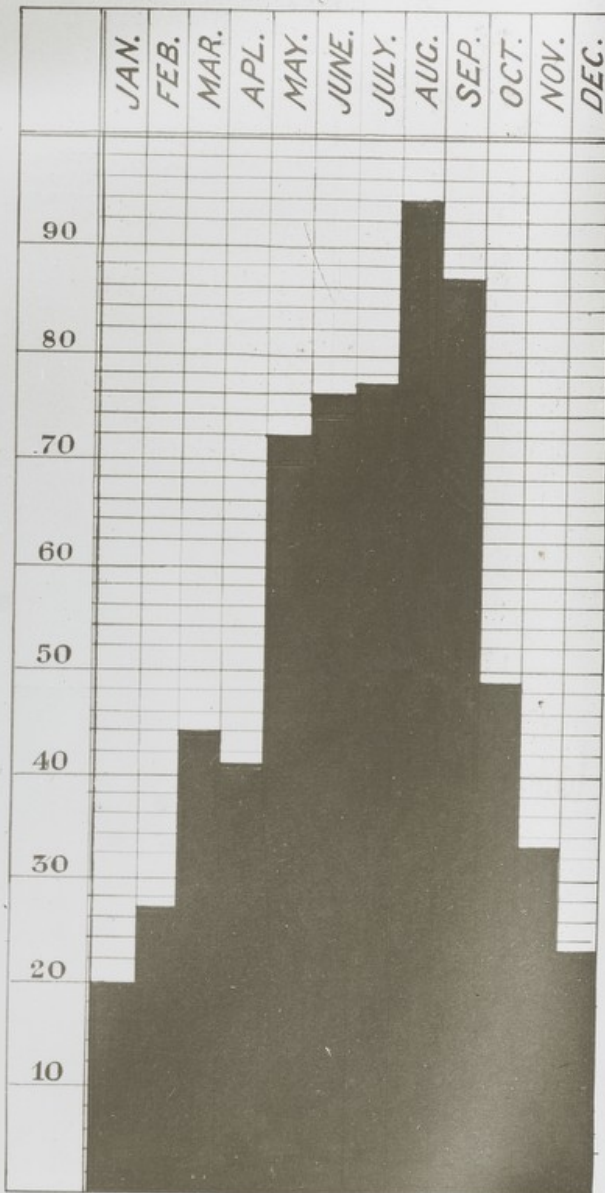
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1899 to 1905

