Date taken out.	For what purpose.			Initials of clerk taking the paper or of attender.	Date returned.	Initials of attender.
	Department.	C. No.	Year.			

Marine (1897) Department.

G.O., No. 550 Mar.

DATED 21st June 1899

23/6/99

[Despatch Abstract.]

Jigger

Communicating to the Officers concerned letter from the Govt of India forwarding copy of their correspondence with the Bombay Govt regarding the measures taken by the latter to prevent the importation of —— into India directing the publication of the correspondence in the Fort St George and Maritime Dts Gazettes and requesting the issue of orders on the Political Dept in view to precautionary measures being taken by the Travancore and Cochin Durbars.

2/0 2/0 2/0 2/0

23/6/99

[illegible]
1,000—28-10-05.

BACK PAPERS.

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

FURTHER PAPERS.

No.	Department.	Date.	G.O.	No.	Department.	Date.
556-7	Mar.	24-6-99				

Government {1899} of Madras.

MARINE.

Recd. } 1899. *Enclosures*

Regd. } *Spare copies*

G.O., No. 550, 21st June 1899.

JUNE.

Jigger

Communicating to the officers concerned letter from the Government of India forwarding copy of thier correspondence with the Bombay Government regarding the measures taken by the latter to prevent the importation of — into India ; directing the publication of the correspondence in the Fort St. George and Maritime District Gazettes ; and requesting the issue of orders in the Political Department in view to precautionary measures being taken by the Travancore and Cochin Darbars.

GOVERNMENT OF MADRAS.

MARINE DEPARTMENT.

Read—the following paper:—

From A. H. L. FRASER, Esq., C.S.I., Officiating Secretary to the Government of India, Home Department (Medical), to the Chief Secretary to the Government of Madras, dated Simla, 18th May 1899, No. 868.

In continuation of my letter, No. 195, dated the 9th February 1899, I am directed to forward, for the information of the Governor in Council, a copy of the correspondence noted in the margin, with the Government of Bombay, regarding the measures taken in that Presidency to prevent the importation of jigger into India.

Telegram to the Government of Bombay, dated the 25th April 1899, No. 686.
Letter from the Government of Bombay, dated the 3rd May 1899, No. 1898, and enclosure.
Letter from the Government of Bombay, dated the 8th May 1899, No. 1970, and enclosure.
Letter to the Government of Bombay, dated the 18th May 1899, No. 867.

2. I am to invite attention to the suggestion made to the Government of Bombay in the telegram of the 25th ultimo that, as an additional precaution, when returning emigrants are being examined for jigger the nature of the malady should be explained to them and they should be made to understand the importance of immediate resort to a Government dispensary in the event of their suffering from painful swelling between toes or under toe-nails.

3. It will also be observed that the Governor-General in Council has accepted the following modifications suggested by the Government of Bombay in the orders contained in the circular from this department, Nos. 195–98, dated the 9th February last, namely,—

(*a*) that a 5 per cent. solution of carbolic acid or a 1 in 1,000 solution of corrosive sublimate should be used in place of kerosine-oil for disinfecting vessels infected with jigger; and

(*b*) that the word "ballast" should include only sand and earth.

Enclosures.

Telegram from the Secretary to the Government of India, Home Department, to the Secretary to the Government of Bombay, General Department, dated Simla, 25th April 1899, No. 686.

Reference my letter 196, dated 9th February, about jigger. Please send for information Government India copy of resolution recently issued by Bombay Government on this subject, and keep Government India informed of any further action taken. Government India would suggest as additional precaution that when returning emigrants are examined for jiggers explanation should be given them of nature of malady, and they should be made to understand importance of immediate resort to Government dispensary in event of suffering from painful swelling between toes or under toe-nails.

From R. B. STEWART, Esq., I.C.S., Acting Secretary to the Government of Bombay, General Department, to the Secretary to the Government of India, Home Department, dated Bombay Castle, 3rd May 1899, No. 1898.

With reference to your telegram No. 686 (Medical), dated the 25th ultimo, I am directed to forward herewith, for the information of the Government of India, copies of the Resolutions noted in the margin regarding the measures taken to prevent the importation of jigger into India.

Government Resolution, General Department, No. 213, dated the 17th January 1899, and accompaniment.
Government Resolution, General Department, No. 756, dated the 17th February 1899.
Government Resolution, General Department, No. 1458, dated the 29th March 1899.
Government Resolution, Political Department, No. 2283, dated the 18th April 1899.
Government Resolution, General Department, No. 1897, dated the 3rd May 1899.

Resolution of the Government of Bombay, General Department, dated Bombay Castle, 17th January 1899, No. 213.

