Covernment of Bengal.

1909

MUNICIPAL DEPT.



SANITATION.

NOVEMBER.

File S. $\frac{C}{3}$

Nos. 3-23.

Malaria Conference at Simla.

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मिहार के समिवालय विभाग (बिहार राज्य अभिने खागार निदेशान्य)

LIST OF PAPERS.

		PAG
3.	From the Government of India, Home Department, No. 1376-83, dated the 12th August 1909, requesting to be furnished with the names of the delegates selected to attend the Conference at Simla.	1-2
4.	To Sanitary Commissioner and Superintendent, Royal Botanic Garden, Nos. 1388-90San., dated the 19th August 1909, forwarding the above for report.	2
5.	To the British Indian Association, No. 1451San., dated the 25th August 1909, asking for the selection of an Indian delegate.	2- 3
6.	From the Superintendent, Royal Botanic Garden No. 2-8-4F., dated the 21st August 1909, submitting the report called for.	3-4
7.	To Commissioner of the Patna Division, Nos. 1534-35San., dated the 31st August 1909, asking for suggestions in the matter.	4
8.	From Inspector-General of Civil Hospitals, Bengal, No 8484, dated the 25th August 1909, submitting the opinion called for.	4

		AGE.
9.	From Dr. A. G. Newell, M.D., dated the 23rd August 1909, asking to be nominated as a delegate to the Conference.	4-5
10.	To Dr. A. G. Newell, M.D., No. 654T.—San., dated the 3rd September 1909, replying to the above.	5
11.	To Superintendent, Royal Botanic Garden, Calcutta, No. 653T.—San., dated the 3rd September 1909, accepting the proposal made.	5
12.	From Secretary, British Indian Association, No. 429, dated the 1st September 1909, nominating Rai Kissori Lal Goswami Bahadur as a delegate to the Conference.	5
13.	To Secretary, British Indian Association, No. 692T.— San., dated the 9th September 1909, accepting the Association's nomination.	6
14.	To Rai Kissori Lal Goswami Bahadur, No. 693T.—San., dated the 9th September 1909, enquiring whether he had any suggestion to offer as to the papers to be read at the Conference.	6
15.	From Rai Kissori Lal Goswami Bahadur, dated the 13th September 1909, replying to the above.	6
16.	From the Sanitary Commissioner, Bengal, No. 1001D., dated the 7th September 1909, submitting the opinion called for.	6-8
17.	To the Government of India, Home Department, No. 787T.—San., dated the 18th September 1909, submitting suggestions on the subject.	8-9
18.	dated the 18th September 1909, asking him to supply the delegates with certain informations on the subject.	9
19.	From the Government of India, Home Department, No. 1509, dated the 13th September 1909, asking for the copies of the papers to be read at the Conference.	9
20.	To Captain A. T. Gage, I.M.S., Nos. 798-99T.—San., dated the 18th September 1909, forwarding the above, and asking for the despatch of the papers to be read at the Conference in time to reach Simla by the 1st October 1909.	/ 10
21.	dated the 20th September 1909, fixing the date of the Conference to be held at Simla.	10
22.	To Mr. W. Maude, I.C.S. Mgjor L. Rogers, I.M.S. Rai Kissori Lai Goswami Bahadur the 25th September 1909, forwarding the above for information.	10
23.	From Captain A. T. Gage, I.M.s., No. 2—8-16F., dated the 8th October 1909, reporting that he would be absent for about a fortnight.	10

MALARIA CONFERENCE AT SIMLA.

[File S. $\frac{C}{3}$ 1.] [No. 3.]

No. 1376-83, dated Simla, the 12th August 1909.

From-Sir Harold Stuart, K.C.V.O., C.S.I., Secretary to the Government of India, Home Department,

To-The Secretary to the Government of Bengal, Municipal Department.

THE Governor-General in Council has recently had under his consideration a proposal of the Sanitary Commissioner with the Government of India that a permanent organization should be formed to enquire systematically into problems, both practical and scientific, connected with malaria in India. The importance of the subject, more especially in view of the devastating epidemics of last year, does not require to be insisted on. The number of deaths ascribed to fever throughout India approximates to four and-a-half millions, representing a mean death rate of nearly 20 per thousand; and though this total is greatly in excess of the actual figure, owing to the general practice of ascribing to "fever" deaths which are in reality due to other causes, yet it has been estimated, from indications afforded by certain special enquiries and by the dispensary returns, that the actual death rate from malarial fever is about 5 per thousand. This represents about 1,130,000 deaths, and, as the case mortality in malarial fever is ordinarily low, a death rate of even 5 per mille indicates an amount of sickness, much of it preventible, which clearly calls for the best efforts that

Government can make to diminish it.

While many important problems regarding the epidemiology of malarial fever remain to be worked out, its etiology is sufficiently well known to make it possible to lay down with confidence the broad lines which should be followed in devising measures of prophylaxis and treatment, adequate consideration being given to local conditions, which in one case may indicate operations against the mosquito as the most useful method of combating the disease, and in another, owing to the impracticability or the prohibitive cost of attempts to extirpate the mosquito, may point to the prophylactic use of quinine as the only available measure. In every case, however, it is essential that the people should be induced to adopt the measures which may be most suitable to the areas in which they live, and it is therefore necessary that any scheme for an organised attempt to deal with the malaria problem throughout India should be framed in consultation with administrative officers intimately acquainted with local conditions in the various provinces. The Governor-General in Council has therefore decided to convene a Conference to examine the whole question, and to draw up a plan of campaign for the consideration of the Government of India and of the Local Governments, and I am directed to express the hope that His Honour the Lieutenant-Governor will be ready to co-operate with him by appointing delegates to the Conference, and by informing him of any subjects which he specially desires to have discussed.