1899 TO 1905.

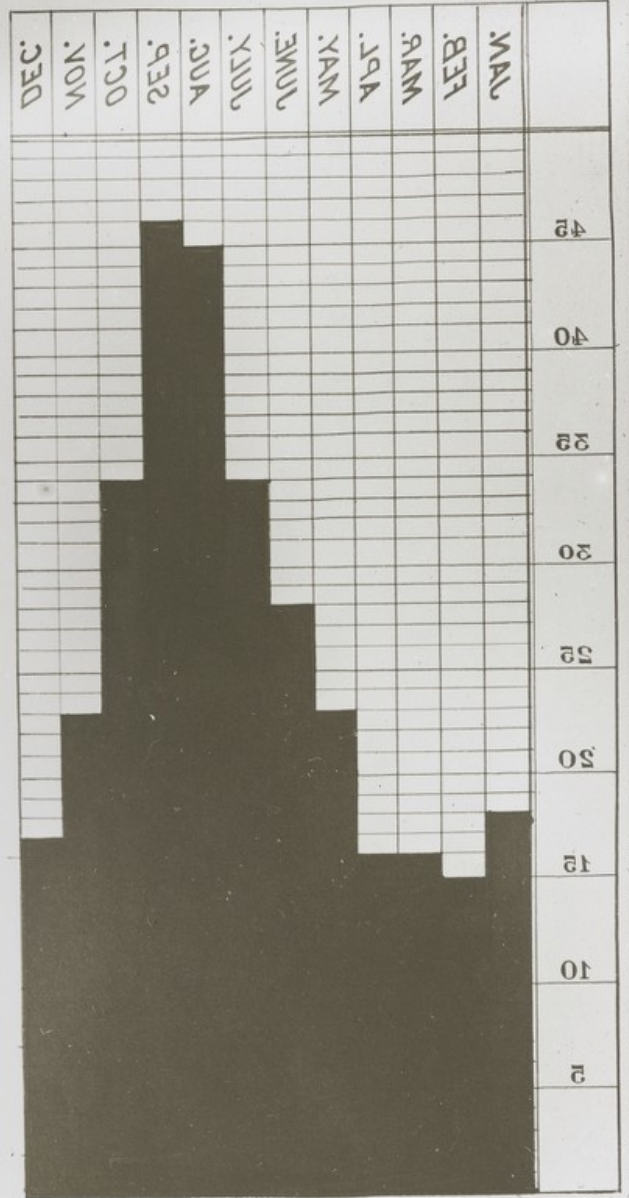


1905.

