Public (1895) Department.

ORDINARY MS.

G.O., No. 13/4 - 13/5

Dated 14 - 12 - 96

INDEXED.

[Despatch Abstract.]

Investigation of the Malarial Parasite.

Recommends to the Govt., that Surgeon Major R. Ross be placed on Special Duty under the orders of that Govt. for the — and allowed the assistance of an Asstt Surgeon well trained in microscopic work.

No.	Department.	Date.	G.O	No.	De

FURTHER PAPERS.

G.O.	No.	Department.	Date.	G.O.	No.	De
	C No 382 of 1897	Eff. R 138-98	5-2-97			
	C No 1207 of 97	464				
		27-4-97				

செப்பனிடுபவர் பெயர்

செப்பனிடுவதற்காக எடுத்துக் கொள்ளப்பட்ட நாள்

செப்பனிட்டு முடித்த நாள்

சரிபார்த்தவர் கையொப்பம்

மு. பதிவேடு கையொப்பம்

Current No. 869 of 1896

Pub. 29

vi—29-7-96.

Public (1896) Department.

Referred to the Surgeon General for remarks with the request that he will submit with his reply a copy of the pamphlet by Surgeon Major R. Ross referred to in the Resolution.

Order

Chief Secretary

5 B 3
14-9-6.

Otacamund
17 Sept 96

TO BE RETURNED WITH REPLY.

SURGEON GEN. OFFICE SEP 96

From the Secretary, United planters Association, Southern India.

No.

Dated 8 "
Received 9 "
Registered 11 "
} Sept. 96

Enclosures — nil

Spare copies. — nil

SUBJECT.

Requesting to commence an inquiry into the question of the development of the malarial parasite.

BACK PAPERS.

G.O.	No.	Department.	D

FURTHER PAPERS.

G.O.	No.	Department.	Date.

United Planters Association
of Southern India.

CHIEF SECRETARY
9 SEP 1896
GOVERNMENT OF MADRAS

Madras, 8 September 1896

To
The Secretary to Govt of Madras,
Madras.

per H. Secretary
United Planters Association of Southern India
Madras

Sir,

I am directed by the Committee of the Association of the United Planters of Southern India to communicate for the information of His Excellency the Governor in Council the following Resolution passed at the last annual general meeting:-

"That the Secretary be instructed to move the Government of Madras to cause an enquiry into the question of the development of the Coconut fibre trade on lines similar to the investigations undertaken by Surgeon Major R. Ross and others; and the Association trusts that the theory as further developed by Surgeon Major Ross and explained in a pamphlet on the subject will be thoroughly investigated on the same lines as the investigation undertaken by Dr Hoffmeister and Tanjore."

The subject referred to in such wider terms that it is unnecessary for me to attempt to supplement the above resolution by any argument or remarks beyond a request that the matter may have the favourable consideration of Government.

I have the honour to be, Sir,
Your most obedient Servant
Alan Cornwall
Secretary.

4

Public (1896) Department.

CURRENT No.

CHIEF SECRETARY
7 OCT. 1896
GOVERNMENT OF

From The Surgeon-General with the Government of Madras.

Order

No. 465

Dated 5th October 1896.

Received 7th do

Registered

Enclosures one book & Pub: C. No 2937

Spare copies returned

SUBJECT.

Stating that the investigation of Malarial parasite is not likely to be undertaken in the way the Planters' Association suggested except by detailing a full-time Medical Officer to work solely at the subject.

BACK PAPERS.

G.O.	No.	Department.	Date.

FURTHER PAPERS.

G.O.	No.	Department.	Date.

No. 465

OFFICE OF SURGEON-GENERAL
WITH THE GOVERNMENT OF MADRAS,
Madras, 5th October 1896.

From

Colonel D.F. Bateman,
SURGEON-~~MAJOR-GENERAL~~ C. SIBTHORPE, F.R.C.P.I.,
Ag: SURGEON-GENERAL WITH THE
GOVERNMENT OF MADRAS,

To

THE HON'BLE THE CHIEF SECRETARY TO GOVERNMENT,
Public DEPARTMENT.

