Local & Munl. (1898) Department.

PRINTED.

G.O., No. 521P

DATED 27. 5. 98

[Despatch Abstract.]

Flying Column's Recording, with remark
letter from the Government of India
forwarding copy of a circular letter
regarding the organisation of ——
in areas infected with plague.

BACK PAPERS.

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

FURTHER PAPERS.

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

Government {1898} of Madras.

LOCAL AND MUNICIPAL.

Recd. } 1898. *Enclosures*

Regd. } *Spare copies*

G.O., No. 521 P., 27th May 1898.

MAY.

Flying Columns.

Recording, with remark, letter from the Government of India forwarding copy of a circular letter on the subject of the utility of — in areas infected with plague.

GOVERNMENT OF MADRAS.

LOCAL AND MUNICIPAL DEPARTMENT.

READ—the following paper :—

From R. NATHAN, Esq., Under Secretary to the Government of India, Home Department (Sanitary), to the Secretary to the Government of Madras, Local and Municipal Department, dated Calcutta, 9th March 1898, No. 481.

In continuation of Home Department Resolution, No. 227—240, dated the 3rd February 1898, I am directed to forward, for the information of His Excellency the Governor in Council, a copy of a circular letter, No. 477—80, of this date, and enclosures, on the subject of the utility of flying columns in areas infected with plague.

ENCLOSURES.

From R. NATHAN, Esq., Under Secretary to the Government of India, Home Department (Sanitary), to the Secretary to the Government of the North-Western Provinces and Oudh, Sanitation Department; the Chief Secretary to the Government of the Punjab; the Resident at Hyderabad; the Agent to the Governor General in Rajputana; dated Calcutta, 9th March 1898, No. 477—480.

I am directed to forward, for [the information of His Honour the Lieutenant-Governor (and Chief Commr.) / your information], a copy of the papers marginally noted on the subject of the formation and use of flying columns in areas infected with plague. Experience in the Bombay Presidency has shown that the system of flying columns is of great value, and I am to recommend for the consideration of the Government of the [North-Western Provinces and Oudh / Punjab] that, in addition to the measures on which stress is laid in the Home Department Resolution, No. 227—240, dated the 3rd February 1898, the system might with advantage be resorted to should the diffusion of plague in [the North-Western Provinces / the Punjab / Hyderabad / Rajputana] render this necessary.

[your consideration]

Resolution of the Government of Bombay, No. 4073—2810-P., dated the 26th July 1897, and enclosures.
Letter from the Government of Bombay, No. 1146-P., dated the 14th February 1898, and enclosure.

EXTRACT from the Proceedings of the Government of Bombay, General Department, No. 4073—2810-P., dated Bombay Castle, the 26th July 1897.

Read—

Letter from Dr. J. A. Lowson, dated 9th July 1897—

"I have the honour to enclose, for the information of Government, a report sent last night to Mr. Lamb, Collector of Poona.

"I have to suggest to Government that one or more small plague 'flying columns' be formed for work such as must now be done at Lonavli. I am afraid that in the near future cases like this may occur more frequently than is desirable. I need hardly point out that men who have experience of this work can do it much more satisfactorily than local authorities with local assistance for the time being.

"The composition of a column for the present occasion should be somewhat as follows :—

One Commissioned Officer.
Two Native Hospital Assistants.
One Female Hospital Assistant.
One Native Supervisor of disinfection.
Twenty Coolies for disinfection, and a sufficient force of sepoys.

"There is at present no police of the slightest use in Lonavli. A great point to remember is not to send an inadequate staff to tinker with the outbreak; consequently it should be added to at once on the recommendation of the Commissioned Officer. This officer should be detailed for nothing else but this work, and should proceed at once to investigate all reported outbreaks and, if necessary, take action concerning them. I have found that local officials usually fail to get at all facts and points deserving of notice, and these small outbreaks should be dealt with in a scientific way by a well-trained staff, otherwise some of these days the disease may get beyond easy control.

"The 'flying column' method, I understand, has been practically tested in cholera epidemics in Germany, and I am certain it will be by far the best method of working plague efficiently and economically for the next few months, arrangements being made to draw on Bombay City for coolies and stores as required.

* * * * *

"The situation is now totally different from what it was a few months ago, and some plan of campaign should be formed on the lines I have suggested above, as a time will surely come when plague committees with their organisations must be abolished at the various centres of recent plague. Circumstances so greatly alter requirements that I cannot lay down any rule as to the strength of such organisations as it is now desirable to form; but on no account let them be too small. Men are always attempting to work plague with a small staff. Nothing is more expensive than this.

"I need not insist further on the necessity for immediate action on such occasions, the early attack on the disease and prevention of people fleeing all over the country being of paramount importance. This fleeing is assisted by affairs as they are at present. As an official goes to inquire in the neighbourhood, the people get a scent of official operations, and when the staff ultimately set to work from four to seven days later, a general scatter has taken place. I only wish I could adequately express the tremendous advantages and saving of expenditure which immediate action in plague brings about."

Letter from the Surgeon-General with the Government of Bombay, No. 8004, dated 16th July 1897.

Letter to the Surgeon-General with the Government of Bombay, No. P.—956-P., dated 13th July 1897.

Letter from the Surgeon-General with the Government of Bombay, No. 8010, dated the 16th July 1897.

Letter from the Joint Plague Commissions, dated 12th July 1897.

Letter to the Surgeon-General with the Government of Bombay, No. P.—961-P., dated 15th July 1897.

Letter from the Surgeon-General to the Government of Bombay, No. 8070, dated 17th July 1897.

Letter to the Surgeon-General with the Government of Bombay, No. P.—1026-P., dated the 21st July 1897.

Memorandum to the Accountant-General, No. P.—1024-P., dated the 21st July 1897.

Memorandum to the Executive Engineer, Presidency, No. P.—1025-P., dated the 21st July 1897.

RESOLUTION.—The suggestions made by the Surgeon-General with a full sense of his responsibility are accepted to the extent shown below, but if experience should show that a further development of a special plague staff is required, Government will expect to be promptly informed, even though the treatment of cholera and other epidemics may offer no analogy for similar special arrangements.

2. The Surgeon-General is authorised to at once form two "flying columns" and to add to their number when required. The Surgeon-General should endeavour to have at least one "flying column" in reserve ready for despatch at a few hours' notice to the scene of a local outbreak of plague. The Surgeon-General should be at once informed of such outbreak by telegram from the chief local officer.

3. The exact composition of a "flying column" must be left to the Surgeon-General. It will ordinarily consist of a commissioned officer, two hospital assistants, coolies and sepoys. Government consider that it will be more convenient to employ police than military sepoys. The Surgeon-General should arrange for police in consultation with the Inspector-General or (in Bombay City) the Commissioner of Police, who should arrange to supply picked men as far as possible. Government further consider that it is highly desirable that at least one female, probably a nurse, should be attached to each column.

4. The duties of the "flying columns" will be to advise and assist the local authorities in suppressing the plague. The Surgeon-General is given full authority to direct the measures, subject to a clear understanding that in case of practical difficulties presenting themselves, the decision must rest with the local authorities whose responsibility for the administration will not be affected by these orders. The "flying columns" will assist the local executive.

5. Disinfectants will ordinarily be obtained from the Executive Engineer, Presidency, but the Surgeon-General is hereby given a grant of Rs. 1,000 for the purchase of such disinfectants, tools, etc., as he cannot conveniently obtain from Executive Engineer. The Surgeon-General will make all arrangements for disinfectants.

6. The Surgeon-General is permitted to make such arrangements regarding the superior and subordinate medical staff in Government service as he may think necessary in order to rapidly form the necessary "flying columns." He should not engage private practitioners (except in cases of emergency) without reference to Government, as there may be difficulties regarding their pay and allowances.

7. The Surgeon-General may engage four temporary clerks on such pay as he thinks necessary, but should, as soon as possible, submit detailed statements of the cost for formal sanction. He should also, at his earliest convenience, submit an estimate, in such detail as is possible, of the cost of the measures now sanctioned.

