

Public (1895) Department.

ORDINARY PRINTED.

G.O., No. 990

DATED 2^d Dec: 1895

[Despatch Abstract.]

BACTERIOLOGICAL RESEARCH.

Communicating to the Surgeon-General and to the Sanitary Commissioner, for joint report, resolution of the Government of India regarding a scheme for securing a trained reserve of Chemical Examiners and for establishing an Imperial Bacteriological Laboratory.

BACK PAPERS.

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

FURTHER PAPERS.

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

ORDINARY, PRINTED.

Public DEPARTMENT.
G.O., DATED 2-12-95
No. 990

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[Despatch Abstract.]

Bacteriological Research

Comm^d to the Surgeon
General and to the Sanitary
Commissioner, for favour
of joint remarks, Resolution
of the Govt. of India regarding
a scheme for securing a
trained reserve for Chemical
Examiners and for establishing
an Imperial Bacteriological
Library Laboratory.

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508 of 96

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ENCLOSURES.

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STATEMENT WITH DICTO.

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No. 990, PUBLIC, 2ND DECEMBER 1895.

GOVERNMENT OF MADRAS.

PUBLIC DEPARTMENT.

READ—the following paper :—

Extract from the Proceedings of the Government of India in the Home Department (Sanitary), dated Simla, 31st October 1895, No. 12 San'y.—339.

Read—

Circular to Local Governments, Nos. 331—334, dated the 24th May 1894, regarding the formation of a Chemical Department for the whole of India.

Read also—

The following replies from Local Governments to the above circular :—

From the Government of Madras, No. 512 (Public), dated the 13th July 1894, and enclosures.

From the Government of Madras, Erratum dated the 7th August 1894.

From the Government of Bombay (General Department), No. 3796, dated the 11th October 1894, and enclosures.

From the Government of Bengal, No. 327-T.M., dated the 5th September 1894, and enclosures.

From the Government of the North-Western Provinces and Oudh, No. 3479, dated the 11th September 1894, and enclosures.

From the Government of the Punjab, No. 571-S., dated the 8th August 1894, and enclosures.

Resolution.—In the circular letter to Local Governments of the 24th May 1894, quoted in the preamble, the Government of India circulated for their consideration a proposal that a small, specially-trained department of officers of the Indian Medical Service might be organized in order to provide suitable incumbents for the five appointments of Chemical Examiner under the Governments of Madras, Bombay, Bengal, the North-Western Provinces and Oudh and the Punjab, respectively. The scheme then formulated provided for an increase in the salaries of the several Chemical Examiners, and for the increase in the cadre of the Indian Medical Service by three. It was intended in this manner to provide probationers or supernumerary officers to fill sudden vacancies and an officer to eventually succeed Mr. Hankin as Chemical Examiner of the North-Western Provinces and Oudh.

2. The Local Governments are in favour of increasing the pay of the Chemical Examiners. Their replies to the suggestions contained in the circular of 24th May 1894 disclose considerable difference of opinion as to the source from which Chemical Examiners should be recruited, the employment and training of the supernumerary officers, and the reductions in the appointment of Laboratory Assistants, now held by Assistant Surgeons, proposed in order to provide for the salaries of the supernumerary officers. The Governments of Bengal and the North-Western Provinces and Oudh have advanced reasons for obtaining, in cases of necessity, specialists direct from England for these appointments. Again, the proposal for the employment of supernumerary officers has not received the unqualified support of Local Governments. The Government of Madras observe that the continuance of the appointment of Assistant Chemical Examiner in that Province is an absolute necessity if the multifarious duties attached to the office of Chemical Examiner are to be efficiently and expeditiously discharged and they do not think that a young officer, who is himself only learning the work, would be able efficiently to conduct the duties of Assistant Chemical Examiner. The Lieutenant-Governor of the Punjab has stated that he would be unable to provide temporarily for such an officer as the obligation to give

him employment in charge of a district might operate to prevent deserving Assistant Surgeons from being appointed to the charge of districts. The Bombay Government, moreover, consider that to appoint one of the proposed supernumeraries, when unemployed, to a civil station, would have the effect of recruiting the Chemical Examiner's Department at the expense of the General Civil Medical Administration.