3. The Conference will assemble at Simla on the 11th October, and it is expected that it will last about a week. His Excellency in Council hopes to be able to arrange for the attendance of the following medical officers:—

The Principal Medical Officer, His Majesty's Forces in India.

Director General, Indian Medical Service.

Sanitary Commissioner with the Government of India. Lieutenant-Colonel Semple, R.A.M.C. (Retired), Director, Central

Research Institute, Kasauli.

Major James, I.M.S., Statistical Officer to the Government of India in the Sanitary and Medical Departments.

Captain Christophers, I.M.S., Assistant to the Director, Central Research Institute, Kasauli.

I am to request that His Honour the Lieutenant-Governor will be so good as to permit Captain Gage, Superintendent of the Royal Botanic Garden, Calcutta, and of Cinchona Cultivation in Bengal, to attend the Conference.

The Governor-General in Council will be glad if His Honour the Lieutenant-Governor will nominate (a) an administrative officer of experience, (b) a medical officer and (c) an Indian gentleman to attend the Conference; and if he will report the names of the delegates selected. Officers not stationed in Simla who are deputed to the Conference will receive travelling allowance and halting allowance at the usual rates, but no deputation allowance, and similar allowances will be paid, if he so desires, to any Indian gentleman not in Government service who may be nominated a member.

5. The detailed programme for the Conference has not yet been settled.

but the following is a rough outline of the subjects to be discussed:-

(i) the distribution of malaria in India as a whole and in the various provinces, with special reference to the sickness and mortality

to which it gives rise;

(ii) the measures of prevention which have been adopted in the different provinces—drainage, mosquito destruction, the distribution of quinine—and the measure of success which has attended each; and

(iii) the improvement of schemes of prevention, including the question of the most suitable form of quinine and the agency by which

it can most effectively be distributed.

The Government of India hope to be able to arrange for several papers of scientific interest to be read by some of their delegates, and will be glad to receive, in addition to suggestions as to the subjects to be discussed, proposals for papers to be read by delegates of the Local Government.

[No. 4.]

[FILE S. $\frac{C}{3}$ 2.]

Nos. 1388-90San.

Copy of the above is forwarded to the Inspector-General of Civil Hospitals, Bengal, Sanitary Commissioner, Bengal, and Superintendent, Royal Botanic Garden, for favour of a very early expression of opinion, and for any suggestions they may have to offer on the subject. Inspector-General of Civil Hospitals is requested to nominate a medical officer to be sent as a delegate to the Malaria Conference.

By order of the Lieutenant-Governor of Bengal.

H. WHEELER,

Secretary to the Goot. of Bengal.

CALCUTTA; MUNPL. DEPT.—Sanitation, The 19th August 1909.

[No. 5.]

[File S. $\frac{C}{3}$ 3.]

No. 1451San., dated Calcutta, the 25th August 1909.

From-H. Wheeler Esq., i.c.s., Secretary to the Government of Bengal, Municipal Department,

To-The Secretary, British Indian Association.

I AM directed to enclose herewith copy of a letter, No. 1376-83, dated the 12th instant, from the Government of India in the Home Department, explaining the proposal to hold a Conference at Simla, commencing on the 11th October 1909, for the discussion of the prevalence of malaria in India, and the

measures which can be taken for its prevention.

2. The Lientenant-Governor has been requested to nominate an Indian gentleman to attend the Conference; but, before doing so, His Honour would be glad if the British Indian Association would favour him with the name of any gentleman who, in their opinion, would be able to assist the Conference by his knowledge of the local conditions in this province, and who would be willing to attend at Simla under the conditions proposed by the Government of India. In this connection the name of Dr. Kailash Chandra Bose has been

suggested to His Honour, but it is not understood that the Government of India desire that the nominee should necessarily be a medical man.

The favour of an early reply is requested, in order to permit of

arrangements being made.

[FILE S. $\frac{C}{3}$ 4.] No. 6.

No. 2-8-4F., dated Sibpur-Calcutta, the 21st August 1909.

From—Captain A. T. Gage, I.M.S., Superintendent, Royal Botanic Garden Calcutta, and of Cinchona Cultivation in Bengal,
To—The Secretary to the Government of Bengal, Municipal Department.

With reference to your endorsement No. 1390San., dated the 19th August 1909, forwarding copy of a letter from the Government of India, Home Department, No. 1376-83, on the sudject of a Conference on malaria to be held at Simla in October next, I have the honour to submit the following observations.

2. The administering of quinine being one of the chief methods of combating malaria, it is quite appropriate that the Government department concerned with the production of the drug should be represented in a Conference to discuss malaria and its prevention. There would be no difficulty in my attending the Conference, if permission be given. The greater part of the discussions that are likely to take place would probably be along medical and hygienic lines, and so far only indirectly concern the Cinchona Department. Certain aspects of the discussions that are likely to take place are however certain to directly affect the Cinchona Department. I mean for instance such questions as the form in which quinine is to be administered, and the agency of its distribution. The Conference may recommend that hydrochloride of quinine should be manufactured instead of sulphate of quinine, as the former is stated to be more readily, assimilated. Such a recommendation if carried is stated to be more readily assimilated. Such a recommendation, if carried into effect, would necessitate modification of the present process of manufacture, but not to any serious extent. So the agency of distribution might very well be of direct interest to the Cinchona Department.