SIR,

In returning your endorsement No.1864, dated the 17th September 1896, I have the honour to state that the investigation of malarial parasite is not likely to be --- undertaken in the way the Planter's Association suggests. Moreover Dr.Haffkine is not a Government Officer and is undertaking his investigations on his own responsibility Mr.Hankin is Chemical Examiner for North West Provinces and Imperial Bacteriologist and cannot therefore confine himself to one investigation. If Government were to depute a Medical Officer to work solely at this subject no doubt great progress would be made in ascertaining the exact --- nature and cause of Malaria, its mode of development and the conditions favourable or unfavourable to its existence.

2. A copy of the pamphlet of Surgeon-Major Ross is herewith forwarded as requested.

I have the honour to be,

Sir,

Your most obedient Servant,

H. Bateman
Surgeon-Colonel,
Acting Surgeon-General with
the Government of Madras.

6

[G. 25 A.]
1,000—21-3-96.

Public DEPARTMENT

C&No& 2937 & 3283

The study of the development of the Malarial Parasite

Hon'ble Surgeon Blair, C.I.E.

~~d. Blair~~

FOR ORDERS.

The Secy, United Planters' Association of Southern India, Madras forwards for the sympathetic consideration of Govt the Resolution marginally × quoted which was carried at the last annual general meeting of the Association.

The Surgeon General remarks

(1) that the investigation of the malarial parasite is not likely to be undertaken in the way the Association suggests;

(2) that Dr. Haffkine, who is not a Govt officer, is undertaking his investigations on his own responsibility; and

(3) that Mr. Hankin is Chem. Examiner for the N.W. Provinces & Imperial Bacteriologist and cannot confine himself to one investigation.

Remarks (2) & (3) are at is submitted mal à propos. The Surgeon Genl appears to have misread the Resolution

× "That the Secy be instructed to move the Govt of Madras to commence an Enquiry into the question of the development of the malarial parasite on somewhat similar lines to the investigation undertaken by Surgeon Major R. Ross adopted & the Assocn trusts that the theory as further developed by Surgn Major Ross, & explained in his pamphlet on the subject, will be thoroughly investigated on the same lines as the investigation of cholera by Dr. Haffkine & Hankin."

Dr. Ross has been talking to me about this subject. He will thankfully be rejected for this present appt. Pres. Surgeon, Bangalore, & the return of the Resident occupant, & would object on special duty for 3 or 4 months until (as he believes will be the case) the Resident occupant leaves again & he regains the appt. — I have told him to comment through the Govt. This he will do at once. I would let this be overtaken at that time until he does so.

By dt 11th inst. M.A.V.

FOR ORDERS.

H. M.

He adds, however, that, if effort were to deputed a medl. Officer to work at this subject, great progress would doubtless be made in ascertaining the Exact nature Cause of Malaria, its mode of development & the conditions favourable or unfavourable to its Existence.

Attention is solicited to the statement on page 11 of the last report on the medical institutions in Madras (flagged A) and the remark of the Hon. Member thereon calling attention to the Extraordinary increase of fever cases since 1891. The Sanitary Commissioner has been asked to report on the matter vide Govt. No. 1771 dt 3.9.96.

It will be seen from pages 155 and 156 of the same report (B), that "since November last, a more or less Systematic[x] Examination has been made of the blood of patients complaining of Malaria" Please send Sturrock's remarks on the result of Surgn Major Maitland's investigations on page 154.

A copy of Dr. Ross' pamphlet

[x] This has been noticed in the Govt. (850 Pub dt 11.8.96) vide para 5 of Flagged D

in Royapettah Hospital

M.

[x] "The Crescent-Sphere-Flagellum Metamorphosis of the [illegible] Parasite in the Mosquito" by Surgn Major R. Ross [illegible]

This is what Dr. Ross is

BS 17/10/96

A

Official investigations into matters of pure science are worth very little. What is wanted is an enthusiastic microscopist & bacteriologist conversant with & bent towards original research. The S.G. might send the pamphlet to Drs Sturrock & Maitland with reference to the enquiries Govt is pleased to note they have been making into the same subject.

[illegible] 10.96

pamphlet on the subject is with C. 3283.

The increase in the No. of deaths from malarial fevers is probably not confined to this Presy. & the results of any systematic investigation would be equally valuable to all parts of India. It is submitted that the papers may be forwarded to India with the remark that the alarming increase (quote figures) in the No. of deaths renders it very desirable that a duly qualified officer should be placed on special duty for the investigation of the causes of malaria.

JDB 12.10.96.

Public (1896) Department.

CURRENT No.

From

The Surgeon-General with the Government of Madras.