Read the following papers:—

Letter from the Surgeon-General with the Government of Bombay, No. 169, dated 11th January 1899.

I have the honour to forward herewith, for the information of Government, together with the attached correspondence, a report from Captain P. P. Kilkelly, M.B., I.M.S., lately officiating in medical charge 4th Bombay Infantry when that corps was serving in British East Africa, on the prevalence of the chigger, chigoe or jigger (*Pulex Penetrans*) in Mombassa and the adjacent mainland.

2. Captain Kilkelly correctly describes the effects produced by this parasite, which are such as to cause a very painful illness with temporary disablement ending sometimes in the loss of the affected part. He also gives his opinion that the parasite, which is said to have been unknown in Mombassa up to March 1898, has been carried thither across Africa from the West Coast of that continent within very recent times.

3. The report states that, when the regiment returned from inland on the 25th November 1898, chigger had firmly established itself at Mombassa. The regiment left that island on December 3rd in the S.S. *Canara*, and on December 17th, during the voyage between Aden and Bombay, 26 fresh cases of fully developed chigger were found amongst the men and followers, on making a minute inspection. Also, out of 30 coolies returning in the ship, many were found to be affected by the parasite. Development of the contents of the egg-sac of the female insect which causes the disease may, therefore, as Captain Kilkelly observes, be completed within a period of between 14 and 24 days after penetrating the skin.

4. There is no reason to doubt the probability that this insect will establish itself in India, and I need not emphasize the great necessity of taking all possible steps to prevent its importation and, if it should obtain a foot-hold, to limit its spread.

5. The measures which I recommend are the following:—

(*a*) The periodical inspection and careful treatment of all Indian coolies employed by Government in British East Africa, or in other parts of the continent having direct communication with Indian ports. Special attention should be paid to time-expired men for a month before their return to India.

(*b*) Medical inspection of all persons leaving East African ports for India, and prohibition of the embarkation for India of those found on medical inspection to be suffering from chigger.

(*c*) The medical examination on boardship of passengers for India eight days after leaving the African port, and afterwards at intervals of three days, with the object of detecting cases infected shortly before embarkation and which may have developed on the voyage.

(*d*) Careful medical inspection, at the port of disembarkation in India, of arrivals from Africa, and the detention, for treatment, of all cases of chigger in which the parasite had not already been extracted or destroyed.

6. I propose to issue instructions to Medical officers and subordinates, drawing attention to the possibility of the occurrence of cases of chigger in this Presidency, and making suggestions for their management; but, before doing so, I should be glad if Government could furnish me with information as to the races and castes of the majority of the coolies who have left for East Africa, and the districts from which they have mainly gone.

Resolution.—Government approve of the proposal made by the Surgeon-General in paragraph 6 of his letter, and the Protector of Emigrants, Bombay, should be requested, in consultation, if necessary, with the Protector of Emigrants, Karachi, to supply him as early as possible with the information required by him.

2. Copies of the letter from the Surgeon-General and of its accompaniments should be forwarded to the Commissioner in Sind and the Commissioner of Customs, with a request that they will report as early as possible what immediate steps can be taken to prevent the importation of chigger into India and what powers, if any, are required to enable them to deal with the disease.

(Signed) R. B. STEWART,
Acting Secretary to Government.

Accompaniments to Government Resolution No. 213, *dated the* 17*th January* 1899.

Report on the Prevalence of Chiggers in Mombassa, East Africa.

Absence of chiggers in Mombassa in March.

When the 4th Bombay Rifles landed in Mombassa, cases of chiggers had not been noted in the island.

During the months of March and April the first cases appeared and two men in the regiment were infected. At this time, however, the insect was very prevalent at Voi and Ndi stations, about 100 miles inland on the Uganda Railway, and the railway coolies at these places were to a large extent infected.

Coolies on Uganda Railway infected.

On the return of the regiment from Kismayu in November, it was found that chiggers had firmly established themselves at Mombassa; they were especially numerous at Kilindini, which is the terminus of the Uganda Railway.

Chiggers numerous in Mombassa in November.

The regiment arrived in Mombassa on 25th November and embarked on the B.I.S.S. *Canara* on the 3rd December.

Chiggers are unknown in Kismayu and Juba land. The men who returned from that district were therefore exposed to infection from chiggers for a period of eight days only.

Period required to develop fully—14 to 24 days.

On the 17th December, during the voyage from Aden to Bombay, a minute inspection was made of all men and followers on board and 26 fresh cases of fully developed chiggers were detected.

It will thus be seen that the period required for the development of the insect is limited to between 14 to 24 days.