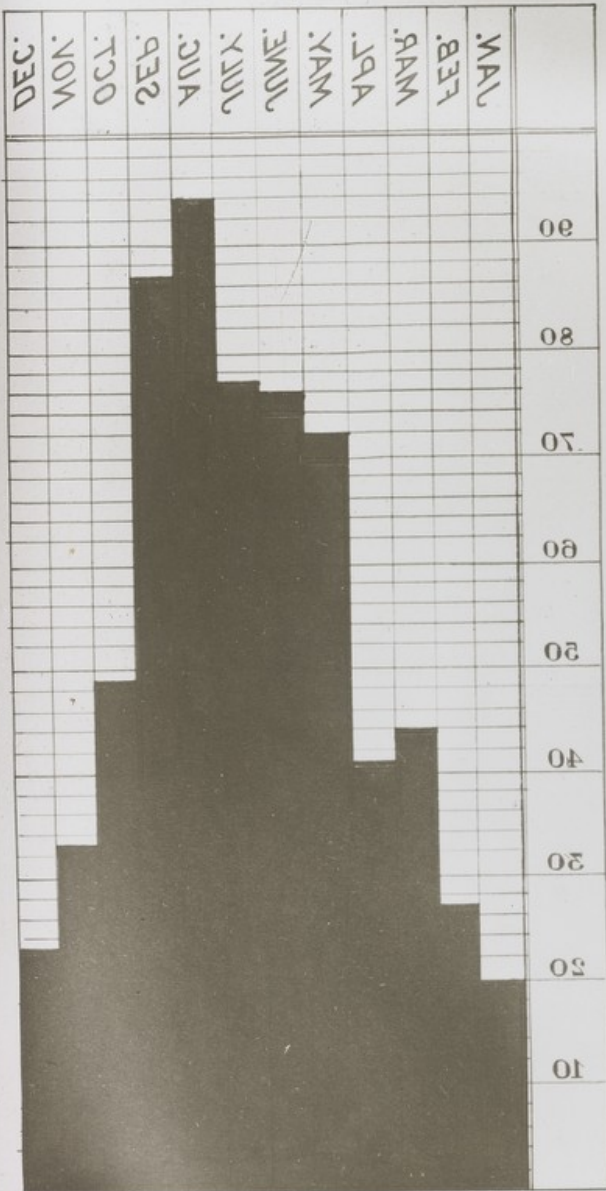



21905. M. J

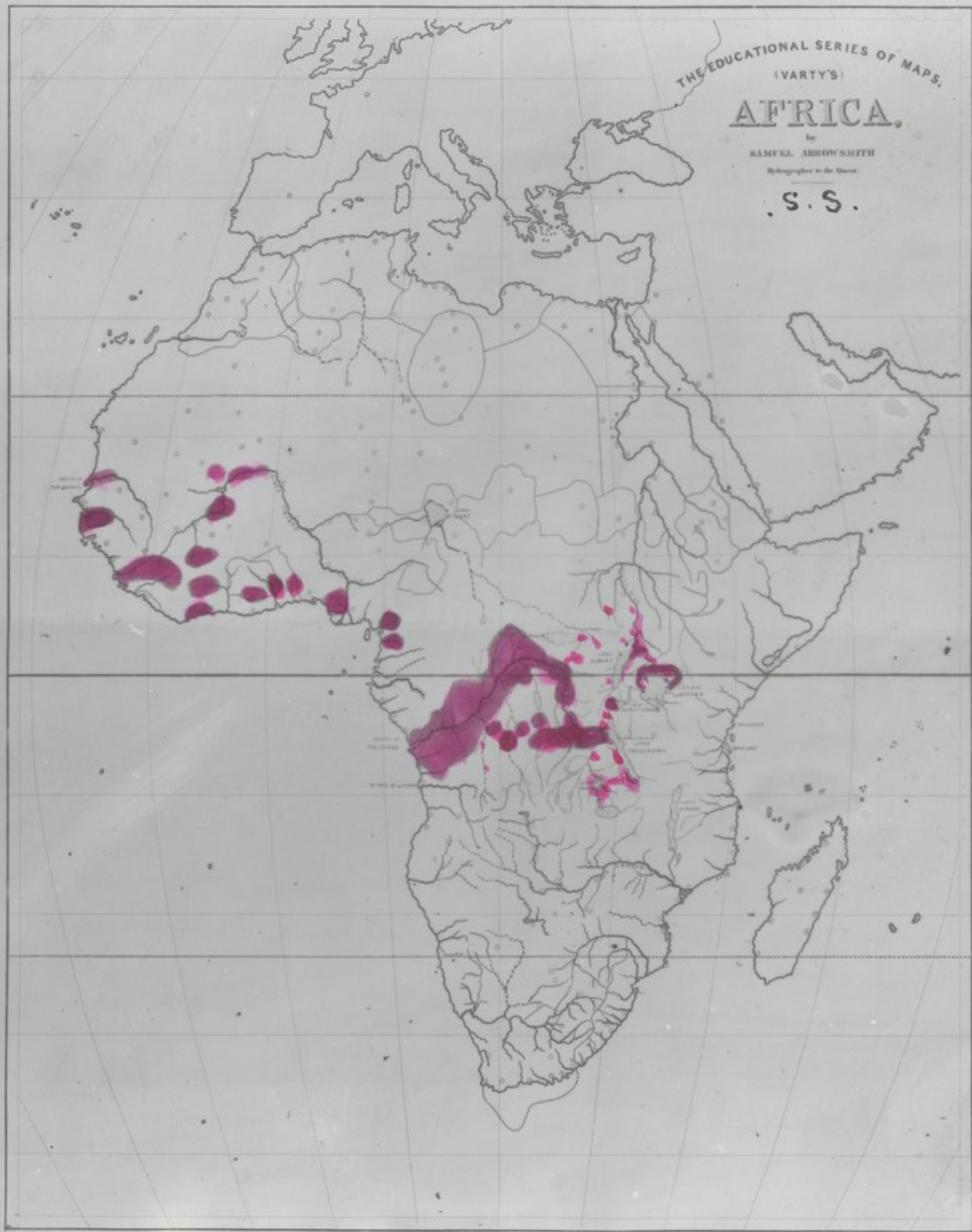
1899 to 1902.



1902.