From the Hon'ble Mr. A. WINGATE, C.I.E., I.C.S., Secretary to the Government of Bombay, General Department, to the Secretary to the Government of India, Home Department, dated Bombay Castle, the 14th February 1898, No. 1146-P.

With reference to your letter No. 2650 of the 14th December 1897, requesting that the Government of India may be furnished with the opinion of this Government regarding (1) the establishment and utility of plague flying columns, and (2) the question of corpse inspection, I am directed to state that His Excellency in Council attaches the greatest value to the system of flying columns; the importance of bringing to bear upon the disease in its early stages the efforts of trained gangs of disinfectors and the administrative experience of trained superior officers cannot be overrated.

2. The system was inaugurated in the end of July last, and the demand for columns increased with the recrudescence, until now there are ten columns at work; they began operations at the places noted in the margin; in Lanowli, Sirur, and Hubli the disease was prevented from attaining serious dimensions; from these towns and from Karad, Tasgaon, Kalidhon and Igatpuri it has now entirely vanished, and the columns have turned their attention to the surrounding villages; in Jalgaon, Nasik and Sholapur, the infection is now well under control; some portion of the credit of these results belongs to the efforts of the flying columns. Their value lies in the prompt despatch of labour at a time of panic when local labour is often unobtainable, in the complete supply of all disinfecting apparatus, and in the superior efficiency of trained agency.

Poona district—
Lanowli.
Sirur.
Khandesh district—
Jalgaon.
Dharwar district—
Hubli.
Sholapur district—
Sholapur.

Satara district—
Karad.
Tasgaon.
Kalidhon.
Nasik district—
Nasik.
Igatpuri.

3. The columns are under the orders of the Surgeon-General; in a report received from him, he states his opinion that the system followed ensure promptitude of action with efficiency and economy and advocates its extension in all Administrations threatened by the epidemic. The accompanying statement details the composition and equipment of a column.

4. Collectors of districts follow much the same plan in despatching to villages attacked by plague an agency which has been trained at some plague-infected centre. And once plague is very widely diffused the composition of the column is necessarily reduced to coolies and disinfectants and appliances under one or two trained subordinates to work under any available local officers.

5. On the subject of corpse inspections, I am to say a further communication will be addressed to the Government of India on the receipt of certain reports that have been called for.

STATEMENT showing the composition of a column as originally planned, together with a list of implements.

One Commissioned Medical Officer.
Two Native Hospital Assistants.
One Female Hospital Assistant.
One Native Supervisor of disinfection.
Twenty Coolies for disinfection and a sufficient force of sepoys.

Implements.

	No.
Wooden tubs, small, 2 gallons each, to mix perchloride of mercury	12
Pumps, Holburn Garden	3
" Wooden	6
Mops with handles	12
Wooden tubs, large, for mixing lime	4
Pails, galvanized (12 inches)	12
Brushes, date, for limewashing	24
Brooms, Goa, 4, to make up a jit	72
Baskets, cane	12
Picks with handles	12
Powrahs with handles	12
Bamboos, solid, 7 feet long, for brooms	6

ORDER—No. 521 P., dated 27th May 1898.

Recorded with the remark that the "Ambulance staffs" with the additional medical officer posted to each of the districts under observation are really "flying columns." It is presumed the Collectors of these districts have ready the necessary apparatus for disinfection and other purposes under Additional Regulation 8.

(True Extract.)

H. TREMENHEERE,
Ag. Secretary to Government.

To the Surgeon-General.
" Sanitary Commissioner.
" Collectors of Bellary and Kurnool.
Copy to all other Collectors.
" to President, Municipal Commission, Madras.

Ed. A. F. Eccleston.

2689

Proof 1/6

Government {1898} of Madras.

LOCAL AND MUNICIPAL.

S. A

Revised Proof Submitted for approval.

NHP 23/5/98

Correct Strike N

Issue 27/5/98

Press

Recd.	} 1898.	*Enclosures*	
Regd.		*Spare copies*	

G.O., No. 521 P., 27th May 1898.

MAY.

Flying Columns.

Recording, with remark, letter from the Government of India forwarding copy of a circular letter on the subject of the utility of — in areas infected with plague.

GOVERNMENT OF MADRAS.

LOCAL AND MUNICIPAL DEPARTMENT.

READ—the following paper :—

From R. NATHAN, Esq., Under Secretary to the Government of India, Home Department (Sanitary), to the Secretary to the Government of Madras, Local and Municipal Department, dated Calcutta, 9th March 1898, No. 481.

In continuation of Home Department Resolution, No. 227—240, dated the 3rd February 1898, I am directed to forward, for the information of His Excellency the Governor in Council, a copy of a circular letter, No. 477—80, of this date, and enclosures, on the subject of the utility of flying columns in areas infected with plague.

ENCLOSURES.

From R. NATHAN, Esq., Under Secretary to the Government of India, Home Department (Sanitary), to the Secretary to the Government of the North-Western Provinces and Oudh, Sanitation Department; the Chief Secretary to the Government of the Punjab; the Resident at Hyderabad; the Agent to the Governor General in Rajputana; dated Calcutta, 9th March 1898, No. 477—480.

I am directed to forward, for [the information of His Honour the Lieutenant-Governor (and Chief Commr.) / your information], a copy of the papers marginally noted on the subject of the formation and use of flying columns in areas infected with plague. Experience in the Bombay Presidency has shown that the system of flying columns is of great value, and I am to recommend for the consideration of the Government of the [North-Western Provinces and Oudh / Punjab / your consideration] that, in addition to the measures on which stress is laid in the Home Department Resolution, No. 227—240, dated the 3rd February 1898, the system might with advantage be resorted to should the diffusion of plague in the [North-Western Provinces / the Punjab / Hyderabad / Rajputana] render this necessary.

Resolution of the Government of Bombay, No. 4073—2810-P., dated the 26th July 1897, and enclosures.
Letter from the Government of Bombay, No. 1146-P., dated the 14th February 1898, and enclosure.

EXTRACT from the Proceedings of the Government of Bombay, General Department, No. 4073—2810-P., dated Bombay Castle, the 26th July 1897.

Read—

Letter from Dr. J. A. Lowson, dated 9th July 1897—

"I have the honour to enclose, for the information of Government, a report sent last night to Mr. Lamb, Collector of Poona.

"I have to suggest to Government that one or more small plague 'flying columns' be formed for work such as must now be done at Lonavli. I am afraid that in the near future cases like this may occur more frequently than is desirable. I need hardly point out that men who have experience of this work can do it much more satisfactorily than local authorities with local assistance for the time being.

"The composition of a column for the present occasion should be somewhat as follows :—

One Commissioned Officer.
Two Native Hospital Assistants.
One Female Hospital Assistant.
One Native Supervisor of disinfection.
Twenty Coolies for disinfection, and a sufficient force of sepoys.

"There is at present no police of the slightest use in Lonavli. A great point to remember is not to send an inadequate staff to tinker with the outbreak; consequently it should be added to at once on the recommendation of the commissioned officer. This officer should be detailed for nothing else but this work, and should proceed at once to investigate all reported outbreaks and, if necessary, take action concerning them. I have found that local officials usually fail to get at all facts and points deserving of notice, and these small outbreaks should be dealt with in a scientific way by a well-trained staff, otherwise some of these days the disease may get beyond easy control.

"The 'flying column' method, I understand, has been practically tested in cholera epidemics in Germany, and I am certain it will be by far the best method of working plague efficiently and economically for the next few months, arrangements being made to draw on Bombay City for coolies and stores as required.

* * * * *

"The situation is now totally different from what it was a few months ago, and some plan of campaign should be formed on the lines I have suggested above, as a time will surely come when plague committees with their organisations must be abolished at the various centres of recent plague. Circumstances so greatly alter requirements that I cannot lay down any rule as to the strength of such organisations as it is now desirable to form; but on no account let them be too small. Men are always attempting to work plague with a small staff. Nothing is more expensive than this.