About 30 coolies from the Uganda Railway were travelling on board under the care of the Medical officer of the ship. They had been invalided to India.

Coolies on ship infected.

I had an opportunity of examining some of these men and detected many cases of chiggers. The attention of the Medical officer of the ship was drawn to the importance of inspecting the coolies and treating all cases before the ship reached Bombay.

The chigger is a true flea (*Pulex Penetrans*). It commonly attacks the feet, being usually found under or near the toe nails; it may occur in other situations, back, chest, but such cases are not common.

Mode of infection.

The female burrows under the skin and gradually enlarges to about the size of a pea. In the earlier stages detection is almost impossible, as the patient himself is unaware of the presence of the insect and on inspection the very minute black spot, which marks its presence, may easily be overlooked. Later on as the enlargement, which is due to development of numerous eggs, increases, the patient is aware of slight itching or pain, and on examination a small circle of the cuticle is seen to be discoloured and appears as if a drop of pus had collected, but the centre of the circle is marked by a minute black spot. If the cuticle be removed, the white shining wall of the sac is seen.

When fully developed, the sac ruptures and the eggs escape and then develop into the mature flea, but I am not aware that the exact manner of growth during this portion of its life history has been fully worked out.

The sac can be completely enucleated. The natives in East Africa are particularly skilful in removing it in its entirety. They use a stiff thorn.

Treatment

The operation is however a difficult one and a considerable time is occupied in its performance, but if successful, the cavity heals rapidly and no more trouble is experienced.

A very serious inflammation proceeding to disease of bone is however set up in some cases in which the sac has been ruptured and operative interference is necessitated. Three instances of this among European officers in the Protectorate

Results.

employ have come to my notice; in one case the toe had to be removed.

It is said that these ill-effects can be prevented by free use of strong antiseptics. In the cases treated on board this ship, I have applied pure carbolic acid.

Sufficient time has not passed to show the results of this treatment, but so far all patients are doing well. I have however noticed that in some cases in which the men have themselves ruptured the sac, no ill-effects have followed.

It is stated that chiggers were conveyed to the West Coast of Africa in course of trade from the West Indies. They gradually crossed the continent through Congo and Uganda and have now reached Mombassa on the East Coast.

Chiggers traced to West Indies.

Large numbers of Indian coolies are employed on the Uganda Railway. These men have for the most part engaged for from two to three years and the return of the first drafts of the time-expired men commenced this year.

Indian coolies returning to India.

Chiggers are of frequent occurrence among these men and the danger of the disease being brought to India is therefore very great.

Danger of chiggers being brought to India.

No examination is made before the coolies leave Mombassa, and it appears probable that if untreated cases be allowed to land in India, the eggs on being expelled will find themselves under conditions not very dissimilar to those in Africa and will rapidly develop and multiply.

I would therefore urge the importance of an adequate medical examination being insisted on at Mombassa.

Precautions recommended.

No men actually suffering from chiggers should be allowed to proceed on boardship.

A further examination made at least eight days after leaving Mombassa by the Medical officer of the ship, would detect such cases as may have been infected within a few days of the date of the ship's departure from Mombassa.

The Medical officer of this ship has sent me the accompanying letter.

—

Letter from Dr. J. S. S. SHERLOCK, Surgeon in charge S.S. *Canara*, to the Senior Medical Officer in charge Troops, S.S. *Canara*.

I beg to acknowledge receipt of memorandum No. 95 and in reply to state that since being the Medical officer in charge of British India Steam Navigation Company's S.S. *Canara*, it has been my invariable custom to make a most thorough examination of all coolies, &c., those returning from the employ of the Uganda Railway to India, before landing at Bombay. A most systematic search has been made for the *Pulex Penetrans* and when found energetically treated.

—

Letter from Captain Kilkelly, I.M.S., to the Surgeon-General with the Government of Bombay.

I have the honour to forward, for the information of the Surgeon-General with the Government of Bombay, a copy of report on the prevalence of chiggers in Mombassa, East Africa.

—

Memorandum from the principal Medical Officer, Bombay and Aden Districts, dated the 22nd December 1898, No. 5347.

Forwarded for transmission to the Surgeon-General with the Government of Bombay.

The matter seems to be one of imperial importance and for early consideration by the Government of India.

—

Memorandum from the Principal Medical Officer, Bombay Command, dated 23rd December 1898, No. 23—3651.

Forwarded to the Surgeon-General with the Government of Bombay. I trust you will urge on the notice of the Government of Bombay, the importance of taking prompt steps in this matter. An inspection before the coolies embark and eight days after embarkation, as suggested by Captain Kilkelly, is desirable.

—

Resolution of the Government of Bombay, General Department, dated Bombay Castle, 17th February 1899, No. 756.