As my own contribution to the Conference, I propose to prepare a paper—which need not however be read, unless the Conference so desire—giving a succinct account of the introduction of cinchona into India, a sketch of the history of the Bengal Cinchona Department, a brief descrintion of the cinchona plantation and its working, and a detailed account of the processes involved in the production of quinine and its allied sallts. As very few or any of the members of the Conference are likely ever to have seen a cinchona tree or a quinine factory, I would have my paper accompanied with maps, photographs and specimens of quinine in its various stages from the crude to purified article. I should endeavour to have ready all the facts regarding the plantation yield, cultivation, cost of manufacture of sulphate or hydrochloride, capacity of the factory now, possible capacity hereafter, etc., etc.

Cinchona Department could reasonably be expected to produce at such a Conference.

As regards suggestions for subjects to be discussed, the Conference might at least tentatively discuss the effect of any proposed measures on the future demand for quinine, of the requirements of India as a whole and the means for meeting such demand the estimate and kindred topics. I fancy some member of the Conference is likely to bring forward the question of the price charged by Government for quinine, but I would not propose to do so myself, as I think this is a question that Government could deal with at first hand and one which would scarcely come within the functions of the Conference as a Conference.

In short, I should endeavour to be prepared to give any information that the

5. As the preparation of the material with which I would require to provide myself will take some time, of which there is not over much to spare, I would make my autumnal inspection of the plantation and the factory sooner than usual, going up early in September, so as to give me about just enough time to discuss details with the executive officers of the department to prepare my paper, to take photographs, to visit Munsong Plantation, and to return to Calcutta early in October. If Government approves of my suggestion

i would solicit the favour of being informed as soon as convenient so as to enable me to make the necessary arrangements.

[FILE S. $\frac{\mathrm{C}}{3}$ 5.] [No. 7.]

Nos. 1534-35San., dated Calcutta, the 31st August 1909.

From-H. Wheeler, Esq., i.c.s, Secretary to the Government of Bengal, Municipal Department,

To-(1) W. Maude, Esq., Commissioner of the Patna Division; (2) Major R. Rogors, I.M.s., Professor of Pathology, Medical College, Calcutta.

I am directed to forward, for your information, a copy of a letter from the Government of India in the Home Department, No. 1376-83, dated the 12th August 1909, explaining the proposal to hold a Conference at Simla, commencing on the 11th October next, for the discussion of the prevalence of malaria in India, and the measures which can be taken for its prevention, and to say that the Lieutenant-Governor has selected you to attend the Conference.

2. I am to ask whether you have any suggestions to offer as to the papers to be read or the points to be discussed at the conference.

3. The favour of a very early reply is requested.

3. The favour of a very early reply is requested.

[File S. $\frac{C}{3}$ 6.] [No. 8.]

Nos. 8484, dated Calcutta, the 25th August 1909.

From—Col. R. Macrae, M.B., I.M.S., Inspector-General of Civil Hospitals, Bengal, To—The Secretary to the Government of Bengal, Municipal Department.

I HAVE the honour to acknowledge the receipt of Government order No. 1388San., dated the 19th instant, for an expression of my opinion on the Government of India scheme for a permanent organization to enquire system. atically into problems, both practical and scientific, connected with malaria in India. I am also asked to nominate a medical officer and an Indian gentleman to attend the Conference on the subject, which it is proposed to hold in Simla on the 11th October.

2. In reply, I have the honour to say that I am in entire agreement with the proposal. It will be necessary to formulate a definite policy to be sustained and continuous to have any appreciable effect. It seems to me that the chief problem to solve is how best to enlist the aid of the people generally. The measures which are required for prophylaxis and treatment are pretty well known; the difficulty is in carrying them out; and without the aid of the people in a country like this the problem is insoluble. The permanent organization must begin by educating the people to improve their village sites, where lies the main difficulty.

3. The medical officer whom I would recommend as a delegate is Major W. W. Clemesha, I.M.S., a Deputy Sanitary Commissioner in Bengal. I consider him the most suitable, as on him would devolve subsequently the execution of some of the measures which may be suggested.

4. As regards an Indian gentleman delegate to the conference, I have the honour, after careful consideration, to suggest Doctor Koilash Chandra Bose, who I think would be a suitable man. While I do not think it at all necessary that the Indian gentleman need be a Doctor, Dr. Koilash Chandra Bose is both a Doctor and a sensible man of considerable influence among certain sections of the community, and his advice would carry considerable weight.

[FILE S. $\frac{\mathbf{C}}{3}$ 7.] [No. 9.]

Dated Kurseong, the 23rd August 1909. From—Dr. A. G. Newell, M.D., C.M., L.M., D.P.H. To—His Honour the Lieutenant-Governor of Bengal.

With reference to the Conference on malaria to assemble at Simla next October, to which the various Local Governments are requested to send representatives, I have the honour to state that, should you care to nominate me as one, I should be pleased to attend as one who is specially interested in the subject and having had nearly seven years' experience in the malarious districts of the Dooars and Terai (of which latter I am still medical officer) and aware of local conditions. In this connection I may also add I am the author of a book on Blackwater Fever, a condition associated with malaria.

I trust you will forgive my writing you on the subject.
I understand that all attending the Conference will have their travelling and hostel expenses paid.

[No. 10.]

[FILE S. $\frac{C}{3}$ 8.]

No. 654T.—San., dated Darjeeling, the 3rd September 1909.