Order

No. 504

CHIEF SECRETARY'S GOVERNMENT OF MADRAS
1 NOV. 1896

Dated 31st October 1896.

Received 1 } 11-96

Registered 3 }

Enclosures One.

Spare copies

SUBJECT.

Forwading with remarks a letter from Surgeon-Major R. Ross wishing to be placed on special duty for a few months in order to investigate the truth of Dr. Patrick Manson's theory of the transmission of the infection of Malaria by means of the mosquito.

BACK PAPERS.

G.O.	No.	Department.	Date.

FURTHER PAPERS.

G.O.	No.	Department.	Date.

Rec'd

Copy of a letter from Surgeon-Major R.Ross, Officiating Residency Surgeon, Bangalore, to the Secretary, Surgeon-General with the Government of Madras, No.[illegible], dated the [illegible]th October 1896.

In continuation of my letter No.[illegible]-R.S. dated [illegible]th September 1896 replying to your No.[illegible]/1 of the [illegible]rd September 1896, I have the honour to request that the Surgeon-General will be so kind as to consider favourably and to forward to the Government of Madras this my application to be put on special duty for a few months, after I am relieved from my present officiating appointment, in order to investigate the truth of Dr.Patrick Manson's theory of the transmission of the infection of malaria by means of the mosquito . In making the application I hope that I may be allowed to submit the following remarks recalling the advisability of the investigation, the present position of the theory, and the work which remains to be done in connection with it.

2. Though the parasite of malaria has been discovered for fifteen years and has been very thoroughly studied when in the human blood, its form and mode of existence in external nature has not yet been ascertained. The determination of this point is clearly of the greatest practical importance, since we have as yet no definite knowledge as to how the parasite enters the human system, being obliged to content ourselves with theories, more or less vague, of infection by means of miasma, and so on. As a consequence medical and sanitary officers find themselves almost powerless to prevent the occurence of the disease, which prevails, almost without the possibility of check, in all towns and cantonments in India, amongst troops on active service and coolies employed on public works and in plantations. The actual amount of sickness caused by malaria can be accurately determined from the Annual Reports of the Sanitary Commissioner with the Government of India, from which it will be seen that about one third of all admissions into hospital among the troops in India is due to it - a number which exceeds the admissions

for

.or cholera, dysentery, diarrhoea and enteric fever put altogether - while the amount of sickness among the civil population is enormous. Hence it is all the more unfortunate that, owing to the incomplete state of our knowledge respecting the cause of the disease, we are quite unable in particular outbreaks to do as it is possible to do in the case of cholera (for instance), namely detect the source in external nature from which the outbreak proceeds, and hence approach from a proper direction the important question of prevention. Indeed our preventive measures up to the present have consisted in nothing but such very extensive and expensive empirical methods as drainage of large areas; which methods, while being undoubtedly beneficial, may perhaps be displaced hereafter by cheaper, more simple, and perhaps more effective ones.

3. Impressed by the importance of the subject many men of science, such as Grassi and Feletti, Celli and Sanfelice, --- Zeri and Labbé as well as the Government of Italy and , I believe, those of Germany and France, have instituted enquiry as to the mode of life of the parasite outside the human body; but in --- spite of every effort, all such enquires have failed hitherto, chiefly I believe because of the great difficulty of identifying without some definite clue, the parasite of malaria among the -- immense number of similar organisms in external nature . Lately however Dr.Patrick Manson M.D., L.L.D., Lecturer on Tropical Diseases at St: Thomas' and St:George's Hospitals, London, has, he thinks, found such a clue as is required. Noting that the parasite undergoes a curious development in blood drawn from the human body and being guided by induction based on an intimate knowledge of parasites in general, he has come to the conclusion that the mosquito is the agent which diffuses the disease.

4. In order to establish the truth of this induction it is necessary to prove

(a). That the parasite undergoes within the mosquito the same change which it is seen to undergo in blood drawn --- otherwise from the human body.

(b). That it is capable of developing and living within the mosquito as a parasite of that insect.

(c). That it can be communicated in some manner — from the mosquito to mankind.