Read the following paper:—

Letter from the Government of India, Home Department (Medical), No. 196, dated the 9th February 1899.

I am directed to state that the attention of the Government of India has been drawn to the spread of the insect known as the "chigo" or "jigger" over Africa and to the possibility that the pest may invade India. I am to forward, for the information of the Governor in Council, a memorandum about the insect prepared by Mr. E. C. Cotes, Fellow of the Entomological Society of London.

2. The Government of India think that it would be advisable that the matter should be brought to the notice of Port Health Officers in order that they may be on the look-out and may make enquiries from ship masters and doctors, in the case of vessels coming from countries which are infested by the insect. I am also to suggest that the following precautions should be adopted, as far as the Government of Bombay may consider practicable, in respect of any ship in which the existence of the jigger may be brought to light. Every one on board to be carefully examined before being allowed to land, and any person suffering from the pest to be detained until cured. The ship to be washed down with kerosine oil, and the ballast, if the ship is in ballast, to be discharged into the sea.

Resolution.—Copies of the letter from the Government of India and accompaniment should be forwarded to the officers concerned for information and guidance.

2. The Commissioner of Customs and the Commissioner in Sind should be requested to expedite the submission of the reports called for in paragraph 2 of Government resolution No. 213, dated the 17th January 1899.

(Signed) R. B. STEWART,
Acting Secretary to Government.

Resolution of the Government of Bombay, Political Department, dated Bombay Castle, 18th April 1899, No. 2283.

Read the following paper:—

Memorandum from the General Department, No. 1580, dated the 12th April 1899—Transferring, with copies of Resolutions of Government in that department, No. 213, dated the 17th January 1899, No. 756, dated the 17th February 1899, and No. 1458, dated the 29th March 1899, for consideration and orders, a letter from the Health Officer of the port of Bombay, to the address of Government in that department, No. 714, dated the 6th idem, who states that the *Sirdhana* arrived on the morning of the 6th April 1899 in the Bombay harbour from Mombassa *viâ* Cutch Mándvi; and suggests, if the statement of those on board is correct, that some passengers from Mombassa, who were suffering from jigger ulcers, were landed at Cutch Mándvi, the authorities at ports in Native States may be informed so that steps may be taken for the necessary examination and supervision of passengers and coolies from East Africa.

Further memorandum from the General Department, No. 1656, dated the 17th April 1899—Transferring, in continuation of that department memo. No. 1580, dated the 12th idem, together with an endorsement No. 1995, dated the 14th April 1899, from the Commissioner of Customs, Salt, Opium and Abkari, a letter No. c.—5706, dated the 7th idem, from the Collector of Land Revenue, Customs and Opium, Bombay, who forwards copy of a memo. No. 61, dated the 6th idem, from the Superintendent, Preventive Department, reporting that a man suffering from jigger was recently landed from the S.S. *Sirdhana* at Mándvi in Cutch; and suggests that the same precautions against the importation of the disease should be taken at the Kathiawar and Cutch ports as are taken at British ports in this Presidency.

Resolution.—Copies of the Government Resolutions forwarded by the General Department should be communicated to the Political Agents of Native States having a sea board, with a request that they will move the Darbars of the States concerned to adopt, as far as possible, the precautions prescribed in paragraph 2 of the Government of India's letter, No. 196, dated the 9th February 1899, which is printed in the preamble of Government resolution No. 756, dated the 17th February 1899, in the General Department.

(Signed) S. W. EDGERLEY,
Secretary to Government.

Resolution of the Government of Bombay, General Department, dated Bombay Castle, 3rd May 1899, No. 1897.

Read the following paper:—

Telegram from the Government of India, Home Department, No. 686 (Medical), dated the 25th April 1899.

My letter No. 196, dated 9th February, about jigger. Please send for information, Government India, copy of resolution recently issued by Bombay Government on this subject, and keep Government India informed of any further action taken. Government India would suggest as additional precaution that when returning emigrants are examined for jiggers, explanation should be given them of nature of malady, and they should be made to understand importance of immediate resort to Government dispensary in event of suffering from painful swelling between toes or under toe-nails.

Resolution.—Copies of the Resolutions noted in the margin should be forwarded to the Government of India for information.

Government Resolution, General Department, No. 213, dated the 17th January 1899, and accompaniment.
Government Resolution, General Department, No. 756, dated the 17th February 1899.
Government Resolution, General Department, No. 1458, dated the 29th March 1899.
Government Resolution, Political Department, No. 2283, dated the 18th April 1899.