From-H. WHERLER, Esq., I.c.s., Secretary to the Govt. of Bengal, Munpl. Dept., To-Dr. A. G. NEWELL.

In reply to your letter dated the 23rd August 1909, to the address of His Honour the Lieutenant-Governor, I am directed to say that Government regrets its inability to nominate you to attend the Malaria Conference to be held at Simla next month, as you do not answer the qualifications with regard to which the submission of nominees has been requested, and other selections have already been made.

[No. 11.]

[FILE S. $\frac{C}{3}$ 9.]

No. 653T.—San., dated Darjeeling, the 3rd September 1909.

From—H. Wherler, Eso., i.c.s., Secretary to the Govt. of Bengal, Munpl. Dept., To—The Superintendent, Royal Botanic Garden, Calcutta.

WITH reference to your letter No. 2-8-4F., dated the 21st August 1909, I am directed to say that the Lieutenant-Governor is agreeable to your attending the Conference on malaria to be held at Simla in October next. Honour also approves your proposal to make an early inspection of the cinchona plantations, in order to furnish yourself in time with the necessary materials for the preparation of the papers which you propose to lay before the conference. म डल सचिवालय विभाग

[No. 12.]

[FILE S. $\frac{0}{3}$ 10.]

No. 429, dated Calcutta, the 1st September 1909.

From-Maharaja Sir Product Coomar Tagore, Kt., Honorary Secretary, British Indian Association,

To—The Secretary to the Government of Bengal, Municipal Department.

I AM directed by the Committee of the British Indian Association to acknowledge the receipt of your letter No. 1451San., dated the 25th August last, forwarding copy of the Home Department letter, relating to the proposal

to hold a Conference at Simla for the discussion of the question of the prevalence and prevention of malaria, and inviting the Association to nominate a representative to take part in the proceedings of the proposed Conference.

2. The Committee note that, though the name of Dr. Kailas Chandra Bose, Rai Bahadur, c.i.e., has been suggested in this connection to His Honour the Lieutenant-Governor, their choice need not be restricted on that account, as the Government of India do not, so the Committee understand from your letter, desire that the nominee should necessarily be a medical man and as, moreover, it is expressly laid down in your letter that, in the opinion of His Honour, the nominee should be one with some practical knowledge of the local conditions obtaining in the interior of this province.

3. Under the circumstances, without desiring to disparage in the slightest degree the fitness of Dr. Bose, and having regard also to the fact that the medical profession is already adequately represented in the persons of some of its most distinguished and experienced members, the Committee venture to recommend to Sir Edward Baker the appointment of an experienced zamindar and adapted to the proceed Conference and accordingly when the slightest as a delegate to the proposed Conference, and accordingly submit respectfully the name of Rai Kissori Lal Goswami Bahadur, lately a member of the Legislative Council, who, in the opinion of the Committee, is specially fitted to render useful service to the Conference, by reason of his minute and first-hand knowledge of the local conditions prevailing in some of the malaria-ridden tracts of this province.

[No. 13.]

[FILE S. C 11.]

No. 692T.—San. dated Darjeeling, the 9th September 1909.

From—H. Wheeler, Esq., i.c.s., Secretary to the Govt. of Bengal, Munpl Dept., To—The Honorary Secretary to the British Indian Association.

I am directed to acknowledge the receipt of your letter No. 429, dated the 1st September 1909, and in reply to say that the Lieutenant-Governor accepts the Association's nomination of Rai Kishori Lal Goswami Bahadur as a delegate from this province to the Conference on malaria to be held at Simla next month; a communication has been addressed to that gentleman informing him of his selection.

[No. 14.]

[Fig. 8. $\frac{C}{3}$ 12.]

No. 693T .- San., dated Darjeeling, the 9th September 1909.

From-H. WHEELER, Esq., 1.c.s, Secretary to the Govt. of Bengal, Munpl. Dept., To-Rai Kishori Lai. Goswami Bahadur.

I am directed to forward, for your information, a copy of a letter from the Government of India in the Home Department, No. 1376-83, dated the 12th August 1909, explaining the proposal to hold a Conference at Simla, commencing on the 11th October next, for the discussion of the prevalence of malaria in India, and the measures which can be taken for its prevention, and to say that the Lieutenant-Governor has, on the nomination of the British Indian Association, decided to depute you as a delegate from this Government to the Conference, in the event of your being agreeable to accepting the nomination.

2. I am to ask whether you have any suggestion to offer as to the papers to be read or the points to be discussed at the Conference.

3. The favour of a very early reply is requested.

मित्रमंडल सचिवासय विभाग

[No. 15.]

बेहार राज्य अभिने सामार निदेशालय) [File 8. C 13.]

dated Serampore, the 13th September 1909.

From—RAI KISSORI LAL GOSWAMI BAHADUR,
To—The Secretary to the Government of Bengal Manicipal Department.

I have the honour to acknowledge the receipt of your letter No. 693T .-San., dated the 9th instant, enclosing a copy of a letter from the Government of India in the Home Department, No. 1376-83, dated the 12th August 1909, and in reply I beg to inform you that I am thankful to His Honour the Lieutenant-Governor for having appointed me a delegate to the Conference at Simla for the discussion of the prevalence of malaria in India. I am agreeble to attend the Conference.

I have at present no special suggestion to offer as to the papers to be read, or the points to be discussed, at the Conference.

[No. 16.]

[FILE S. C 14.]

No. 1001D., dated Calcutta, the 7th September 1909.