3. The first alternative to the recruitment for the Chemical Examiner's Department by adding to the cadre of the Indian Medical Service which suggested itself was the removal of the appointments of Chemical Examiner altogether from that cadre, and the engagement in England of specialists for fixed periods and on a fixed salary. The objections which occur to the Government of India to an adoption of such a method of recruitment are that it is doubtful whether officers thus recruited would be suitable as lecturers in the Medical Colleges, and that, until it is shown by further experience that members of the Indian Medical Service fail, owing to the absence of special training, to discharge the duties of Chemical Examiners in a satisfactory manner, it is undesirable to depart from the system in force in Europe under which such appointments are uniformly entrusted to medical men. For the present, therefore, the Governor-General in Council is disposed to defer making any more radical change in the conditions of appointment to, and training for, the Chemical Analysers' Department than is involved in the proposals which are set forth below.

4. While the question of revising the Chemical Analysers' Department has been under the consideration of the Government of India, that of devising means for furthering bacteriological researches has also been brought prominently before them. The scientific experiments of Dr. D. D. Cunningham in that branch of science and the practical application of similar investigations by Mr. Hankin, the Chemical Examiner and Bacteriologist to the Government of the North-Western Provinces and Oudh, together with the views generally entertained by the medical profession in India, as expressed in the Resolution passed at the Medical Congress in Calcutta in December 1894, led the Governor-General in Council to consider whether the work of Chemical Examiners might not be combined with bacteriological research. His Excellency in Council is, however, advised that the work and observations in a Bacteriological Laboratory must, if they are to be considered satisfactory, be more or less continuous, and that the character of the materials associated with medico-legal analysis would be prejudicial to exact bacteriological observations.

5. The Government of India need not here enlarge upon the importance of encouraging bacteriological research in a country like India where so many problems in connection with disease await solution, and they are anxious to afford greater facilities, than at present exist, for the prosecution of such studies. With a view to giving practical effect to a scheme for the establishment of a Bacteriological Laboratory in a manner which will not add to the expense to Local Governments of maintaining the staff necessary for the proper conduct of medico-legal work, the Government of India have had under consideration a scheme of which an outline is given below. It is hoped that this scheme will, by providing for the attachment of young medical officers for training, both to the Chemical Analyst's Office and to the Bacteriological Laboratory, also meet to some extent the difficulties brought to notice of filling the offices of Chemical Analyser with properly-qualified men.

6. The objects aimed at in the scheme set out below are (1) to secure a trained reserve for Chemical Examiners and (2) to establish an Imperial Bacteriological Laboratory. To secure these objects it is essential that the Government of India should be assured of the co-operation of Local Governments. It has been established by the testimony both of Dr. Cunningham, at Calcutta, and of Mr. Hankin, at Agra, that bacteriological investigations can be carried on in the plains of India in the hot weather, and the latter is of opinion that the dry climate of Agra is better adapted for the work than that of Lower Bengal. The results already achieved by Mr. Hankin and the energy and enthusiasm with which he has pursued his investigations, combined with the searching and practical character of his enquiries, eminently fit him, in the opinion of the Government of India, for the charge of such a laboratory and for the work of training the officers who may be attached to it. Taking these two factors as a starting-point the Government of India propose, as the first step

towards the attainment of their object, to relieve Mr. Hankin of his duties in connection with the office of Chemical Examiner in order that he may be able to devote his whole time to the work of the Bacteriological Laboratory at Agra.

7. The Government of India desire it to be understood that they do not contemplate the establishment at Agra of a laboratory of purely local interest, but of one at which investigations relating to the whole of India may be undertaken. The Governor-General in Council anticipates that an institution of this kind will be of special value to the Military authorities in helping them towards the discovery of the causes of enteric fever, cholera and other specific diseases and the means of preventing them, and in assisting them in the solution of the difficulties connected with the sanitary surroundings of the troops which are constantly arising. The Sanitary Departments of Local Governments should derive material aid from the inquiries of a competent bacteriologist in all questions affecting the health of the civil population and in pursuing investigations as to the causes of the prevalence of particular diseases, while municipalities will be enabled to receive an authoritative opinion on the purity of their food and water supplies. In meeting all these wants the institution should, in the opinion of the Government of India, contribute materially to the general welfare of the people.