2. The Health Officer of the port of Bombay and the Commissioner in Sind should be requested to carry out the suggestion of the Government of India made in the concluding portion of their telegram. Immediate information should be given to Government in case any persons land who are affected by the jigger.

3. A copy of the telegram should be forwarded to the Political Department for the necessary action with reference to the concluding portion thereof.

(Signed) R. B. STEWART,
Acting Secretary to Government.

From R. B. STEWART, Esq., I.C.S., Acting Secretary to the Government of Bombay, General Department, to the Secretary to the Government of India, Home Department, dated Bombay Castle, 8th May 1899, No. 1970.

In their letter No. 196, dated the 9th February 1899, the Government of India directed that every one on board any ship, in which the existence of jigger was brought to light, should be carefully examined before being allowed to land, and that any person suffering from the pest should be detained until cured, and remarked that the ship should be washed down with kerosine oil, and that the ballast, if the ship was in ballast, should be discharged into the sea.

2. I am now directed to forward herewith, for the consideration and orders of the Government of India, copy of a letter No. 819, dated the 20th April 1899, from the Health Officer of the Port of Bombay, in which that officer points out certain difficulties in carrying out the instructions of the Government of India as regards the use of kerosine oil for the purpose of disinfecting vessels, and suggests that a 5 per cent. solution of carbolic acid or 1 in 1,000 solution of perchloride of mercury be used in place of kerosine oil, and that the world "ballast" may include sand or earth only. I am to add that His Excellency the Governor in Council concurs in the suggestions made by the Health Officer.

From Major JOHN CRIMMIN, V.C., I.M.S., Acting Health Officer of the Port of Bombay, to the Secretary to the Government of Bombay, General Department, dated Bombay Castle, 20th April 1899, No. 819.

With reference to Government Resolution, General Department, No. 756, dated 17th February 1899, I have the honour to state that ship commanders raise objections to the use of kerosine oil for the purpose of disinfecting the holds and decks of vessels on which cases of jigger or jigger-ulcers arrive from East or South African ports.

2. They say that the proceeding makes the wood very inflammable and is dangerous in the case of vessels carrying deck or tween-deck passengers owing to the difficulty there is in preventing native passengers from smoking and lighting fires in the tween-decks.

3. I would therefore venture to suggest that a 5 per cent. solution of carbolic acid or 1 in 1,000 solution of perchloride of mercury be used in place of the kerosine oil, and that the word "ballast" include sand or earth only.

From A. H. L. FRASER, Esq., C.S.I., Officiating Secretary to the Government of India, Home Department (Medical), to the Secretary to the Government of Bombay, General Department, dated Simla, 18th May 1899, No. 867.

In reply to your letter No. 1970, dated the 8th May 1899, I am directed to state that the Government of India accept the two modifications of the instructions contained in this department letter No. 196, dated the 9th February 1899, on the subject of precautions to be taken against the jigger suggested by the Government of Bombay, namely,—

(*a*) that a 5 per cent. solution of carbolic acid or a 1 in 1,000 solution of corrosive sublimate should be used in place of kerosine oil for disinfecting vessels infected with jigger; and

(*b*) that the word "ballast" should include only sand and earth.

No. 1467, Public.

Transferred to the Marine Department.

(Signed) A. R. KNAPP,
1st June 1899. Under Secretary.

Order—No. 550, Marine, dated 21st June 1899.

Communicated to the officers concerned in continuation of G.O., No. 208, Marine, dated 6th March 1899.

2. Orders will issue in the Political Department in view to precautionary measures being taken by the Travancore and Cochin Darbars.

3. The correspondence will be published in the Fort St. George and Maritime District Gazettes.

(True Extract.)

(Signed) W. B. DEWINTON,
Secretary to Government.

To the Presidency Port Officer.
" Collectors of Maritime Districts.
" the Port Health Officer, Madras.
" the Revenue Department.
" the Public Department.
" the Political Department.
" the Local and Municipal Department.
" the Superintendent, Government Press.

Exd. T. K. Narayana Aiyangar.

No 550 Mar of 21-6-99

Marine DEPARTMENT.

READ the following:—

Letter from the Government of India, Home department,
No 868 Medical, dated 18th May 1899.
Endorsement thereon in the Public department
No 1467 dated 1st June 1899

The disease called Chigger

Circulated to

The Governor.

14

The Political Dept for Cir.

A.G.H.
15.6.99

ORDER.

Communicated to the Officers concerned in continuation of G.O. 208 Mar. dated 6th March 1899.

2. Orders will issue in the Political department in view to precautionary measures being taken by the Travancore and Cochin Darbars.

3. This Correspondence ~~Order~~ will be published in the Fort St. George and Maritime district Gazettes.

C.S.