5. Dr.Manson enunciated this theory in the three Goulstonian Lectures published in the British Medical Journal for March 14th, 21st and 28th 1896. Previously to that date he had made me acquainted, while in England, with the subject; and on my return to India in April 1895 I set about making the necessary observations. Those observations are detailed in the Goulstonian Lectures referred to; and I may here remark that I was able to show that the parasite not only does undergo a change within the mosquito (paragraph 4 /a/) but does so to a much greater extent than in blood ordinarily drawn from the finger; thus not only demonstrating the first step, but emphasizing the probability of the theory. Further, out of 26 experiments made with a view to producing slight fever (paragraph 4/c/), three have been successful - a number which, while by no means definitely establishing the hypothesis, may be looked upon as being decidedly encouraging. Owing however to lack of time occasioned by numerous sanitary duties while on special deputation in this town and since, it has been impossible for me to give the theory as much attention during the last year as I have wished. I have felt moreover peculiar difficulties in studying the matter in such stations as Secunderabad and --- Bangalore. These difficulties are, (a) that the disease is not so very prevalent in those stations as to warrant me in assuming that the mosquitoes are generally of the right kind to convey it - a doubt which is extremely inconvenient in — prosecuting further research; (b) that there are so many --- sources of water supply that it is impossible to conjecture from which the infection arises; and, (c) that I am frequently compelled by other duties to discontinue observations often just at the most important juncture.

6. In submitting this application then I have been guided by the hope that Government may see fit to permit me to proceed to some locality where these difficulties will not exist; — namely to a place (which may be determined upon after consultation with the Surgeon-General) where malaria is extremely

rife.

rife, where the sources of water supply are very few and where the population is fixed and small in numbers - in short to a circumscribed but intensely malarial area such as is frequently found at the foot of hill ranges. In such a locality I trust full opportunities will be afforded for carrying the investigation to a further stage.

7. To particularise more exactly the steps of the proposed enquiry:- the first point requiring study would be to ascertain the various species of mosquito infecting the malarious locality referred to. It would then be necessary to examine the tissues of these insects for a parasite resembling that of malaria in men. At the same time the theory could be attacked from the direction already pursued, namely by endeavouring to infect the insect from malarious subjects and to trace the evolution of the flagellated spores within them; while several collateral methods, such as direct experiment with the tissues of the mosquitoes and with the psorosperms which I have already described as infesting them, and so on, may be tried. I think I may venture to say that I shall receive all through the course of the enquiry, as I have already received, the advantage of Dr.Patrick Manson's advice; and I have no doubt that he will examine with interest the specimens which I shall be able to send to England to him.

8. The practical result of the investigation if successful will be that the profession will acquire an exact knowledge of the means of infection of malaria in place of the vague theories now necessarily resorted to. If it dan be shown that the parasite infests only one or two species of mosquito, as is likely to be the case, we shall have in possession an exact and extremely — simple means, most useful on active service for instance, of ascertaining whether a given locality is malarious. If it infests the mosquito at all we shall be able without difficulty to rid small sources of water supply, such as there is reason to think are chiefly at fault, of the means of infecting human beings with so troublesome a disease. In fact we shall acquire in respect to malaria means of prevention similar to those which the researches of Koch and Hankin have placed at our disposal in respect to — cholera. It may be added that even negative results will be of

not

not a little value to medical science. In this connection I may perhaps venture to quote the concluding paragraph of Dr. Manson's Goulstonian Lectures. "I understand" he says "that "extensive drainage works are about to be undertaken in India "with the object of mitigating the insalubrity of certain — "pestiferous districts, and that the schemes entail an enor- "mous expenditure of the public money. This money will be ex- "pended simply to fight the plasmodium. Would it not be well "to know a little more about the enemy before attacking him? "Would it not be a wise, a businesslike thing, before proceed "ing to expend powder and shot, first to find out something "about his habits, and so learn when, and where, and how he "may be most easily, most effectually, and most economically "attacked? I think the Indian Government would do well to do "this, and to encourage men like Ross in their efforts to lay "a scientific foundation on which a truly scientific prophy- "laxis might subsequently be built."

9. With respect to the time needed for the enquiry I may express a hope that something may perhaps be done even in three months, while the continuance of the investigation may depend upon the results obtained during those months. With respect to apparatus I may say that I am already in possession of sufficient for the purpose; it would however be of great assistance to me if the Surgeon-General could allow me the services of an Assistant Surgeon or Hospital Assistant well acquainted with microscopic work. The enquiry being limited entirely to the prosecution of Dr.Manson's theory, the Surgeon General may perhaps be willing to advise that no other work in connection with the parasite should be called for, except incidentally; since such work would be very likely to engross the time which would be better spent on the principal aims in view.