"I need not insist further on the necessity for immediate action on such occasions, the early attack on the disease and prevention of people fleeing all over the country being of paramount importance. This fleeing is assisted by affairs as they are at present. As an official goes to inquire in the neighbourhood, the people get a scent of official operations and when the staff ultimately set to work from four to seven days later, a general scatter has taken place. I only wish I could adequately express the tremendous advantages and saving of expenditure which immediate action in plague brings about."

Letter from the Surgeon-General with the Government of Bombay, No. 8004, dated 16th July 1897.

Letter to the Surgeon-General with the Government of Bombay, No. P.—956-P., dated 13th July 1897.

Letter from the Surgeon-General with the Government of Bombay, No. 8010, dated the 16th July 1897.

Letter from the Joint Plague Commissions, dated 12th July 1897.

Letter to the Surgeon-General with the Government of Bombay, No. P.—961-P., dated 15th July 1897.

Letter from the Surgeon-General to the Government of Bombay, No. 8070, dated 17th July 1897.

Letter to the Surgeon-General with the Government of Bombay, No. P.—1026-P., dated the 21st July 1897.

Memorandum to the Accountant-General, No. P.—1024-P., dated the 21st July 1897.

Memorandum to the Executive Engineer, Presidency, No. P.—1025-P., dated the 21st July 1897.

RESOLUTION.—The suggestions made by the Surgeon-General with a full sense of his responsibility are accepted to the extent shown below, but if experience should show that a further development of a special plague staff is required, Government will expect to be promptly informed, even though the treatment of cholera and other epidemics may offer no analogy for similar special arrangements.

2. The Surgeon-General is authorised to at once form two "flying columns" and to add to their number when required. The Surgeon-General should endeavour to have at least one "flying column" in reserve ready for despatch at a few hours' notice to the scene of a local outbreak of plague. The Surgeon-General should be at once informed of such outbreak by telegram from the chief local officer.

3. The exact composition of a "flying column" must be left to the Surgeon-General. It will ordinarily consist of a commissioned officer, two hospital assistants, coolies and sepoys. Government consider that it will be more convenient to employ police than military sepoys. The Surgeon-General should arrange for police in consultation with the Inspector-General or (in Bombay City) the Commissioner of Police, who should arrange to supply picked men as far as possible. Government further consider that it is highly desirable that at least one female, probably a nurse, should be attached to each column.

4. The duties of the "flying columns" will be to advise and assist the local authorities in suppressing the plague. The Surgeon-General is given full authority to direct the measures, subject to a clear understanding that in case of practical difficulties presenting themselves, the decision must rest with the local authorities whose responsibility for the administration will not be affected by these orders. The "flying columns" will assist the local executive.

5. Disinfectants will ordinarily be obtained from the Executive Engineer, Presidency, but the Surgeon-General is hereby given a grant of Rs. 1,000 for the purchase of such disinfectants, tools, etc., as he cannot conveniently obtain from Executive Engineer. The Surgeon-General will make all arrangements for disinfectants.

6. The Surgeon-General is permitted to make such arrangements regarding the superior and subordinate medical staff in Government service as he may think necessary in order to rapidly form the necessary "flying columns." He should not engage private practitioners (except in cases of emergency) without reference to Government, as there may be difficulties regarding their pay and allowances.

7. The Surgeon-General may engage four temporary clerks on such pay as he thinks necessary, but should, as soon as possible, submit detailed statements of the cost for formal sanction. He should also, at his earliest convenience, submit an estimate, in such detail as is possible, of the cost of the measures now sanctioned.

From the Hon'ble Mr. A. WINGATE, C.I.E., I.C.S., Secretary to the Government of Bombay, General Department, to the Secretary to the Government of India, Home Department, dated Bombay Castle, the 14th February 1898, No. 1146-P.

With reference to your letter No. 2650 of the 14th December 1897, requesting that the Government of India may be furnished with the opinion of this Government regarding (1) the establishment and utility of plague flying columns, and (2) the question of corpse inspection, I am directed to state that His Excellency in Council attaches the greatest value to the system of flying columns; the importance of bringing to bear upon the disease in its early stages the efforts of trained gangs of disinfectors and the administrative experience of trained superior officers cannot be overrated.

2. The system was inaugurated in the end of July last, and the demand for columns increased with the recrudescence, until now there are ten columns at work; they began operations at the places noted in the margin; in Lanowli, Sirur, and Hubli the disease was prevented from attaining serious dimensions; from these towns and from Karad, Tasgaon, Kalidhon and Igatpuri it has now entirely vanished, and the columns have turned their attention to the surrounding villages; in Jalgaon, Nasik and Sholapur, the infection is now well under control; some portion of the credit of these results belongs to the efforts of the flying columns. Their value lies in the prompt despatch of labour at a time of panic when local labour is often unobtainable, in the complete supply of all disinfecting apparatus, and in the superior efficiency of trained agency.

Poona district—
Lanowli.
Sirur.
Khandesh district—
Jalgaon.
Dharwar district—
Hubli.
Sholapur district—
Sholapur.
Satara district—
Karad.
Tasgaon.
Kalidhon.
Nasik district—
Nasik.
Igatpuri.

3 The columns are under the orders of the Surgeon-General; in a report received from him, he states his opinion that the system followed ensure promptitude of action with efficiency and economy and advocates its extension in all Administrations threatened by the epidemic. The accompanying statement details the composition and equipment of a column.

4. Collectors of districts follow much the same plan in despatching to villages attacked by plague an agency which has been trained at some plague-infected centre. And once plague is widely diffused the composition of the column is necessarily reduced to coolies and disinfectants and appliances under one or two trained subordinates to work under any available local officers.

5. On the subject of corpse inspections, I am to say a further communication will be addressed to the Government of India on the receipt of certain reports that have been called for.

STATEMENT showing the composition of a column as originally planned, together with a list of implements.

One Commissioned Medical Officer.
Two Native Hospital Assistants.
One Female Hospital Assistant.
One Native Supervisor of disinfection.
Twenty Coolies for disinfection and a sufficient force of sepoys.

Implements.

	NO.
Wooden tubs, small, 2 gallons each, to mix perchloride of mercury	12
Pumps, Holburn Garden	3
" Wooden	6
Mops with handles	12
Wooden tubs, large, for mixing lime	4
Pails, galvanized (12 inches)	12
Brushes, date, for limewashing	24
Brooms, Goa, 4, to make up a jit	72
Baskets, cane	12
Picks with handles	12
Powrahs with handles	12
Bamboos, solid, 7 feet long, for brooms	6

ORDER—No. 521 P., dated 27th May 1898.

Recorded with the remark that the "Ambulance staffs" with the additional medical officer posted to each of the districts under observation are really "flying columns." It is presumed the Collectors of these districts have ready the necessary apparatus for disinfection and other purposes under Additional Regulation 8.

(True Extract.)

for *Secretary to Government.*

To the Surgeon-General.
" Sanitary Commissioner.
" Collectors of Bellary and Kurnool.
Copy to all other Collectors.
" to President, Municipal Commission, Madras.

Exd. A. F. Eccleston.

Government {1898} of Madras.

LOCAL AND MUNICIPAL.

Recd.	} 1898.	*Enclosures*
Regd.		*Spare copies*

G.O., No. 521 P., 27th May 1898.

MAY.

Flying Columns.

Recording, with remark, letter from the Government of India forwarding copy of a circular letter ~~regarding the organisation~~ of — in areas infected with plague.

GOVERNMENT OF MADRAS.

LOCAL AND MUNICIPAL DEPARTMENT.

READ—the following paper :—

From R. NATHAN, Esq., Under Secretary to the Government of India, Home Department (Sanitary), to the Secretary to the Government of Madras, Local and Municipal Department, dated Calcutta, 9th March 1898, No. 481.

In continuation of Home Department Resolution, No. 227—240, dated the 3rd February 1898, I am directed to forward, for the information of His Excellency the Governor in Council, a copy of a circular letter, No. 477—80, of this date, and enclosures, on the subject of the utility of flying columns in areas infected with plague.

ENCLOSURES.