6.6.99

To The A.G.
" Collectors of Maritime Dts.
" Port Health Officers, Madras.
" Revenue Deptt
" Public Deptt
" Political Deptt 3/7/99
" Ex. Deptt
" Bpt. Govt Press.

[P. W. 42-A. / 1,000—2-3-99.]

Political Deptt Cir. 7/6. R 10/6 H & I 10/6 L 17/6.

208 Marine 6-3-99

Ro 363/99
E 526/99

Public (1899) Department.

CURRENT No. 718

13 P

From
The Govt of India
(Home)

Order Endorsement No. 1467
Transmitted to the 6-99.

No. 868.

Marine Department
A Schuster
Under Secretary

Dated 18th May 99
Received 3 June 99
Registered 29
Enclosures 56
Spare copies -

CH 30.5.99

SUBJECT.

Forwarding for information copy of correspondence with the Govt of Bombay regarding the measures taken in that Presidency to prevent the importation of Jigger into India

BACK PAPERS.

G.O.	No.	Department.	Date.
	883	Pub:	21.3.99.

FURTHER PAPERS.

G.O.	No.	Department.	Date.

Telegram No. 686, dated Simla, the 25th April 1899.

From—The Secretary to the Government of India, Home Department,

To—The Secretary to the Government of Bombay, General Department.

Reference my letter 196, dated 9th February, about jigger. Please send for information Government India copy of Resolution recently issued by Bombay Government on this subject, and keep Government India informed of any further action taken. Government India would suggest as additional precaution that when returning emigrants are examined for jiggers explanation should be given them of nature of malady, and they should be made to understand importance of immediate resort to Government dispensary in event of suffering from painful swelling between toes or under toe-nails.

G. C. Press, Simla.—No. 377 H. D.—6-5-99.—40.

No. 1898, dated Bombay Castle, the 3rd May 1899.

From—R. B. STEWART, Esq., I C.S., Acting Secretary to the Government of Bombay, General Department,

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

With reference to your telegram No. 686 (Medical), dated the 25th ultimo, I am directed to forward herewith, for the information of the Government of India, copies of the Resolutions noted in the margin regarding the measures taken to prevent the importation of Jigger into India.

Government Resolution, General Department, No. 213, dated the 17th January 1899, and accompaniment.
Government Resolution, General Department, No. 756, dated the 17th February 1899.
Government Resolution, General Department, No. 1458, dated the 29th March 1899.
Government Resolution, Political Department, No. 2283, dated the 18th April 1899.
Government Resolution, General Department, No. 1897, dated the 3rd May 1899.

1894
Pub. Dept.
Enclos. No. 1
To
1556

G. C. Press, Simla.—No. 562, H. D.—19-5-99.—120.

2. Copies of the letter from the Surgeon General and of its accompaniments should be forwarded to the Commissioner in Sind and the Commissioner of Customs, with a request that they will report as early as possible what immediate steps can be taken to prevent the importation of Chigger into India and what powers, if any, are required to enable them to deal with the disease.

R. B. STEWART,
Acting Secretary to Government.

To

The Surgeon General with the Government of Bombay,
The Sanitary Commissioner for the Government of Bombay,
The Health Officer of the Port of Bombay,
The Commissioner of Customs,
The Collector of Customs, Bombay,
The Protector of Emigrants, Bombay,
The Commissioner in Sind,
The Protector of Emigrants, Karáchi,
The Private Secretary to His Excellency the Governor.

} With copies of the accompaniments to the Surgeon General's letter.

No. of 1899.

Copy forwarded for information and guidance to

Accompaniments to Government Resolution No. 213, dated the 17th January 1899.

REPORT ON THE PREVALENCE OF CHIGGERS IN MOMBASSA, EAST AFRICA.

Absence of Chiggers in Mombassa in March.

When the 4th Bombay Rifles landed in Mombassa, cases of Chiggers had not been noted in the Island.

Coolies on Uganda Railway infected.

During the months of March and April the first cases appeared and two men in the Regiment were infected. At this time however the insect was very prevalent at Voi and Ndi stations, about 100 miles inland on the Uganda Railway, and the railway coolies at these places were to a large extent infected.

Chiggers numerous in Mombassa in November.

On the return of the Regiment from Kismayu in November, it was found that Chiggers had firmly established themselves at Mombassa; they were especially numerous at Kilindini, which is the terminus of the Uganda Railway.

The Regiment arrived in Mombassa on 25th November and embarked on the B. I. S. S. *Canara* on the 3rd December.

Period required to develop fully—14 to 24 days.

Chiggers are unknown in Kismayu and Juba land. The men who returned from that district were therefore exposed to infection from Chiggers for a period of eight days only.