----------oOo----------

(True Copy).

L Simpson M.B.,
Surgeon-Captain,
Secretary, Surgeon-General with the Government of Madras.

12

No. 504

OFFICE OF SURGEON-GENERAL
WITH THE GOVERNMENT OF MADRAS,
Madras, 30th October 1896.

From

SURGEON-MAJOR-GENERAL C. SIBTHORPE, F.R.C.P.I.,
SURGEON-GENERAL WITH THE
GOVERNMENT OF MADRAS,

To

THE HON'BLE THE CHIEF SECRETARY TO GOVERNMENT,
Public DEPARTMENT.

SIR,

C No 3283 Hosp
A

In continuation of this office letter No. [redacted], dated the 5th October 1896, I now forward a true copy of letter No. [redacted], dated Bangalore, 17th October 1896 in which Surgeon Major R. Ross asks to be placed on special duty for a few months in order to investigate the truth of Dr. Patrick — Manson's Theory of the transmission of the infection of — Malaria by means of the mosquito. He wishes to commence the duty from the date of his being relieved of his present acting appointment. Surgeon-Major R. Ross is, in my opinion well competent to carry out such an investigation and it is in the interest of science that the question should be — settled. A true knowledge of the life history of the Malarial parasite would be invaluable to Government in dealing with the large question of the prevention of Malarial Diseases.

2. Surgeon-Major R. Ross is now officiating Residency Surgeon, Bangalore under the Order of the Government of India. On his relief he will revert to his permanent Military appointment as Medical Officer of the 19th M.I. at — Secunderabad where he draws a consolidated salary of Rupees 800/- a month.

3. If Government sees its way to detail him for this duty his services should be applied for, and he should draw the same pay with travelling and halting allowances under — Chapter

XLVII of the Civil Service Regulations and might be granted an honorarium when his work is finished in proportion to the value of the work he does.

3. He asks for the assistance of an Assistant Surgeon or Hospital Assistant well trained in Microscopic work. The latter class of man would be cheaper but none of them are competent to take up such duties.

The cost of an Assistant-Surgeon would be Rs.100 a month with travelling and halting allowances under Chapter XLVII of the Civil Service Regulations.

I have the honour to be,

Sir,

Your most obedient Servant,

Surgeon-Major-General,

Surgeon-General with the

Government of Madras.

Public Cs: 2937 & 3283.

The study of the development of the malarial parasite.

Re submitted with C. 3653, being Dr. Ross' application to be placed on special duty for three months (at first). India would have to be asked for his services; and an Asst Surg: provided to assist. The cost would be 800 + 100 x 3 = Rs. 2,700 + travelling & halting allowances.

With ref: to art: 89.(e) C. S. R. it seems hardly possible to fix the honorarium beforehand.

2/1/96

F.D.B.

5/1/96 C.S.

It is submitted that the date on wh: Surg. Maj: Ross is to be advised to be ready is to be advised to be available. The information is at present in the S.G's office. Perhaps Surg. Maj: Ross might be asked D.O.

Yes JHA 7/1/96

A/Sec. to Govt.

Is it known what
European weapons were held
he released?

R. H.

5/XI/56

A.S.

He is acting for
B.S.L. Col: Dobson. As to date
please see telephone
attached.

F.D.B.
6/11/56

15

Code Class

INDIAN TELEGRAPHS

Number.

To (Office)	Telephone	From (Office)