8. The Governor-General in Council has had under his consideration the question how the above proposal can be carried out without incurring additional expenditure, and after carefully considering this matter His Excellency in Council is of opinion that this can best be done in the following manner. It will be necessary to relieve Mr. Hankin of his duties as Chemical Examiner to the Government of the North-Western Provinces and Oudh, and it appears to the Governor-General in Council that the best arrangement will be to make these over to the Chemical Examiner at Calcutta, and to give that officer an addition to his staff to enable him to cope with the extra work that will thus be thrown on him. As at present advised, the Government of India do not anticipate that there will be any administrative objection to this arrangement, which has for its aim the establishment of a Chemical Laboratory at Calcutta, where the whole Chemical Analyst's work of Bengal, Assam, the North-Western Provinces and Oudh and the Central Provinces can be performed, and where, on account of the larger number of commercial analyses, there are greater facilities than at any other centre in Northern India for training young commissioned medical officers as a reserve for the Chemical Analysers' Department. The existing facilities of railway communication between Calcutta and the Provinces, the work of which would go to that centre, are apparently sufficient to make it practicable to carry out this transfer. A further change which appears to the Government of India feasible, and which is necessary in order to effect the economies requisite for meeting the increase in expenditure involved in carrying out the whole scheme, is the reduction of an appointment of Deputy Sanitary Commissioner. As at present advised, the Government of India think this can be effected, without any material diminution in the efficiency of the Sanitary Department, in the Punjab. His Honour the Lieutenant-Governor of that Province should therefore be asked to consider whether, in view of the general advantages which, by the scheme as now set forth, may be expected to be derived from the establishment of an Imperial Bacteriological Laboratory, he will consent to the proposed reduction. The reduction of the appointment has been rendered feasible by the orders which the Government of India understand have been passed from time to time in the Punjab making Civil Surgeons responsible for the vaccination work of their districts; and the Government of India are considering the question of revising the constitution of the various Sanitary Departments, regarding which orders will issue separately. The abolition of the appointment of Deputy Sanitary Commissioner will render it possible to provide for one commissioned medical officer being attached to the Chemical Laboratory at Calcutta. The Government of India further propose to effect eventually an additional saving of Rs. 3,600 per annum by discontinuing, when the present sanction expires in December 1896, the allowance of Rs. 300 per month at present granted to Dr. D. D. Cunningham, for conducting bacteriological and other investigations at Calcutta as Special Assistant to the Sanitary Commissioner with the Government of India. This work will then, under the proposed scheme, be centralized at the Agra Laboratory under Mr. Hankin.

9. It is intended eventually to attach young medical officers for a six months' course of training to the Chemical Analyst's Office or the Bacteriological Laboratory, and in this way to secure a knowledge of these subjects on the part of a considerable proportion of our medical staff.

10. The present financial effect of these proposals is thus summarized :—

	RS.	RS.
Yearly cost of establishing a Bacteriological Laboratory at Agra, including an increase to Mr. Hankin's pay from Rs. 1,000 rising to Rs. 1,250 per month by annual increments of Rs. 50, with effect from the end of the five years' engagement under which he is at present serving	..	26,392
Present yearly cost of the office of the Chemical Examiner to the Government of the North-Western Provinces and Oudh is	..	20,550
Cost * of additional establishment at Calcutta owing to the transfer of the work of the Government of the North-Western Provinces and Oudh there :—		
1 Commissioned Medical Officer in training for the work of Chemical Analyser, Rs. 450 to Rs. 600 ..	6,600	
Exchange compensation allowance	1,269	
House allowance	900	
Grade pay of 1 Assistant Surgeon (Rs. 100 to Rs. 200)	1,800	
Allowance to ditto (Rs. 50 to Rs. 150)	1,200	
Menial servants	192	
Stores and miscellaneous	1,000	
	12,961	
Saving	..	7,589
Saving owing to the abolition of an appointment of Deputy Sanitary Commissioner in the Punjab, Pay Rs. 600 to Rs. 1,000	10,400	
Exchange compensation allowance	2,000	
Saving owing to the discontinuance, in December 1896, of the allowance of Rs. 300 per month to Dr. Cunningham	3,600	
	16,000	
Total Savings	..	23,589

* This will appear on the accounts as Bengal Provincial expenditure; but an assignment to the Bengal Provincial revenues will be made to cover it; and it is here treated as a reduction of the North-Western Provinces Provincial saving.

Thus the ultimate financial effect of the measures now proposed will be an increase in Imperial expenditure of (Rs. 26,392—Rs. 3,600) Rs. 22,792 and a decrease in Provincial expenditure (a) in the North-Western Provinces and Oudh of Rs. 7,589, (b) in the Punjab of Rs. 12,400, or Rs. 19,989 in all; resulting, on the general account, in an ultimate increase of Rs. 2,803 a year.

In consideration of the fact that the Government of India will assume the responsibility of paying for the Chemical work of the North-Western Provinces and Oudh, His Excellency in Council trusts that His Honour the Lieutenant-Governor and Chief Commissioner will have no objection to their appropriating the amount at present expended on the Chemical Examiner's Office in those Provinces towards providing for the discharge in Calcutta of the work now done by that office and towards establishing the Bacteriological Laboratory.