On the 17th December, during the voyage from Aden to Bombay, a minute inspection was made of all men and followers on board and 26 fresh cases of fully developed Chiggers were detected.

It will thus be seen that the period required for the development of the insect is limited to between 14 to 24 days.

Coolies on ship infected.

About 30 coolies from the Uganda Railway were travelling on board under the care of the Medical officer of the ship. They had been invalided to India.

I had an opportunity of examining some of these men and detected many cases of Chiggers.

The attention of the Medical officer of the ship was drawn to the importance of inspecting the coolies and treating all cases before the ship reached Bombay.

Mode of infection.

The Chigger is a true flea (*Pulex Penetrans*). It commonly attacks the feet, being usually found under or near the toe nails; it may occur in other situations, back, chest, but such cases are not common.

The female burrows under the skin and gradually enlarges to about the size of a pea. In the earlier stages detection is almost impossible, as the patient himself is unaware of the presence of the insect and on inspection the very minute black spot, which marks its presence, may easily be overlooked. Later on as the enlargement, which is due to development of numerous eggs, increases, the patient is aware of slight itching or pain, and on examination a small circle of the cuticle is seen to be discoloured and appears as if a drop of pus had collected, but the centre of the circle is marked by a minute black spot. If the cuticle be removed, the white shining wall of the sac is seen.

When fully developed, the sac ruptures and the eggs escape and then develop into the mature flea, but I am not aware that the exact manner of growth during this portion of its life history has been fully worked out.

3 e/p

Regarding measures to be taken to prevent the importation into India from British East Africa of the disease called Chigger.

General Department.
No. 213

Bombay Castle,
17th January 1899.

Letter from the Surgeon General with the Government of Bombay, No. 169, dated the 11th January 1899 :—

"I have the honour to forward herewith, for the information of Government, together with the attached correspondence, a report from Captain P. P. Kilkelly, M.B., I.M.S., lately officiating in medical charge 4th Bombay Infantry when that Corps was serving in British East Africa, on the prevalence of the Chigger, Chigoe or Jigger (*Pulex Penetrans*) in Mombassa and the adjacent mainland.

"2. Captain Kilkelly correctly describes the effects produced by this parasite, which are such as to cause a very painful illness with temporary disablement ending sometimes in the loss of the affected part, He also gives his opinion that the parasite, which is said to have been unknown in Mombassa up to March 1898, has been carried thither across Africa from the West Coast of that Continent within very recent times.

"3. The report states that, when the Regiment returned from inland on the 25th November 1898, Chigger had firmly established itself at Mombassa. The Regiment left that island on December 3rd in the S. S. *Canara*, and on December 17th, during the voyage between Aden and Bombay, 26 fresh cases of fully developed Chigger were found amongst the men and followers, on making a minute inspection. Also, out of 30 coolies returning in the ship, many were found to be affected by the parasite. Development of the contents of the egg-sac of the female insect which causes the disease may, therefore, as Captain Kilkelly observes, be completed within a period of between 14 and 24 days after penetrating the skin.

"4. There is no reason to doubt the probability that this insect will establish itself in India, and I need not emphasize the great necessity of taking all possible steps to prevent its importation and, if it should obtain a foot-hold, to limit its spread.

"5. The measures which I recommend are the following :—

(*a*) The periodical inspection and careful treatment of all Indian coolies employed by Government in British East Africa, or in other parts of the Continent having direct communication with Indian Ports. Special attention should be paid to time-expired men for a month before their return to India.

(*b*) Medical inspection of all persons leaving East African Ports for India, and prohibition of the embarkation for India of those found on medical inspection to be suffering from Chigger.

(*c*) The medical examination on boardship of passengers for India eight day after leaving the African Port, and afterwards at intervals of three days, with the object of detecting cases infected shortly before embarkation and which may have developed on the voyage.

(*d*) Careful medical inspection, at the port of disembarkation in India, of arrivals from Africa, and the detention, for treatment, of all cases of Chigger in which the parasite had not already been extracted or destroyed.

"6. I propose to issue instructions to Medical officers and subordinates, drawing attention to the possibility of the occurrence of cases of Chigger in this Presidency, and making suggestions for their management; but, before doing so, I should be glad if Government could furnish me with information as to the races and castes of the majority of the coolies who have left for East Africa, and the districts from which they have mainly gone."

Resolution.—Government approve of the proposal made by the Surgeon General in paragraph 6 of his letter, and the Protector of Emigrants, Bombay, should be requested, in consultation, if necessary, with the Protector of Emigrants, Karáchi, to supply him as early as possible with the information required by him.