Words	Day.	Hour.	Minute.	Official Instructions.
	7	3	27	

To (Person)	From (Person)
Chief Secretary	Surgeon General

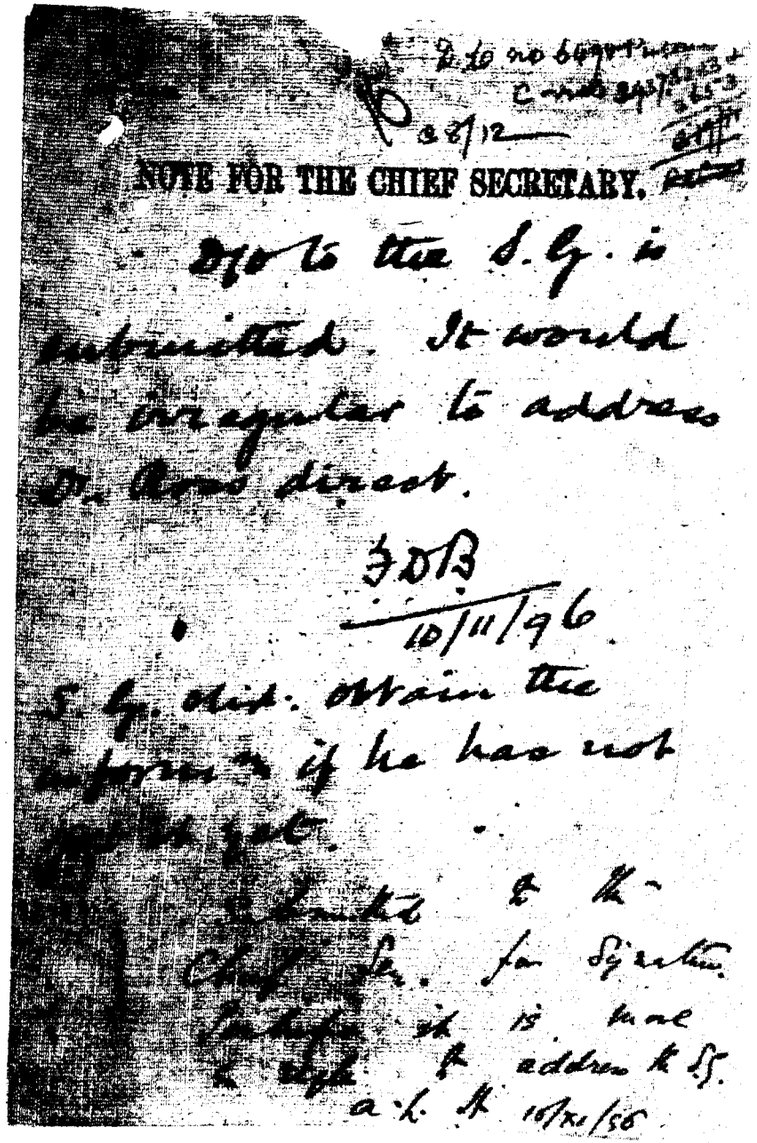
No information will be given regarding Dr Robertson's date of departure on leave. His leave was granted with effect from 25th May 1896 or date of departure for 6 months.

6-11-96

F.C.2.

Rec'd from LN.	Sent to LN.	
Hrs. Mts. by	At Hrs. Mts. by	Telegraph Master.

G. P. Office No. [illegible]



NOTE FOR THE CHIEF SECRETARY.

Before the S.G. is instructed. It would be irregular to address Dr. Ross direct.

JDB
10/11/96.

S.G. dist. obtain the information if he has not got it yet.

Fort St. George
11th November 1896.

My dear Lieutenant,

With reference to your No. 504 of the 30th ultimo will you kindly let me know as early as possible on what date Surgeon Major Ross will be relieved of his officiating duties at Bangalore.

Yours sincerely
(Signed) A Cotton

To

Surgeon Major General C. Lethbridge

CHIEF SUPERINTENDENT
D. C.
No.

[8/9]
300—29-7-96.

(189) Department.

D. O. No. 6

From Surg: Major Gaul.
Silethorpe.

The Hon'ble Bligh CIE C.S.
H.E. the Lord.

~~D. O.~~ Fr orders

Please see the 45th a C. Hon. 7th/13.

No. 157.

2937 & 3283. Surgeon Major Ross will be relieved a 28th Feb. next. The cost of his deputation a Rs. 800, to investigate into the development of the malaria plasmodium, for 3 mo. wd. be Rs. 800 × 3 + 100 × 3 (for an Asst. Surgeon) or 2700 Rs., with hon'ble. Lally. Allce. in addition.

Orders are requested as to whether India Govt. be addressed for Sanction to this arrangement.

The L.G. proposes that Surgeon Major Ross Govt. be granted an honorarium in proportion to the value of the work done. The previous Sanction of the G.I. must be

Dated 14
Received 16 } 11-96
Registered 16
Enclosures —
Spare copies. —

SUBJECT.

Selecting Chief Surg: Major Ross will be relieved of his present Cey. appointment at Bangalore on or about the 28th February. 97.

17/11/96

BACK PAPERS.

G.O.	No.	Department.	Date.
		Hdq. put up with C.N.s 2937+	

FURTHER PAPERS.