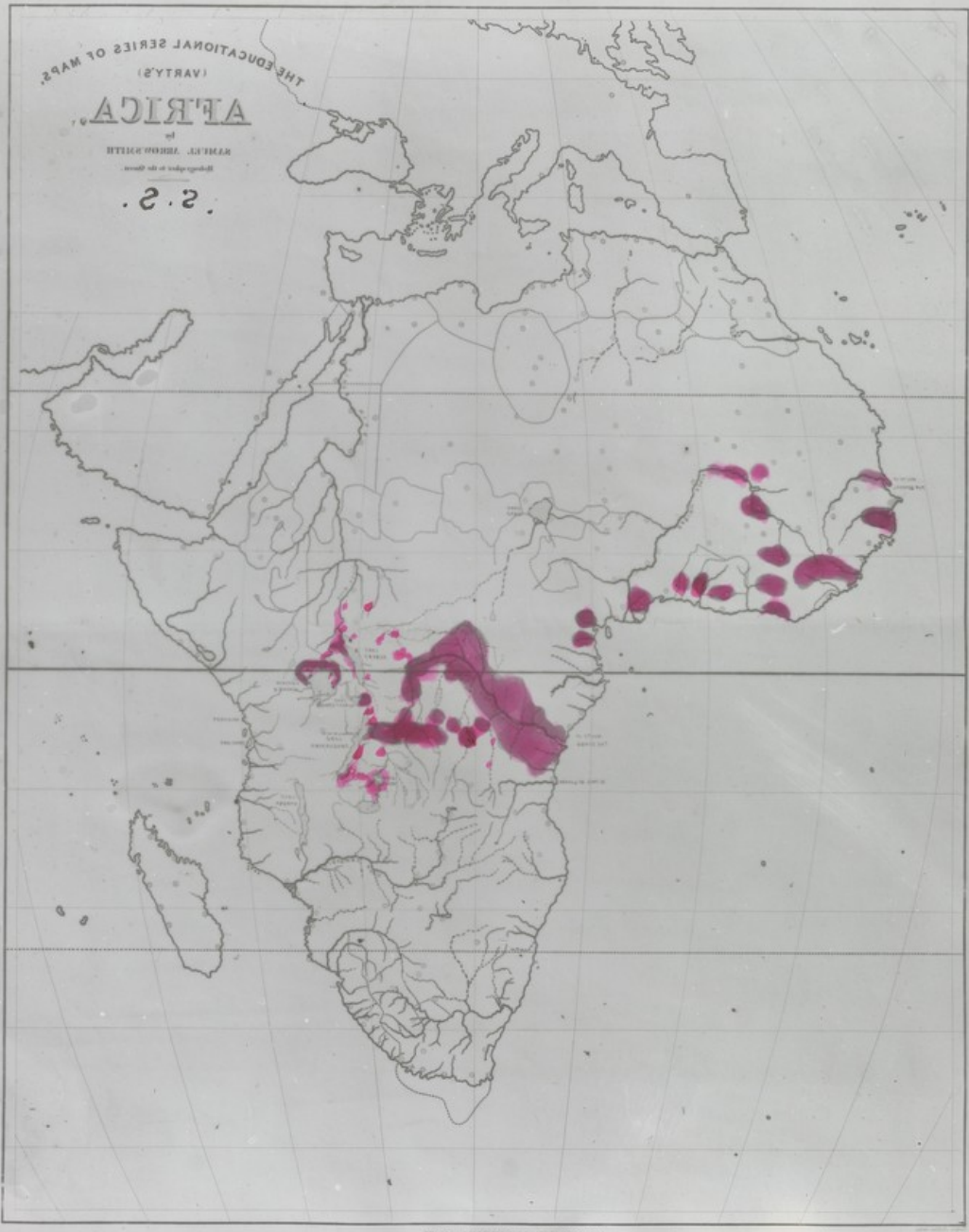


Sleeping Sickness 



Printed and Published by Edward Stanford, 25, Abchurch Lane, London, E.C. 4.

m. 1908. on Africa



THE EDUCATIONAL SERIES OF MAPS

Typhoid.

SOUTH AFRICAN WAR

THE GREAT WAR.

TYPHOID FEVER