From-Lieut.-Col. F. C. Clarkson, I.M.S., Sanitary Commissioner for Bengal, To-The Secretary to the Government of Bengal, Municipal Department.

WITH reference to Government order No. 1389San., dated the 19th ultimo, asking for an expression of my opinion in connection with the measures for the prevention of malaria to be discussed at the forthcoming Conference at Simla, I have the honour to say that the question of dealing with this disease resolved itself into that dealing with prophylaxis or preventive measures and that dealing with treatment. As regards the latter, there is very little difference of opinion, but doubtless the methods by which quinine is to be brought within the use of all, whether by sale of quinine at easily accessible centres. or by its free distribution by itinerant Hospital Assistants, will be discussed.

2. It is in regard to preventive measures that great differences of opinion will be found. These measures will have to be considered from the educational point of view, and as regards ways and means. Until the people are educated as to the prophylactic value of quinine, very little can be effected by pressing its use for this purpose; and until they are educated to a thorough belief in the mosquito theory, it is difficult to convince them as to the value of village sanitation. The doctrine of self-help, especially as regards the community as distinct from the household, also requires to be inculcated. With regard to the actual ways and means to be adopted, the measures which are advocated are well known, but considerable doubts are entertained as to the feasibility of their general adoption. The measures which are advocated and which have been tried in specially selected parts have consisted in draining away collections of water, in filling up hollows, in deepening the sides of tanks in kerosining collections of water not used for drinking purposes, in providing larvae-eating fish (Genus Haplechilus) in tanks, etc., where the anopheles are known to breed, and in the clearing of jungle. These measures have for the most part been undertaken at Government expense, and in only a few instances have similar measures been taken by local zamindars outside the towns. I am of opinion that these operations should not be undertaken at Government expense, but that these operations should not be undertaken at Government expense, but that the people themselves should be compelled to undertake them under the Local Self-Government Act, taxing themselves, if necessary for the purpose. To be of any use, the work should be regular and continuous; spasmodic efforts result in more less waste of money. When it is found that the above measures cannot be satisfactorily carried out owing to natural configuration of the land or from other causes, then I think that Government should step in and help with financial assistance in having large drainage works, undertaken such as are now being done or large drainage works undertaken, such as are now being done or contemplated in the Magra Hât, Nawai Soontee, Bhairab and the Argowal (Midnapore) Schemes. The utilisation of river-borne silt for filling up large depressions can also only be usefully done under Government supervision (as is now being done in the case of the Bistopore jheel at Berhampore) as well as the treatment of so-called "dead rivers," the neighbourhood of which is so intensely malarious, and which could probably be best bourhood of which is so intensely malarious, and which could probably be best improved by assisting nature with the silting up-process. It will be seen that the districts containing these dead rivers, viz., Nadia, Murshidabad, Jessore and Purnea, contain a much larger proportion of highly malarious than as any other district.

3. As the delegates appointed to represent Bengal have little intimate knowledge of the anti-malarial work and of the investigations that have been undertaken in Bengal in recent years, they should be supplied with the reports of the Bengal Drainage Committee and of Captain Forster, and I can

supply them with statements showing-

(a) the thanas in which the average death-rate for the last five years from "fever" was over 30 per mille;

(b) the large drainage schemes which are being undertaken or have recently been completed;

(c) the methods being adopted to ascertain their effect on public health (i.e., spleen counts by Assistant Surgeons);

(d) the operations undertaken by Government as object-lessons;

(e) the methods of affording medical relief in malaria-stricken localities;

(f) the quinine circular;

(g) circular on anti-malarial operations to rounicipalities;

(h) results of Galsi investigations.

4. The Principal points requiring discussion are:

(i) the distinguishing features between malaria and kala-azar, apart from the detection of the causative micro-organism in the blood, as the continued administration of quinine in cases of kala-azar tends to discredit its use among the malarious;

(ii) the conditions other than rainfall, if any, which conduce to particular areas being fairly healthy in some years, and

particularly malarious in others;

(iii) the influence that railway embankments, embankments to prevent floods, and irrigation schemes have in increasing malaria may be considered;

(iv) the necessity of appointing a special officer for research work only

in each province should also be considered.

[No. 17.]

[File 8. $\frac{C}{3}$ 15.]

No. 787T .-- San., dated Darjeeling, the 18th September 1909.

From—H. Wheeler, Esq., i.c.s., Secretary to the Govt. of Bengal, Munpl. Dept., To -The Secretary to the Government of India, Home Department.

I AM directed to acknowledge the receipt of your letter No. 1376-83, dated the 12th ultimo, announcing the intention of the Government of India to convene a Conference at Simla to consider the question of the prevalence of malaria in India, and the measures which may appropriately be taken to diminish the mortality attributable to this cause. The Lieutenant-Governor is asked to permit Captain Gage, Superintendent of the Royal Botanic Garden, Calcutta, to attend the Conference and to nominate (a) an administrative officer of experience, (b) a medical officer and (c) an Indian gentleman to attend the Conference, and to report the names of the delegates thus selected. Suggestions as to the subjects to be discussed, and for papers to be read by the delegates of the Local Government, are also invited.

2. Instructions have been issued to Captain Gage directing him to attend the Conference, while, as other delegates from this province, His Honour desires

to nominate the following gentlemen:-

(a) Mr. W. Maude, Commissioner of the Patna Division.

(b) Major L. Rogers, Professor of Pathology at the Medical College, Calcutta, and Bacteriologist to Government.

(c) Rai Kishori Lal Goswami Bahadur, Member of the Provincial Legislative Council.