G.O.	No.	Department.	Date.

obtained for payment of a Specific sum (if over 500 Rs) under Sec 89 (6) 2(c) C.S.R. Orders are requested a ins boat also

A.G.M.
9/x/96

Under what art. C.S.R. = sanction of S.I. necessary for appt of a Medical Officer on Special duty?

M.A. 15-9-96

It is submitted that as Surgn Major Ross is at present under the S. of S., Sanction will have to be obtained & his substitution on the Duty Pleon Para 2 & 3 of the S. of S. Letter at flag D.

It is submitted also as a point for consideration whether a case of the General application of the Regulation the fee might not be credited to Govt.

If Surg. Major Ross is to be appt'd India's sanction must be obtained. Madras will have to provide his pay & allowances. The question whether any honorarium should be paid at all. He will be on special duty for a specific object. If he did this work in addition to his ordinary duties it would be a different matter

M.A. 7.11.96

No. 157.

Recruitment Branch
14th Nov 96

My dear Arundel,

With reference to your D.O. of the 11th, I have ascertained that Surg. Major Ross will be relieved of his present acting appointment at

BACK PAPERS.

G.O.	No.	Department.	Date.

obtained the Consent of a Specific
Sum (if not Stated) under Sec 87
(6)12(c) C.S.R., Orders on Appoint
a Board etc.

Under that Art. C.S.R. — is
of F.D. necessary for appt
a Medical Officer on Rece
duty?

Reasons Submitted that re

on special duty for a
object. If he did this
in addition to his ordinary
it wd be a different ma
MA-78-11-94

Brooklyn n or
about the 28 Feb 1871

BACK PAPERS.

G.O.	No.	Department.	Date
		file put up with C.M. 39374	

obtained for payment of a Specific sum (if over 500 Rs) under Sec 89 (6) 2(c) C.S.R. Orders are required in this behalf also

A.L.H. 23/X/96

Under what art. C.S.R. — is of S.I. necessary for appt a Medical Officer on Special duty?

H.A. 15-11-96

It is submitted that as Major Ross is at present on the S. of S.I., Sanction will have to be obtained & his substitution on Spl. Duty. Please see paras 2 & 3 at flag D.

It is submitted that

[G. 94.] 500—28-10-96.

92 Public DEPARTMENT.

Papers to be read in proceedings :—

Again G.O., dated 189 , No.

Again G.O., dated 189 , No.

Current No. 2937 of 1896, dated 8/9 , from the Secy, United Planters' Assocn Southern India

" " 3283 " 1896, " 5/10 , " the Surgeon-General

" " 3653 " 1896, " 30/10 , " ——— do ———

ORDER. N°. 1314 dy 14-12-96

HON. MR. BLISS, C.I.E.

H.E. THE GOVERNOR.

To

The Secretary, United Planters' Association, Southern India.

" Surgeon-General.

The Government of India will be addressed.

N°. 1315.

LETTER:-

To

The Secretary to the Govt. of India,

Home Department.

SIR,

I am directed to bring to the notice of the Govt. of India the serious increase in recent years in the number of deaths from fever in the city of Madras. The mortality has risen from 5595 in 1885 to 6265 during ~~the~~ last year and no explanation is forthcoming except the prevalence of malaria. The abnormal growth ~~in this Presidency~~ in the number of cases of complaints due to malaria render it in the opinion of

S.H. 10.12.96

given in that letter strongly favour the conclusion that ~~an~~ such an investigation should be undertaken.

I am to invite attention to the pamphlet by Surgeon-Major Ross which accompanies this letter. It contains observations by him on the Crescent-Sphere-Flagella metamorphosis of the malaria-parasite within the mosquito and testifies to ~~Surgeon-Major Ross's~~ his capability to conduct the investigation now proposed, and to his interest in the subject.

4. The Surgeon-General with Govt. has expressed his opinion that Dr. Ross is well competent to carry out the research and that it is in the interest of science that the question should be settled. A true knowledge of the life history of the malarial parasite would be invaluable to the authorities in India in dealing with the large question of the prevention of malarial diseases.

5. As the results of the systematic investigation which Dr. Ross is desirous of undertaking would be equally valuable to all parts of India His Excellency the Governor in Council would strongly recommend that Surgeon Major Ross should be placed on special duty under the orders of the Govt. of India, and allowed the assistance of an Assistant Surgeon well trained in microscopic work. So satisfied is this Govt. of the necessity of action in the matter and of the

H.E. in Council will

D.L.B.
7/11/16