From R. NATHAN, Esq., Under Secretary to the Government of India, Home Department (Sanitary), to the Secretary to the Government of the North-Western Provinces and Oudh, Sanitation Department; the Chief Secretary to the Government of the Punjab; the Resident at Hyderabad; the Agent to the Governor General in Rajputana; dated Calcutta, 9th March 1898, No. 477—480.

I am directed to forward, for [the information of His Honour the Lieutenant-Governor (and Chief Commr.) / your information], a copy of the papers marginally noted on the subject of the formation and use of flying columns in areas infected with plague. Experience in the Bombay Presidency has shown that the system of flying columns is of great value, and I am to recommend for the consideration of the Government of the [North-Western Provinces and Oudh / Punjab] / your consideration that, in addition to the measures on which stress is laid in the Home Department Resolution, No. 227—240, dated the 3rd February 1898, the system might with advantage be resorted to should the diffusion of plague in [the North-Western Provinces / the Punjab / Hyderabad / Rajputana] render this necessary.

Resolution of the Government of Bombay, No. 4073—2810-P., dated the 26th July 1897, and enclosures.
Letter from the Government of Bombay, No. 1146-P., dated the 14th February 1898, and enclosure.

EXTRACT from the Proceedings of the Government of Bombay, General Department, No. 4073—2810-P., dated Bombay Castle, the 26th July 1897.

Read—

Letter from Dr. J. A. Lowson, dated 9th July 1897—

"I have the honour to enclose, for the information of Government, a report sent last night to Mr. Lamb, Collector of Poona.

"I have to suggest to Government that one or more small plague 'flying columns' be formed for work such as must now be done at Lonavli. I am afraid that in the near future cases like this may occur more frequently than is desirable. I need hardly point out that men who have experience of this work can do it much more satisfactorily than local authorities with local assistance for the time being.

"The composition of a column for the present occasion should be somewhat as follows:—

One Commissioned Officer.
Two Native Hospital Assistants.
One Female Hospital Assistant.
One Native Supervisor of disinfection.
Twenty Coolies for disinfection, and a sufficient force of sepoys.

"There is at present no police of the slightest use in Lonavli. A great point to remember is not to send an inadequate staff to tinker with the outbreak; consequently it should be added to at once on the recommendation of the commissioned officer. This officer should be detailed for nothing else but this work, and should proceed at once to investigate all reported outbreaks and, if necessary, take action concerning them. I have found that local officials usually fail to get at all facts and points deserving of notice, and these small outbreaks should be dealt with in a scientific way by a well-trained staff, otherwise some of these days the disease may get beyond easy control.

"The 'flying column' method, I understand, has been practically tested in cholera epidemics in Germany, and I am certain it will be by far the best method of working plague efficiently and economically for the next few months, arrangements being made to draw on Bombay City for coolies and stores as required.

* * * * *

"The situation is now totally different from what it was a few months ago, and some plan of campaign should be formed on the lines I have suggested above, as a time will surely come when plague committees with their organisations must be abolished at the various centres of recent plague. Circumstances so greatly alter requirements that I cannot lay down any rule as to the strength of such organisations as it is now desirable to form; but on no account let them be too small. Men are always attempting to work plague with a small staff. Nothing is more expensive than this.

"I need not insist further on the necessity for immediate action on such occasions, the early attack on the disease and prevention of people fleeing all over the country being of paramount importance. This fleeing is assisted by affairs as they are at present. As an official goes to inquire in the neighbourhood, the people get a scent of official operations, and when the staff ultimately set to work from four to seven days later, a general scatter has taken place. I only wish I could adequately express the tremendous advantages and saving of expenditure which immediate action in plague brings about."

Letter from the Surgeon-General with the Government of Bombay, No. 8004, dated 16th July 1897.

"With reference to your No. P.—924-P., dated the 9th instant, I have the honour to state, for the information of Government, that I consider Dr. Lowson's suggestion to have a special staff always ready for despatch to different localities to report on, instruct and help local bodies in stamping out the plague, a very good one.

"2. As long as the plague continues, as at present, to break out in a few localities, it will be quite possible to send a special staff of operators from head-quarters in Bombay, but if there is any general recrudescence of the disease in the future, it must be treated as it has been in Poona and Karachi by special arrangements on the spot The 'flying column' will be specially useful in small places like Karad and Lonavli: in larger cities like Poona, &c., local measures can be better and more easily organized.

"3. I can easily arrange to form a special plague staff, if Government decide that this method of combating plague is to be adopted. There is no difficulty whatsoever in the scheme if Government are prepared to meet the necessary expenditure. I am quite ready to control these special staffs and to form others at short notice; but Government must keep the necessary commissioned officers and hospital assistants on special duty under my control so that they may be available at a moment's notice.

"4. The only difficulty is the sepoys; if there are to be military sepoys, of course the military authorities must be asked to sanction any requisition I make for sepoys; but if there is any objection or difficulty raised on this point, I think specially selected police sepoys might be put at my disposal. If the military sepoys are available, then I should prefer them to police sepoys. I might be allowed to arrange with the General Officer Commanding Bombay District to employ volunteers from the native regiment on this duty at the rate of pay lately sanctioned for similar duties under the Plague Committee, Bombay.

"5. I think at first it will be only necessary to be prepared with two special staffs, which should, I consider, be kept in Bombay, and on telegraphic requisition, I can despatch them to any part of the Presidency.

"I should advise each special staff to consist of one commissioned officer, two hospital assistants and two muccadums of coolies and twelve coolies and six sepoys. I do not think a female hospital assistant necessary, and in fact these are not available, but if experience shows that a female member of the staff is required, I can get a Eurasian nurse, as I did lately for Bhusaval station. I have put two muccadums of coolies, because then there can be two separate gangs of coolies at work, a muccadum and six trained coolies can easily teach local coolies their work, up to any number required.

"6. I can arrange to have hospital assistants and coolies who have had experience of plague work for the two 'flying columns' to be arranged for at once. If necessity requires other 'flying columns,' I can employ medical practitioners if our supply of commissioned officers fail, but this contingency can be arranged for in the most advantageous manner when the necessity for more 'flying columns' arises.

"7. I can requisition on the Executive Engineer, Bombay, for the necessary disinfectants, and I should have a special grant, so that I can purchase quicklime, the necessary tools, etc., and give advance to the staff for travelling allowance, etc. This proposal to have 'flying columns' is, I think, a good one, but I do not think it will be economical; still any measure which enables us to fight the plague effectively and scientifically should not be rejected on the score that it is more expensive than imperfect local measures."

Letter to the Surgeon-General with the Government of Bombay, No. P.—956-P., dated 13th July 1897.

"With reference to the outbreak of plague at Karad, I am directed to ask you to be so good as to at once arrange to send an extra hospital assistant to that place.

"Also with reference to the possibility of such outbreaks in other places—and it may be noted that new outbreaks have been reported also at Lonavli and in the Surat district—I am directed to invite your remarks on a suggestion that has been made to Government that a Board, with perhaps yourself as its President, should be constituted to direct operations against the plague in scattered places in this Presidency. I am also to invite your remarks on a further suggestion that a junior commissioned medical officer might be made an itinerant plague officer to immediately visit places where plague breaks out and superintend operations."

Letter from the Surgeon-General with the Government of Bombay, No. 8010, dated the 16th July 1897.

"With reference to your No. P.—956-P., dated the 13th instant, I have the honour to state, for the information of Government, that a hospital assistant has been ordered to Korad, and the Collector of Satara has been informed of his despatch.

"2. I have no objection to the President of a Board to direct operations against plague in scattered places in this Presidency, if Government consider such a Board necessary, but I beg to state that I see no reason why an outbreak of plague in a mofussil town or village cannot be managed by the same agency which directs the operations against cholera, viz, the Surgeon-General, the Collector, Civil Surgeon, and other Civil officers of the district.

"3. Cholera is a dangerous epidemic disease like plague, requires the same sanitary methods to stamp it out, and as a rule kills more people than plague. If the Surgeon-General and the civil officers of Government in the different districts have, for years, arranged for the treatment of all outbreaks of cholera, I see no reason why the same agency should not treat outbreaks of plague.