11. The Governor-General in Council thinks it important to give effect to the arrangements above mentioned as soon as is feasible, and His Excellency in Council trusts that the Local Governments concerned will give their careful consideration to the proposals and submit their views thereon at an early date.

Order.—Ordered that a copy of this Resolution be forwarded to Local Governments and Administrations for information.

(True Extract.)

(Signed) L. M. THORNTON,
Dy. Secretary to the Government of India.

To the Government of Madras.

ORDER—No. 990, Public, dated 2nd December 1895.

Communicated to the Surgeon-General and to the Sanitary Commissioner, with the request that they will favour Government with their joint remarks on the subject of the Resolution. The Government attaches much importance to bacteriological research.

(True Extract.)

J. F. PRICE,
Chief Secretary.

To the Surgeon-General.
" Sanitary Commissioner.
" Chemical Examiner.

Exd. A. Raitt.

Gobt. of {1895} Madras.
PUBLIC.

Issued

Recd.

Encl.

G.O., No. 990, 2nd Dec. 1895.

DECEMBER.

Bacteriological Research.

Communicating to the Surgeon-General and to the Sanitary Commissioner, for favour of joint remarks, Resolution of the Government of India regarding a scheme for securing a trained reserve for Chemical Examiners and for establishing an Imperial Bacteriological Laboratory.

CURRENT No. 339

12 Jan 1896
No. 339

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3. The first alternative to the recruitment for the Chemical Examiner's Department by adding to the cadre of the Indian Medical Service which suggested itself was the removal of the appointments of Chemical Examiner altogether from that cadre, and the engagement in England of specialists for fixed periods and on a fixed salary. The objections which occur to the Government of India to an adoption of such a method of recruitment are that it is doubtful whether officers thus recruited would be suitable as lecturers in the Medical Colleges, and that, until it is shewn by further experience that members of the Indian Medical Service fail, owing to the absence of special training, to discharge the duties of Chemical Examiners in a satisfactory manner, it is undesirable to depart from the system in force in Europe, under which such appointments are uniformly entrusted to medical men. For the present therefore the Governor General in Council is disposed to defer making any more radical change in the conditions of appointment to and training for the Chemical Analysts' Department than is involved in the proposals which are set forth below.

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8. The Governor General in Council has had under his consideration the question how the above proposal can be carried out without incurring additional expenditure, and after carefully considering this matter His Excellency in Council is of opinion that this can best be done in the following manner. It will be necessary to relieve Mr. Hankin of his duties as Chemical Examiner to the Government of the North-Western Provinces and Oudh, and it appears to the Governor General in Council that the best arrangement will be to make these over to the Chemical Examiner at Calcutta, and to give that officer an addition to his staff to enable him to cope with the extra work that will thus be thrown on him. As at present advised, the Government of India do not anticipate that there will be any administrative objection to this arrangement, which has for its aim the establishment of a Chemical Laboratory at Calcutta, where the whole Chemical Analyst's work of Bengal, Assam, the North-Western Provinces and Oudh and the Central Provinces can be performed, and where, on account of the larger number of commercial analyses, there are greater facilities than at any other centre in Northern India for training young Commissioned Medical Officers as a reserve for the Chemical Analysts' Department. The existing facilities of railway communication between Calcutta and the Provinces the work of which would go to that centre are apparently sufficient to make it practicable to carry out this transfer. A further change which appears to the Government of India feasible, and which is necessary in order to effect the economies requisite for meeting the increase in expenditure involved in carrying out the whole scheme, is the reduction of an appointment of Deputy Sanitary Commissioner. As at present advised, the Government of India think this can be effected, without any material diminution in the efficiency of the Sanitary Department, in the Punjab. His Honour the Lieutenant-Governor of that Province should therefore be asked to consider whether, in view of the general advantages which, by the scheme as now set forth, may be expected to be derived from the establishment of an Imperial Bacteriological Laboratory, he will consent to the proposed reduction. The reduction of the appointment has been rendered feasible by the orders which the Government of India understand have been passed from time to time in the Punjab making Civil Surgeons responsible for the vaccination work of their districts; and the Government of India are considering the question of revising the constitution of the various Sanitary Departments, regarding which orders will issue separately. The abolition of the appointment of Deputy Sanitary Commissioner will render it possible to provide for one Commissioned Medical Officer being attached to the Chemical Laboratory at Calcutta. The Government of India further propose to effect eventually an additional saving of Rs. 3,600 per annum by discontinuing, when the present sanction expires in December 1896, the allowance of Rs. 300 per month at present granted to Dr. D. D. Cunningham, for conducting bacteriological and other investigations at Calcutta as Special Assistant to the Sanitary Commissioner with the Government of India. This work will then, under the proposed scheme, be centralized at the Agra Laboratory under Mr. Hankin.