3. In the opinion of the Lieutenant-Governor it is not desirable to fetter the Conference with detailed instructions as to the points which should be discussed. The Inspector-General of Civil Hospitals (Colonel Macrae) considers that the most important problem to be solved is the best method of enlisting the aid of the people generally in any preventive measures which it may be deemed expedient to adopt. Malaria must be combated in the villages themselves, and this is impossible without the co-operation of the people. This point is also emphasised by the Sanitary Commissioner (Colonel Clarkson), who further considers that the following points are worthy of discussion :-

(i) The best methods of making quinine easily accessible to all requiring it, whether by sale at convenient centres, or by its free distri-

bution by itinerant medical subordinates.

(ii) The agency by which measures for the improvement of village sanitation should be undertaken, whether at the expense of Government, or by imposing this responsibility upon landholders

or upon villagers.

(iii) The distinguishing features between malaria and kala-azar, apart from the detection of the causative micro-organism in the blood. Colonel Clarkson remarks that the continued administration of quinine in cases of kala-azar tends to discredit its use as a remedy for malaria.

(iv) The conditions (if any) other than rainfall, which in different years cause particular areas to be either specially unhealthy or the

reverse.

(v) The influence upon malaria of railway embankments, protective embankments against floods, and irrigation schemes.

(vi) The desirability of establishing in each province a permanent agency for the continuance of research.

Captain Gage draws attention to the fact that the recommendations of the Conference may have an important bearing upon the operations of the Cinchona

Department. Apart from the agency for the distribution of quinine (referred to by Colonel Clarkson), the Conference will doubtless consider the best form in which quinine should be made up for distribution, and the methods of manufacture and the output required from the factory may be directly affected. He proposes to prepare a paper detailing concisely the history of the introduction of einchona in India, and the origin and development of the Cinchona Department, together with a brief description of the Cinchona Plantations and of the processes of manufacture.

4. These suggestions appear to the Lieutenant-Governor to be generally suitable, but the exact programme to be followed may more appropriately be decided by the Government of India, who will have the recommendations of

different provinces before them.

[No. 18.]

[FILE S. $\frac{C}{3}$ 16.]

No. 788T.—San., dated Darjeeling, the 18th September 1909. From—H. Wheeler, Esq., i.c.s., Secretary to the Govt. of Bengal, Munpl. Dept., To—The Sanitary Commissioner for Bengal.

I am directed to acknowledge the receipt of your letter No 1001D., dated the 7th instant, on the subject of the proposed Malaria Conference to be held

at Simla.

2. The gentlemen who will attend the Conference on behalf of this

Government are as follows:-

(a) Mr. W. Maude, Commissioner of the Patna Division.
(b) Major Rogers, Professor of Pathology, Medical College, Calcutta,
(c) Rai Kissori Lal Goswami Bahadur, Member of the Provincial Legislative Council.

I am to request that you will be so good as to supply these gentlemen with the information suggested in your letter regarding recent enquiries into malaria in Bengal, and the prevailling rates of mortality in certain areas, etc.

तिहारी प्रविद्वार शाल्य अभिलेखागार निदेशालय) Nos. 789-91T.-San.

By order of the Lieutenant-Governor of Bengal, Asynot at achavalle atomorphic on an achara, -o

Under-Secretary to the Govt. of Bengal.

The 18th September 1909.

[No. 19.]

[File S. $\frac{C}{3}$ 17.]

No. 1509, dated Simla, the 13th September 1909.

From-P. W. Monie, Esq., i.c.s., Under-Secretary to the Government of India, Home Department,

To-The Secretary to the Government of Bengal, Municipal Department.

In continuation of the Home Department letter No. 1378, dated the 12th August 1909, I am directed to request that, with the permission of His Honour the Lieutenant-Governor, it may be arranged that copies of any papers which the delegates wish to read at the Malaria Conforence may be despatched so as to reach Simla by the 1st October.

[No. 20.]

[FILE S. 3

Nos. 798-99T.—San., dated Darjeeling, the 18th September 1909. From—H. Wheeler, Esq., i.c.s., Secretary to the Govt. of Bengal, Munpl. Dept.,

To—(1) Cant. A. T. Gage, i.m.s., Superintendent, Royal Botanic Garden, Calcutta.

(2) Major L. Rogers, i.m.s., Professor of Pathology, Medical College, Calcutta.

In continuation of Government order No. 65ST.—San., dated the 3rd September 1909.

I am directed to forward copy of a letter, No. 1509, dated the 18th September 1909.

September 1909, from the Government of India, in the Home Department, and to request that copies of any papers which you may wish to read at the approaching Malaria Conference may be despatched by you direct to the address of the Secretary to the Government of India in the Home Department, in time to reach Simla by the 1st October.

[No. 21.]

[FILE S. $\frac{C}{3}$ 19.]

No. 1545, dated Simla, the 20th September 1909.

From-P. W. Monie, Esq., i.c.s., Under-Secretary to the Government of India, Home Department,

To-The Secretary to the Government of Bengal, Municipal Department,

WITH reference to paragraph 3 of the Home Department letter No. 1378, dated the 12th August 1909, I am directed to state, for the information of the Lieutenant-Governor, that the opening meeting of the Malaria Conference at Simla will be held at 11 A.M. on the 12th, instead of the 11th October 1909.

[No. 22.]

[FILE S. $\frac{C}{3}$ 20.]

Nos. 833-36T.-San.