"4. I can understand the advisability of Plague Committees in places like Bombay, Karachi and Poona, where it is necessary to set aside municipalities, but in ordinary mofussil towns and villages, where the wishes of Government are supreme, the rational for exceptional and special authority is not apparent.

"5. I have already addressed Government on the question of 'flying columns' to visit places where plague appears in this office No. 8004, dated 16th July 1897, and I need only further remark that I think it would be an excellent arrangement to keep a junior commissioned officer on special plague duty, ready always to go to and direct the necessary operation at any place where plague breaks out."

Letter from the Joint Plague Commissions, dated 12th July 1897.

Letter to the Surgeon-General with the Government of Bombay, No. P.—961-P., dated 15th July 1897.

"In view of a probability of a recrudescence of plague in parts of this Presidency, His Excellency the Governor in Council thinks that it should be considered whether a special Plague department should be formed with an organization of a rapidly moveable and adaptable character which could be at once moved to the locality in which the outbreak had been reported. The executive officers attached to this department should be medical officers with wide experience who on the report of any unusual sickness or mortality should at once investigate it and have the power to requisition on the Plague department for

to stamp out the disease. To this department should be sent all reports and returns touching on plague matters, so that the office may receive the earliest information on the subject. I am to request that Government may be favoured with your views on the subject at the earliest date practicable."

Letter from the Surgeon-General to the Government of Bombay, No. 8070, dated 17th July 1897.

"With reference to your No. P.—961-P., dated 15th instant, I have the honour to state, for the information of Government, that I consider the establishment of a Special Plague department with special powers would be a very efficient way of dealing with a recrudescence of plague in parts of this Presidency, but I cannot see why there should be a special department for plague and not one for cholera or malarial fevers; the former disease is a dangerous epidemic disease, and the latter claims more victims every year than any other disease in India, yet it has never been considered necessary to take special steps, of the nature now proposed by Government, to stop the yearly recurrence of these diseases.

"2. I am distinctly of opinion that the creation of a Special Plague department will be a tacit confession that our ordinary methods are wrong and faulty, and that the usual machinery of Government—sanitary, medical and civil—is so imperfect that the advent of plague has utterly disorganized their working powers. I do not consider this to be the case, and as mentioned in my No. 8010, dated 16th instant, I think that Government has the whole machinery for directing plague operations ready without the creation of a Special Plague department.

"3. All that is required is to give the Surgeon-General power to at once form two, three or more 'flying columns' as detailed in my No. 8004, dated the 16th instant, and to notify to all Collectors that on the outbreak of plague a telegraphic reference should be made to the Surgeon-General direct, who will at once despatch a column to the spot. All reports and information of course will be immediately telegraphed to Government, by me, who will be kept *au courrant* with all events and actions under this head.

"4. The 'flying columns' and the local civil officers of Government will be able to do all that is required, and there will be no fuss, provided I am allowed to arrange for everything and direct all the necessary measures required. My office establishment is already overworked, *vide* my No. 4650, dated 1st May 1897, and I must request Government, if my proposal is adopted, to sanction four extra clerks as a temporary measure to deal with the extra correspondence that this proposal will entail; the rest I shall be able to manage; and if I find after experience that more help of a superior kind is required, Government can later on depute another medical officer or any other officer they think fit to help my Secretary.

"I think this procedure of working measures against plague, through the Surgeon-General, Collectors of districts and civil officers better than any creation of a special department which I consider unnecessary."

Letter to the Surgeon-General with the Government of Bombay, No. P.—1026-P., dated the 21st July 1897.

Memorandum to the Accountant-General, No. P.—1024-P., dated the 21st July 1897.

Memorandum to the Executive Engineer, Presidency, No. P.—1025-P., dated the 21st July 1897

RESOLUTION.—The suggestions made by the Surgeon-General with a full sense of his responsibility are accepted to the extent shown below, but if experience should show that a further development of a special plague staff is required, Government will expect to be promptly informed, even though the treatment of cholera and other epidemics may offer no analogy for similar special arrangements.

2. The Surgeon-General is authorised to at once form two "flying columns" and to add to their number when required. The Surgeon-General should endeavour to have at least one "flying column" in reserve ready for despatch at a few hours' notice to the scene of a local outbreak of plague. The Surgeon-General should be at once informed of such outbreak by telegram from the chief local officer.

3. The exact composition of a "flying column" must be left to the Surgeon-General. It will ordinarily consist of a commissioned officer, two hospital assistants, coolies and sepoys, Government consider that it will be more convenient to employ police than military sepoys. The Surgeon-General should arrange for police in consultation with the Inspector-General or (in Bombay City) the Commissioner of Police, who should arrange to supply picked men as far as possible. Government consider that it is highly desirable that at least one female, probably a nurse, should be attached to each column. required.

4. The duties of the "flying columns" will be to advise and assist the local authorities in suppressing the plague. The Surgeon-General is given full authority to direct the measures, subject to a clear understanding that in case of practical difficulties presenting themselves, the decision must rest with the local authorities whose responsibility for the administration will not be affected by these orders. The "flying columns" will assist the local executive.

5. Disinfectants will ordinarily be obtained from the Executive Engineer, Presidency, but the Surgeon-General is hereby given a grant of Rs. 1,000 for the purchase of such disinfectants, tools, etc., as he cannot conveniently obtain from Executive Engineer. The Surgeon-General will make all arrangements for disinfectants.

6. The Surgeon-General is permitted to make such arrangements regarding the superior and subordinate medical staff in Government service as he may think necessary in order to rapidly form the necessary "flying columns." He should not engage private practitioners (except in cases of emergency) without reference to Government, as there may be difficulties regarding their pay and allowances.

7. The Surgeon-General may engage four temporary clerks on such pay as he thinks necessary, but should, as soon as possible, submit detailed statements of the cost for formal sanction. He should also, at his earliest convenience, submit an estimate, in such detail as is possible, of the cost of the measures now sanctioned.

From the Hon'ble Mr. A. WINGATE, C.I.E., I.C.S., Secretary to the Government of Bombay, General Department, to the Secretary to the Government of India, Home Department, dated Bombay Castle, the 14th February 1898, No. 1146-P.

With reference to your letter No. 2650 of the 14th December 1897, requesting that the Government of India may be furnished with the opinion of this Government regarding (1) the establishment and utility of plague flying columns, and (2) the question of corpse inspection, I am directed to state that His Excellency in Council attaches the greatest value to the system of flying columns; the importance of bringing to bear upon the disease in its early stages the efforts of trained gangs of disinfectors and the administrative experience of trained superior officers cannot be overrated.

2. The system was inaugurated in the end of July last, and the demand for columns increased with the recrudescence, until now there are ten columns at work; they began operations at the places noted in the margin; in Lanowli, Sirur, and Hubli the disease was prevented from attaining serious dimensions; from these towns and from Karad, Tasgaon, Kalidhon and Igatpuri it has now entirely vanished, and the columns have turned their attention to the surrounding villages; in Jalgaon, Nasik and Sholapur, the infection is now well under control; some portion of the credit of these results belongs to the efforts of the flying columns. Their value lies in the prompt despatch of labour at a time of panic when local labour is often unobtainable, in the complete supply of all disinfecting apparatus, and in the superior efficiency of trained agency.

Poona district—
Lanowli.
Sirur.
Khandesh district—
Jalgaon.
Dharwar district—
Hubli.
Sholapur district—
Sholapur.
Satara district—
Karad.
Tasgaon.
Kalidhon.
Nasik district—
Nasik.
Igatpuri.

3. The columns are under the orders of the Surgeon-General; in a report received from him, he states his opinion that the system followed ensure promptitude of action with efficiency and economy and advocates its extension in all administrations threatened by the epidemic. The accompanying statement details the composition and equipment of a column.

4. Collectors of districts follow much the same plan in despatching to villages attacked by plague an agency which has been trained at some plague-infected centre. And once plague is very widely diffused the composition of the column is necessarily reduced to coolies and disinfectants and appliances under one or two trained subordinates to work under any available local officers.

On the subject of corpse inspections, I am to say a further communication will be addressed to the Government of India on the receipt of certain reports that have been called for.