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11. The Governor General in Council thinks it important to give effect to the arrangements above mentioned as soon as is feasible, and His Excellency in Council trusts that the Local Governments concerned will give their careful consideration to the proposals and submit their views thereon at an early date.

ORDER.—Ordered that a copy of this Resolution be forwarded to Local Governments and Administrations for information.

[True Extract.]

A. L. Thos. ...

Deputy Secretary to the Government of India.

To The Embry ...

how in force for the supply of lymph shall be discontinued. Lymph supplied from a central institution which should be under an officer of some standing & experience — whether those proposals are practicable, remains to be seen. I imagine from what Dr. King has told me that in some respects they are rather wild. I think however, there is reason in a suggestion he has made in conversation that arrangements might be made for the working of vaccine institute & a bacteriological institute by the same officer. The fact is that since I noted on the paper in G.O. 662, my attention has been strongly drawn to the published reports of Dr. Haffkine's experiments in cholera inoculation. The results of these experiments seem to be 1st. The inoculation is harmless; 2nd, it is effectual as a preservative against cholera, the only doubt being (and this is a matter which can only be solved by time) how long the preservative effect lasts. Now if this is so, (and we should of course have made careful enquiries on the subject), it seems to me that a duty is cast upon the Govt. in this country, where thousands of lives are annually lost by cholera, which it can neither neglect nor for obvious reasons, delegate to any one else, and which is of so imperative a nature that money must be found to carry it out, no matter what other improvements (e.g., of the nature of public works) are postponed. Dr. King tells me that in order to properly use Dr. Haffkine's system

Current No. 3

DEPARTMENT

From

The Government of India
Home Department

No. 12 Aug
339

Dated 31-10-95

Received 6
Regd. 8 -11-95
Enclosures
S.C. 7.

SUBJECT.

Forwarding copy of a
Resolution regarding
Chemical Examiners.

WITH ORDER

Pub c no 3772 of 95 papers
- go. 662 of 3-8-95

Am. and circ

go.

some S.C. to
S.H. 8/11/95

Comm: to the
Surgeon General

30/10/95
8/11/95

For orders whether

a copy of go. 662 of
3.8.95 may be sent

to India to show that the
important subject of bac-
teriology was not over-
looked in this Presidency.

No need to send
to India

To the Surgeon General
Chemical Exr
with a copy of
go. 511
13.7.94.

This Resn. does not affect
Madras, but I think we may
invite the remarks on it of the
S.G. & the San. Comr. - I understand
that the latter has submitted proposals
for a complete reorganization of the
vaccination dept., and
which is that the local management

two things are essential; 1st,
there must be a central labo-
ratory in which the stronger
vaccine can be prepared
by skilled persons; 2nd, the
people who would have to inocu-
late in different parts of
the country (that is, all
medical officers of superior grades)
must be instructed in the com-
paratively simple business of
the preparation of the weaker
vaccine (that first used)
and must be supplied with the
required apparatus. How
all this is to be done, will
have to be worked out - But
I must begin by letting Dr. H.
have his say on this current.
Perhaps he & the S.G. might
be invited to send in their re-
marks jointly.

15/11/95

I think this might be com-
municated to the S.G. & S.C.
with the remark that Govt.
attaches great importance to
bacteriological research. I
know nothing of the vaccination
proposals.

19/11/95

Very well. Let us hear what they have
to say. I am afraid I am rather sceptical
as to Dr. Haffkine's treatment - tho' he is
very probably on the right track. But anyhow
I do not think India will let us set up
our own Bacteriological Laboratory - at least
not yet.

Pub. C. 3788

58

G.O. No 990 d/2 Dec '95

Comm. to the

Surgeon General and
to the Sanitary Comm.
with the request that
they will favour Govt.
with their joint re-
marks on the subject
of the Resolution. The
Govt attaches much
importance to bacteriol-
ogical research.

JJ
28/11/95

J.S.B.
22.11.5

27/11/95

Surge. Genl
Sanitary Comm.
Chemical Comm.
with a copy of G.O.

dated
14/12/95

511
13.7.94

Despatch
As there is a paper which
has been to be sent to the
Sanitary Comm.

Surgeon Genl
Sanitary Comm.
G.O. No 990 Pub.
2-10-95

19/11/20/11
22/11/22/11

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