Copy of the above is forwarded to (2) W. Maude, Esq., I.C.s. (3) Major L. Rogers, I.M.S. (4) Rai K. L. Goswami Bahadur, for information.

By order of the Lieutenant-Governor of Bengal, मित्रिमंडल सिविवालय विभा

S. N. MITRA,

Under-Secy. to the Govt. of Bengal.

MUNPL. DEPT.—Sanitation, The 25th September 1909.

No. 23.7

[FILE S. $\frac{C}{3}$ 21.]

No. 2-8-16F., dated Calcutta, the 8th October 1909.

From—Captain A. T. Gagr, i.m.s., Superintendent, Royal Botanic Garden, Calcutta, and of Cinchona Cultivation in Bengal,

To—The Secretary to the Government of Bengal, Municipal Department.

I HAVE the honour to report that I am leaving for Simla this evening to attend the Malarial Conference which opens there on the 12th October 1909. As the Conference is expected to last a week, I shall be absent, including the journeys to and from Simla and attendance at the Conference, for probably about affortnight.

MUNICIPAL DEPARTMENT.

MEDICAL.

FILE S. -

K.-W.-A Proceedings for November 1909, Nos. 3-23.

Malaria Conference at Simla.

From the Government of India, Home Department, No. 1376-83, dated the 12th August 1909.

THE Government of India have decided to hold a Conference at Simla in October next to discuss and advise on the question of dealing with malaria. They invite the co-operation of this Government in the way of appointing delegates to the Conference, and suggesting subjects for discussion. They ask that Captain Gage may be permitted to attend the Conference, and want us to nominate-

(a) an administrative officer of experience,(b) a medical officer, and

(c) an Indian gentleman,

as delegates to the Conference.

Copies of India's letter may be sent to the Inspector-General of Civil Hospitals, Sanitary Commissioner and Captain Gage for a very early expression of opinion, and for any suggestions they may have to offer. The Inspector-General will suggest the medical officer who should be sent as a delegate to the Conference, but Government will have to nominate the administrative officer and Indian gentleman.

E. H. P.—18-8-1909.

DISTRIBUTE copies as proposed; then resubmit.

H. Wheeler-19-8-1909.

Sanitary Commissioner Supermendent, Royal Botanic Garden, Nos. 1388—90San., dated the 19th August 1909.

Inspector-General, Civil Hospitals-

We have already asked you officially as to nominating a medical man—probably Major Rogers. Would you help with two or three names of possible Indian gentlemen which I might submit to His Honour.

H. WHEELER-20-8-1909.

SECRETARY-

I have only just got this file. I can only think at the moment of Dr. Koilash Chandra Bose. Major Rogers would no doubt be useful; but I think on the whole the most suitable medical officer would be Major Clemesha, Deputy Sanitary Commissioner.

I am just leaving for Burdwan, and will look into this again on my return.
R. Macrae—23-8-19.9.

TAKEN up to His Honour to-day. Write to Secretary, British Indian Association, as drafted.

H. WHEELER-24-8-1909.

To Secretary British Indian Association No. 1415San., dated the 25th August 1909.

From Superintendent, Royal Botanic Garden, No. 2—8-4F., dated the 21st August 1909.
Resurmitted with letter from Captain Gage. His proposal to visit the Cinchona Plantation early next month may be approved. E. H. P.-26-8-1909.

HIS HONOUR-

This is the matter of the proposed Malaria Conference at Simla. We have to nominate-

(a) an administrative officer of experience,

(b) a medical man, and

(c) an Indian gentleman.

As regards the last, we have addressed the British Indian Association, and their reply is awaited; but orders should be passed regarding the other two, in order that the two officers selected may be warned.

3. As regards the suggestion that Mr. Duke would be suitable for the administrative officer, especially as he would be at Simla about that time, I have discussed with him and

Sir Charles Allen. They both press that this arrangement should not be insisted upon, since Sir Charles Allen desires to be relieved early in October, and the Conference does not begin till the 11th, and will last about a week.

Failing this, I have also discussed alternatives with them, and we suggest the following

If a Commissioner is required, either Messrs. Maude, McIntosh or Levinge.
 If a Collector will suffice, either Mr. Forrest or perhaps Mr. Bompas.

4. As medical officer, after discussion with Colonel Macrae, I propose Major Rogers who has made various special enquiries into the prevalence of malaria in Bengal.

5. We are further asked to suggest papers which might be read by the delegates, and subjects which might be discussed. Captain Gage, whose attendance has been specially asked for by the Government of India, proposes, if desired, to prepare a paper describing the history of cinchona cultivation in Bengal, and the methods and capabilities of the factories. Further, for discussion, he proposes the effect of any suggested measures on the future demand for quinine, the estimate of the requirements of India as a whole, and the means of meeting them. We might put these two suggestions before the Government of India. We may also tell Captain Gage that we are agreeable to his attending the Conference.

H. Wheeler—26-8-1909.

Mr. Maude.

2. Major Rogers.

Nominee of British Indian Association ; otherwise as proposed. E. N. B[AKER].—27-8-1909.

Address Mr. Maude and Major Rogers officially, informing them of their selection, and asking if they have any suggestions to offer as to papers to be read or points to be discussed.

H. WHEELEB-28-8-1909.

To W. Maude, Esq. and Major. L. Rogers, Nos. 1534-35San., dated the 31st August 1909.

From the Inspector-General of Civil Hospitals, Bengal, No. 8484, dated the 25th August 1909.

Nominates Major Clemesha and Rai Kailash Chandra Bose Bahadur to attend the Malaria Conference.