STATEMENT showing the composition of a column as originally planned, together with a list of implements.

One Commissioned Medical Officer.
Two Native Hospital Assistants.
One Female Hospital Assistant.
One Native Supervisor of disinfection.
Twenty Coolies for disinfection and a sufficient force of sepoys.

Implements.

	No.
Wooden tubs, small, 2 gallons each, to mix perchloride of mercury	12
Pumps, Holburn Garden	3
„ Wooden	6
Mops with handles	12
Wooden tubs, large, for mixing lime	4
Pails, galvanized (12 inches)	12
Brushes, date, for limewashing	24
Brooms, Goa, 4, to make up a jit	72
Baskets, cane	12
Picks with handles	12
Powrahs with handles	12
Bamboos, solid, 7 feet long, for brooms	6

ORDER—No. 521 P., dated 27th May 1898.

Recorded with the remark that the "Ambulance staffs" with the additional medical officer posted to each of the districts under observation are really "flying columns." It is presumed the Collectors of these districts have ready the necessary apparatus for disinfection and other purposes under Additional Regulation 8.

(True Extract.)

for *Secretary to Government.*

To the Surgeon-General.
„ Sanitary Commissioner.
„ Collectors of Bellary and Kurnool.

Copy to all other Collectors
" President, M.C. Madras.

Exd. A. F. Eccleston.

Local & Munl. (1898) Department.

CURRENT No. 2687

From

The Government of India

Order No. 521 P. dated 27.5.98

No. 481

Recorded with the remark that the "Ambulance staffs" with the addl medical officers posted beach of the Dts under observation are really 'flying columns'. The Govt to presumed to Collrs of these Dts have ready the necessary apparatus for disinfection &c these purposes under Addl Dy S.

To The Surgeon General
a Sanitary Comr
a Collr of Bellary & Kurnool
a copy to all other Collectors
Surgeon Superintendent
for information

Dated 9th March 1898
Received 16th do do
Registered do
Enclosures 3
Spare copies.

The original docket containing the following remarks of Hon. & H.E. has been removed & filed separately with the D.O. to Native Gentlemen

"Let H.E. see. For my part, I think that for the present we may be contented with our "Ambulance staffs" which are really flying columns. If an addl M.D. (one of those from England) is posted to Bellary, Kurnool & Cuddapah, we shall have in each Dt a competent person to take charge of each 'Ambulance staff' / flying column

SUBJECT.

Forwarding for information a copy of a circular letter on the subject of the utility of flying columns in areas infected with plague.

Columns) We might tell Collrs to see that Ambulance staffs have apparatus req. See Pby A.

Columns) (Init) H.W.B 18-3-98

Yes. I think our Regulations are sufficient.

(Init) A.E.H. 23-3-98

Lmy 25/3/98

BACK PAPERS

G.O.	No.	Department.	Date.

FURTHER PAPERS.

G.O.	No.	Department.	Date.

LOCAL & MUNICIPAL DEPT
CURRENT No. 2680

No. 401.

FROM

R. NATHAN, ESQ.,
Under Secretary to the Government of India,

To

The Secy to the Govt of Madras.
Local and Municipal Department

Home Department.
Sanitary.

Calcutta, the 9th March 1898.

SIR,

IN continuation of Home Department Resolution No. 227—240, dated the 3rd February 1898, I am directed to forward, for the information of His Excellency the Governor in Council, a copy of a circular letter, No 477-80 of this date, and enclosures, on the subject of the utility of flying columns in areas infected with plague.

I have the honour to be,

SIR,

Your most obedient Servant,

Under Secretary to the Government of India.

No. 477-480

FROM

R. NATHAN, ESQ.,
Under Secretary to the Government of India,

To

THE SECRETARY TO THE GOVERNMENT OF THE
NORTH-WESTERN PROVINCES AND OUDH,
SANITATION DEPARTMENT.
THE CHIEF SECRETARY TO THE GOVERNMENT OF THE PUNJAB.
THE RESIDENT AT HYDERABAD.
THE AGENT TO THE GOVERNOR GENERAL IN RAJPUTANA.

Home Department.
Sanitary.

Calcutta, the March 1898.

SIR,

I AM directed to forward, for [the information of His Honour the Lieut.-Govr. (and Chief Commr.) / your information], a copy of the papers marginally noted, on the subject of the formation and use of flying columns in areas infected with plague. Experience in the Bombay Presidency has shown that the system of flying columns is of great value and I am to recommend for [the consideration of the Government of the / your consideration] [North-Western Provinces and Oudh / Punjab] that, in addition to the measures on which stress is laid in the Home Department Resolution No. 227—240, dated the 3rd February 1898, the system might with advantage be resorted to should the diffusion of plague in [the North-Western Provinces / the Punjab / Hyderabad / Rajputana] render this necessary.

Resolution of the Government of Bombay, No. 4073—2810-P., dated the 26th July 1897, and enclosures.
Letter from the Government of Bombay, No. 1146-P., dated the 14th February 1898, and enclosure.

I have the honour to be,

SIR,

Your most obedient Servant,

R. NATHAN,
Under Secretary to the Govt. of India.

Extract from the Proceedings of the Government of Bombay, General Department,—No. 4073—2810-P., dated Bombay Castle, the 26th July 1897.

READ—

Letter from Dr. J. A. Lowson, dated 9th July 1897—

"I have the honour to enclose, for the information of Government, a report sent last night to Mr. Lamb, Collector of Poona.

"I have to suggest to Government that one or more small plague 'flying columns' be formed for work such as must now be done at Lonavli. I am afraid that in the near future cases like this may occur more frequently than is desirable. I need hardly point out that men who have experience of this work can do it much more satisfactorily than local authorities with local assistance for the time being.

"The composition of a column for the present occasion should be somewhat as follows:—

1 Commissioned officer.
2 Native Hospital Assistants.
1 Female Hospital Assistant.
1 Native supervisor of disinfection.
20 coolies for disinfection, and a sufficient force of sepoys.

There is at present no police of the slightest use in Lonavli. A great point to remember is not to send an inadequate staff to tinker with the outbreak; consequently it should be added to at once on the recommendation of the Commissioned officer. This officer should be detailed for nothing else but this work, and should proceed at once to investigate all reported outbreaks and, if necessary, take action concerning them. I have found that local officials usually fail to get at all facts and points deserving of notice, and these small outbreaks should be dealt with in a scientific way by a well trained staff, otherwise some of these days the disease may get beyond easy control.

"The 'flying column' method I understand has been practically tested in cholera epidemics in Germany, and I am certain it will be by far the best method of working plague efficiently and economically for the next few months, arrangements being made to draw on Bombay City for coolies and stores as required.

* * * * * *

"The situation is now totally different from what it was a few months ago, and some plan of campaign should be formed on the lines I have suggested above, as a time will surely come when plague committees with their organisations must be abolished at the various centres of recent plague. Circumstances so greatly alter requirements that I cannot lay down any rule as to the strength of such organisations as it is now desirable to form; but on no account let them be too small. Men are always attempting to work plague with a small staff. Nothing is more expensive than this.

"I need not insist further on the necessity for immediate action on such occasions, the yearly attack on the disease and prevention of people fleeing all over the country being of paramount importance. This fleeing is assisted by affairs as they are at present. As an official goes to enquire in the neighbourhood, the people get a scent of official operations, and when the staff ultimately set to work from four to seven days later, a general scatter has taken place. I only wish I could adequately express the tremendous advantages and saving of expenditure which immediate action in plague brings about."

Letter from the Surgeon-General with the Government of Bombay, No. 8004, dated 16th July 1897—

"With reference to your No. P.—924-P., dated the 9th instant, I have the honour to state, for the information of Government, that I consider Dr. Lowson's suggestion to have a special staff always ready for despatch to different localities to report on, instruct and help local bodies in stamping out the plague, a very good one.