महल स्थितालय विभाग

For orders. C. C. G.—28 8-1909.

Covered by orders already passed. H. Wheeler—30-8-1909.

From Dr. A. G. Newell, dated the 23rd August 1909.

Asks that he may be nominated to attend the Conference.

The Government of India have asked this Government to nominate a "medical officer" in the employ of Government, but not an outsider. Dr. Newell is a private practitioner.

For orders.

C. C. G.—28-8-1909.

Say that Government regrets its inability to nominate him, as he does not answer the qualifications with regard to which the selection of nominees has been requested. H. Wheeler - 30-8-1909.

DRAFT to Dr. Newell put up. A draft to Captain Gage is also submitted for approval. E. H. P.—2-9-1909.

H. WHEELER-3-9-1909.

To Dr. Newell, No. 654T.—San., dated the 3rd September 1909. To the Superintendent, Royal Botanic Garden, No. 653T.—San., dated the 3rd September 1909.

From the British Indian Association, No. 429, dated the 1st September 1909. THE Association nominate Rai Kishori Lal Goswami Bahadur. Е. Н. Р.—4-9-1909.

TAKEN up. Accept the nomination and address the Rai Bahadur. H. WHEELER- 7-9-1909.

To the British Indian Association, No. 692T.—San., dated the 9th September 1909. To Rai Kishori Lal Goswami Bahadur. No. 693T.—San., dated the 9th September 1909.

From Rai Jadu Nath Mazumdar Bahadur, Jessore, dated the 7th September 1909.

This gentleman offers to go as a delegate to the Malaria Conference. He may be informed that the Indian delegate has already been selected.

Draft demi-official reply put up. E. H. P.—11-9-1909.

H. WHEELER-11-9-1909.

To Rai Jadu Nath Mazumdar Bahadur, Jessore, No. 27T.—San., dated the 11th September 1909.

From Rai Jadu Nath Mazumdar Bahadur, Jessore, dated the 12th September 1909. DISPOSED of in above reply.

From Rai Kishori Lal Goswami Bahadur, dated the 13th September 1909.

THE Rai Bahadur is agreeable to attend the Conference as a delegate from this province-He has no suggestions to offer as to papers to be read or subjects to be discussed at the Conference.

Е. Н. Р.—13-9-1909.

FILE.

H. Wheeler-15-9-1909.

From Sanitary Commissioner, No. 1001D., dated the 7th September 1909.

The Sanitary Commissioner expresses his opinion in connection with the measures for the prevention of malaria to be discussed at the forthcoming Conference. His suggestions

in paragraph 3 of his letter may perhaps be approved.

Replies from Mr. Maude and Major Rogers to Government orders Nos. 1534-35San., Replies from Mr. Maude and Major Rogers to Government orders Nos. 1301-25521., dated the 31st August, have not yet been received. As, however, our reply to India is being delayed, we need not wait for them, but at once inform India of the names of the persons selected by this Government as delegates to the Conference, and put before them the subjects suggested by Captain Gage and the Sanitary Commissioner for discussion of the Conference. We should also inform them that Captain Gage has been permitted to attend the Conference.

E. H. P.—15-9-1909.

HIS HONOUR-

A draft to the Government of India is for approval. I have embodied in it the suggestions made by Colonel Macrae, Colonel Clarkson and Captain Gage.

2. Colonel Clarkson proposes to supply our delegates with certain relevant literature, and we may instruct him to do so. I have already

Write as drafted.

H, Wherler—17-9-1909.

Communicated a number of papers unofficially to Major Write as drafted. H. WHEELER-17-9-1909. Rogers.

H. Wheeler-16-9-1909. E. N. B[AKER].-16-9-1909.

To the Government of India, Home Department, No. 787T.—San., dated the 18th September 1909.

Sanitary Commissioner To Mr. Mande Nos. 788—91T.—San., dated the 18th September 1909. Rai K. L. Goswami Bahadur

From the Government of India, Home Department, No. 1509, dated the 13th September 1909.

India ask that copies of any papers which the delegates to the Malaria Conference may

wish to read at the Conference may be despatched so as to reach Simla by the 1st October.

The time is rather short, but we may send copies of India's present letter to each of the delegates, and to Captain Gage, and ask that copies of any papers which they may wish to read at the Conference may be despatched by them direct (this will save time) to the Secretary to the Government of India, in the Home Department, in time to reach Simla by let October. 1st October.

E. H. P.—18-9-1909.

Address Captain Gage and Major Rogers only as above. H. WHEELER-18-9-1909.

To Captain Gage, Nos. 798-99T.—San., dated the 18th September 1909.

(4) 16

From the Government of India, Home Department, No. 1545, dated the 20th September 1909.

States that the opening meeting of the Malaria Conference at Simla will be at 11 A.M., on the 12th, instead of the 11th, October 1909.

Copies at once to Mr. Maude, Major Rogers, Rai Kissori Lal Goswami Bahadur, etc.

H. Wheeler—24-9-1909.

DRAFT memorandum put up.

E. H. P.-24-9-1909.

Captain Gage Mr. Maude Major Rogers Rai K. L. Goswami Bahadur , Nos. 833-36T.-San., dated the 25th September 1909.

(विहार राज्य अभिलेखागार निवेशाल्य)

Reference to former cases.

REFERENCE TO LATER CASES.

मंत्रिमंडल सचिवालय विभाग (विहार राज्य अभिलेखागार निदेशालय)

KEEP-WITH.

Office notes (printed).