"2. As long as the plague continues, as at present, [illegible] in a few localities, it will be quite possible to send a special s[illegible] from head-quarters in Bombay, but if there is any general recrudes[illegible] in the future, it must be treated as it has been in Poona [illegible] arrangements on the spot. The 'flying column' will be spe[illegible]ces like Kirkee and Lonavli: in larger cities like Poon[illegible] more easily organised.

"3. I can easiiy arrange to form a special plague staff if Government decide that this method of combating plague is to be adopted. There is no difficulty whatsoever in the scheme if Government are prepared to meet the necessary expenditure. I am quite ready to control these special staffs and to form others at short notice; but Government must keep the necessary commissioned officers and hospital assistants on special duty under my control so that they may be available at a moment's notice

"4. The only difficulty is the sepoys; if there are to be military sepoys, of course the military authorities must be asked to sanction any requisition I make for sepoys; but if there is any objection or difficulty raised on this point, I think specially selected police sepoys might be put at my disposal. If the military sepoys are available, then I should prefer them to police sepoys. I might be allowed to arrange with the General Officer Commanding Bombay District to employ volunteers from the native regiment on this duty at the rate of pay lately sanctioned for similar duties under the Plague Committee, Bombay.

"5. I think at first it will be only necessary to be prepared with two special staffs, which should, I consider, be kept in Bombay, and on telegraphic requisition, I can despatch them to any part of the Presidency.

"I should advise each special staff to consist of 1 commissioned officer, 2 hospital assistants and 2 muccadums of coolies and 12 coolies and 6 sepoys. I do not think a female hospital assistant necessary, and in fact these are not available, but if experience shows that a female member of the staff is required, I can get a Eurasian nurse, as I did lately for Bhusaval station. I have put two muccadums of coolies, because then there can be two separate gangs of coolies at work, a muccadum and 6 trained coolies can easily teach local coolies their work, up to any number required.

"6. I can arrange to have hospital assistants and coolies who have had experience of plague work for the two "flying columns" to be arranged for at once. If necessity requires other 'flying columns," I can employ medical practitioners if ou supply of Commissioned officers fail, but this contingency can be arranged for in the most advantageous manner when the necessity for more "flying columns" arises.

"7. I can requisition on the Executive Engineer, Bombay, for the necessary disinfectants, and I should have a special grant, so that I can purchase quicklime, the necessary tools, etc., and give advance to the staff for travelling allowance, etc. This proposal to have "flying columns" is, I think, a good one, but I do not think it will be economical; still any measure which enables us to fight the plague effectively and scientifically should not be rejected on the score that it is more expensive than imperfect local measures."

Letter to the Surgeon-General with the Government of Bombay, No. P.—956-P., dated 13th July 1897:—

"With reference to the outbreak of plague at Karad, I am directed to ask you to be so good as to at once arrange to send an extra hospital assistant to that place.

"Also with reference to the possibility of such outbreaks in other places—and it may be noted that new outbreaks have been reported also at Lonavli and in the Surat District—I am directed to invite your remarks on a suggestion that has been made to Government that a Board, with perhaps yourself as its President, should be constituted to direct operations against the plague in scattered places in this Presidency. I am also to invite your remarks on a further suggestion that a junior commissioned medical officer might be made an itinerant plague officer to immediately visit places where plague breaks out and superintend operations."

Letter from the Surgeon-General with the Government of Bombay, No. 8010, dated the 16th July 1897—

"With reference to your No. P.—956-P., dated the 13th instant, I have the honour to state, for the information of Government, that a hospital assistant has been ordered to Karad, and the Collector of Satara has been informed of his despatch.

"2. I have no objection to the President of a Board to direct operations against plague in scattered places in this Presidency, if Government consider such a Board necessary, but I beg to state that I see no reason why an outbreak of plague in a mofussil town or village cannot be managed by the same agency which directs the operations against cholera, *viz.*, the Surgeon-General, the Collector, Civil Surgeon, and other civil officers of the district.

"Cholera is a dangerous epidemic disease like plague, requires the same sanitary methods to stamp it out, and as a rule kills more people than plague. If the Surgeon-General and the civil officers of Government in the different districts have, for years, arranged for the treatment of all outbreaks of cholera, I see no reason why the same agency should not treat outbreaks of plague.

"4. I can understand the advisability of Plague Committees in places like Bombay, Karachi and Poona, where it is necessary to set aside municipalities, but in ordinary mofussil towns and villages, where the wishes of Government are supreme, the rational for exceptional and special authority is not apparent.

"5. I have already addressed Government on the question of 'flying columns' to visit places where plague appears, in this office No. 8004, dated 16th July 1897, and I need only further remark that I think it would be an excellent arrangement to keep a junior commissioned officer on special plague duty, ready always to go to and direct the necessary operation at any place where plague breaks out."

Letter from the Joint Plague Commissions, dated 12th July 1897.

Letter to the Surgeon-General with the Government of Bombay, No. P.—961-P., dated 15th July 1897—

"In view of probability of a recrudescence of a plague in parts of this Presidency, His Excellency the Governor in Council thinks that it should be considered whether a special Plague Department should be formed with an organization of a rapidly moveable and adaptable character which could be at once moved to the locality in which the outbreak had been reported. The executive officers attached to this Department should be medical officers with wide plague experience who on the report of any unusual sickness or mortality should at once proceed to investigate it and have the power to requisition on the Plague Department for a sufficient staff to stamp out the disease. To this Department should be sent all reports and returns touching on plague matters, so that the office may receive the earliest information on the subject. I am to request that Government may be favoured with your views on the subject at the earliest date practicable."

Letter from the Surgeon-General to the Government of Bombay, No. 8070, dated 17th July 1897:—

"With reference to your No. P.—961-P., dated 15th instant, I have the honour to state, for the information of Government, that I consider the establishment of a special Plague Department with special powers would be a very efficient way of dealing with a recrudescene of plague in parts of this Presidency, but I cannot see why there should be a Special Department for plague and not one for cholera or malarial fevers; the former disease is a dangerous epidemic disease, and the latter claims more victims every year than any other disease in India, yet it has never been considered necessary to take special steps, of the nature now proposed by Government, to stop the yearly recurrence of these diseases.

"2. I am distinctly of opinion that the creation of a special Plague Department will be a tacit confession that our ordinary methods are wrong and faulty, and that the usual machinery of Government—sanitary, medical and civil—is so imperfect that the advent of plague has utterly disorganised their working powers. I do not consider this to be the case, and as mentioned in my No. 8010, dated 16th instant, I think that Government has the whole machinery for diricting plague operations ready without the creation of a special Plague Department.

"3. All that is required is to give the Surgeon-General power to at once form two three or more 'flying columns' as detailed in my No. 8004, dated the 16th instant, and to notify to all Collectors that on the outbreak of plague a telegraphic reference should be made to the Surgeon-General direct, who will at once despatch a column to the spot. All reports and information of course will be immediately telegraphed to Government by me, who will be kept *au courrant* with all events and actions under this head.

"4. The 'flying columns' and the local civil officers of Government will be able to do all that is required, and there will be no fuss, provided I am allowed to arrange for everything and direct all the necessary measures required. My office establishment is already overworked, *vide* my No. 4650, dated 1st May 1897, and I must request Government, if my proposal is adopted, to sanction foure extra clerks as a temporary measures to deal with the extra correspondence that this proposal will entail; the rest I shall be able to manage; and if I find after experience that more help of a superior kind is required, Government can later on depute another medical offier or any other officer they think fit to help my Secretary.

I think this procedure of working measures against plague, through the Surgeon-General, Collectors of Districts and civil officers better than any creation of a special Department which I consider unnecessary.

Letter to the Surgeon-General with the Government of Bombay, No. P.—1026-P., dated the 21st July 1897.

Memorandum to the Accountant General, No. P.—1024-P., dated the 21st July 1897.

Memorandum to the Executive Engineer, Presidency, No. P.—1025-P., dated the 21st July 1897.

RESOLUTION.—The suggestions made by the Surgeon-General with a full sense of his responsibility are accepted to the extent shown below, but if experience should show that a further development of a special plague staff is required, Government will expect to be promptly informed, even though the treatment of cholera and other epidemics may offer no analogy for similar special arrangements.

2. The Surgeon-General is authorised to at once form two "flying columns" and to add to their number when required. The Surgeon-General should endeavour to have at least one "flying column" in reserve ready for despatch at a few hours' notice to the scene of a local outbreak of plague. The Surgeon-General should be at once informed of such outbreak by telegram from the chief local officer.

3. The exact composition of a "flying column" must be left to the Surgeon-General. It will ordinarily consist of a commissioned officer, two hospital assistants, coolies and sepoys, Government consider that it will be more convenient to employ police than military sepoys. The Surgeon-General should arrange for police in consultation with the Inspector-General or (in Bombay City) the Commissioner of Police, who should arrange to supply picked men as far as possible. Government further consider that it is highly desirable that at least one female, probably a nurse, should be attached to each column.

4. The duties of the "flying columns" will be to advise and assist the local authorities in suppressing the plague. The Surgeon-General is given full authority to direct the measures, subject to a clear understanding that in case of practical difficulties presenting themselves, the decision must rest with the local authorities whose responsibility for the administration will not be affected by these orders. The "flying columns" will assist the local executive.

5. Disinfectants will ordinarily be obtained from the Executive Engineer, Presidency, but the Surgeon-General is hereby given a grant of R1,000 for the purchase of such disinfectants, tools, etc., as he cannot conveniently obtain from Executive Engineer. The Surgeon-General will make all arrangements for disinfectants.

6. The Surgeon-General is premitted to make such arrangements regarding the superior and subordinate medical staff in Government service as he may think necessary in order to rapidly form the necessary "flying columns." He should not engage private practitioners (except in cases of emergency) without reference to Government, as there may be difficulties regarding their pay and allowances.

7. The Surgeon-General may engage four temporary clerks on such pay as he thinks necessary, but should, as soon as possible, submit detailed statements of the cost for formal sanction. He should also, at his earliest convenience, submit an estimate, in such detail as is possible, of the cost of the measures now sanctioned.

Extract from the Proceedings of the Government of Bombay, General Department,—No. 4091—2823-P., dated Bombay Castle, the 27th July 1897.

READ—

Memorandum from the Commissioner in Sind, No. 3482, dated the 12th July 1897—

"The Acting Commissioner in Sind has the honour to enquire whether the registration of names and addresses of passengers alighting from infected stations in Sind may not now be discontinued. In Sind this is required by Government Resolution No. 991—460-P., dated 23rd February, coupled with Government Resolution No. 1306—785-P., dated 10th March, the infected stations for the purposes of the rule being Sukkur-Rohri, Hyderabad, and Karachi (Cantonment and City).

"2. By various orders of the Government of India ending with their telegram No. 380-R. T., dated 6th May, the names and addresses of passengers alighting anywhere from stations between Karachi and Daharki on the main line, North-Western Railway, Rok and Jhatpat on the Sind-Pishin section, and any station on the Kotri-Rohri chord line and the Hyderabad-Shadipali Branch have to be recorded. Reti is the only other station in Sind, and the Government of India orders therefore only affect the staff at that station in Sind, but the Acting Commissioner

would suggest that the orders might now be much relaxed or even cancelled altogether as there has been no fresh case of plague in Sind, excluding Karachi, since the 24th June 1897, and only 4 in Karachi City since the 28th June."

RESOLUTION.—If the Commissioner is satisfied that plague has entirely disappeared from all places in Sind, except Karachi, that place alone may continue to be treated as infected for the purposes of the rules referred to. Experience in the Presidency proper, however, where there have recently been new outbreaks of plague, shows the need for the exercise of great caution.

Extract from the Proceedings of the Government of Bombay, General Department,—No. 4097—2829-P., dated Bombay Castle, the 27th July 1897.

READ—

Memorandum by the Commissioner, N. D., No. 1460, dated the 19th July 1897—

Forwards the following copy of a letter No. 5078, dated the 14th July 1897, from the Collector of Thana, and requests that the Government Resolution in question may be cancelled so far as Thana District is concerned :—

"I have the honour to suggest the Government Resolution (General Department), No. 1137—634-P., dated the 3rd March last, so far as it concerns the Thana District, should be cancelled as the need for the prohibition has long ceased."

RESOLUTION.—Government Resolution No. 1137—634-P., dated 3rd March 1897, is cancelled so far as it relates to the Thana District.

G. I. C. P. O.—No. 194 H. D.—10-3-98.—170—S. J. D'S.

No. 1146-P., dated Bombay Castle, the 14th February 1898.

From—The Honourable Mr. A. WINGATE, C.I.E., I.C.S., Secretary to the Government of Bombay, General Department,

To—The Secretary to the Government of India, Home Department.

With reference to your letter No. 2650 of the 14th December 1897, requesting that the Government of India may be furnished with the opinion of this Government regarding (1) the establishment and utility of Plague Flying Columns, and (2) the question of corpse inspection, I am directed to state that His Excellency in Council attaches the greatest value to the system of flying columns; the importance of bringing to bear upon the disease in its early stages the efforts of trained gangs of disinfectors and the administrative experience of trained superior officers cannot be overrated.

2. The system was inaugurated in the end of July last, and the demand for columns increased with the recrudescence, until now there are ten columns at work; they began operations at the places noted in the margin; in Lanowli, Sirur and Hubli the disease was prevented from attaining serious dimensions; from these towns and from Karad, Tasgaon, Kalidhon and Igatpuri it has now entirely vanished, and the columns have turned their attention to the surrounding villages; in Jalgaon, Nasik and Sholapur, the infection is now well under control; some portion of the credit of these results belongs to the efforts of the flying columns. Their value lies in the prompt despatch of labour at a time of panic when local labour is often unobtainable, in the complete supply of all disinfecting apparatus, and in the superior efficiency of trained agency.

Poona District.
Lanowli.
Sirur.
Khandesh District.
Jalgaon.
Dharwar District.
Hubli.
Sholapur District.
Sholapur.
Satara District.
Karad.
Tasgaon
Kalidhon.
Nasik District.
Nasik.
Igatpuri.

3. The columns are under the orders of the Surgeon-General; in a report received from him, he states his opinion that the system followed ensure promptitude of action with efficiency and economy and advocates its extension in all administrations threatened by the epidemic. The accompanying statement details the composition and equipment of a column.

4. Collectors of Districts follow much the same plan in despatching to villages attacked by plague an agency which has been trained at some plague-infected centre. And once plague is very widely diffused the composition of the column is necessarily reduced to coolies and disinfectants and appliances under one or two trained subordinates to work under any available local officers.

5. On the subject of corpse inspections, I am to say a further communication will be addressed to the Government of India on the receipt of certain reports that have been called for.

Statement showing the composition of a column as originally planned, together with a list of implements.

1 Commissioned Medical Officer.
2 Native Hospital Assistants.
1 Female Hospital Assistant.
1 Native Supervisor of disinfection.
20 Coolies for disinfection and a sufficient force of sepoys.

Implements.

	No.	
Wooden tubs, small, 2 gallons each, to mix perchloride of mercury	12	
Pumps, Holburn Garden	3	— I don't know what these are — Garden syringes with spray nozzles will be useful
" Wooden	6	
Mops with handles	12	
Wooden tubs, large, for mixing lime	4	
Pails, Galvanized (12 inches)	12	
Brushes, date, for limewashing	24	
Brooms, Goa, 4, to make up a jit	72	
Baskets, cane	12	
Picks with handles	12	
Powrahs with handles	12	
Bamboos, solid, 7 feet long, for brooms	6	

Encl. 3 to No. 2650

First copy sent to Press. 2-6-98

Returned for signature. 29-6-98

Despatched in print. 1-7-98

Number of copies required. } Letter only. 7
Order complete with Letter.

Read again G.O., No. 189 Dated.

Current No. 2687 — A

Enclosures to O. No. do. 1 & 3 A Press

Please show proof

NAP 1/6/98

Order of Government

Letter of Government.

Statement with ditto.

Papers not filed up being meant for despatch in original.

N.B.—

A = Print in full.
B = Not to be printed.
P = Print abstract only.
Q = Print heading only.