The sac can be completely enucleated. The natives in East Africa are particularly skilful in removing it in its entirety. They use a stiff thorn.

Treatment.

The operation is however a difficult one and a considerable time is occupied in its performance, but if successful, the cavity heals rapidly and no more trouble is experienced.

A very serious inflammation proceeding to disease of bone is however set up in some cases in which the sac has been ruptured and operative interference is necessitated. Three instances of this among European officers in the Protectorate employ have come to my notice; in one case the toe had to be removed.

Results.

It is said that these ill-effects can be prevented by free use of strong antiseptics. In the cases treated on board this ship, I have applied pure carbolic acid.

Sufficient time has not passed to show the results of this treatment, but so far all patients are doing well. I have however noticed that in some cases in which the men have themselves ruptured the sac, no ill-effects have followed.

It is stated that Chiggers were conveyed to the West Coast of Africa in course of trade from the West Indies. They gradually crossed the Continent through Congo and Uganda and have now reached Mombassa on the East Coast.

Chiggers traced to West Indies.

Large numbers of Indian coolies are employed on the Uganda Railway. These men have for the most part engaged for from two to three years and the return of the first drafts of the time-expired men commenced this year.

Indian coolies returning to India.

Chiggers are of frequent occurrence among these men and the danger of the disease being brought to India is therefore very great.

Danger of Chiggers being brought to India.

No examination is made before the coolies leave Mombassa, and it appears probable that if untreated cases be allowed to land in India, the eggs on being expelled will find themselves under conditions not very dissimilar to those in Africa and will rapidly develop and multiply.

I would therefore urge the importance of an adequate medical examination being insisted on at Mombassa.

Precautions recommended.

No men actually suffering from Chiggers should be allowed to proceed on boardship.

A further examination made at least eight days after leaving Mombassa by the Medical officer of the ship, would detect such cases as may have been infected within a few days of the date of the ship's departure from Mombassa.

The Medical officer of this ship has sent me the accompanying letter.

Letter from Dr. J. S. S. Sherlock, Surgeon in charge S. S. *Canara*, to the Senior Medical Officer in charge Troops, S. S. *Canara*.

I beg to acknowledge receipt of memorandum No. 95 and in reply to state that since being the Medical officer in charge of B. I. S. N. Company's S. S. *Canara*, it has been my invariable custom to make a most thorough examination of all coolies, &c., those returning from the employ of the Uganda Railway to India, before landing at Bombay. A most systematic search has been made for the *Pulex Penetrans* and when found energetically treated.

Letter from Captain Kilkelly, I.M.S., to the Surgeon General with the Government of Bombay.

I have the honour to forward, for the information of the Surgeon General with the Government of Bombay, a copy of report on the prevalence of Chiggers in Mombassa, East Africa.

Memorandum from the Principal Medical Officer, Bombay and Aden Districts, No. 5347, dated the 22nd December 1898.

Forwarded for transmission to the Surgeon General with the Government of Bombay.

The matter seems to be one of Imperial importance and for early consideration by the Government of India.

Memorandum from the Principal Medical Officer, Bombay Command, No. 23—3651, dated the 23rd December 1898.

Forwarded to the Surgeon General with the Government of Bombay. I trust you will urge on the notice of the Government of Bombay, the importance of taking prompt steps in this matter. An inspection before the coolies embark and 8 days after embarkation, as suggested by Captain Kilkelly, is desirable.

Measures to be taken to prevent the importation into India of the disease called Jigger.

General Department.
No. 756

Bombay Castle,
17th February 1899.

Letter from the Government of India, Home Department (Medical), No. 196, dated the 9th February 1899 :—

"I am directed to state that the attention of the Government of India has been drawn to the spread of the insect known as the 'Chigo' or 'Jigger' over Africa and to the possibility that the pest may invade India. I am to forward, for the information of the Governor in Council, a memorandum about the insect prepared by Mr. E. C. Cotes, Fellow of the Entomological Society of London.

"2. The Government of India think that it would be advisable that the matter should be brought to the notice of Port Health Officers in order that they may be on the look-out and may make enquiries from ship masters and doctors, in the case of vessels coming from countries which are infested by the insect. I am also to suggest that the following precautions should be adopted, as far as the Government of Bombay may consider practicable, in respect of any ship in which the existence of the Jigger may be brought to light. Every one on board to be carefully examined before being allowed to land, and any person suffering from the pest to be detained until cured. The ship to be washed down with kerosine oil, and the ballast, if the ship is in ballast, to be discharged into the sea."

RESOLUTION.—Copies of the letter from the Government of India and accompaniment should be forwarded to the officers concerned for information and guidance.

2. The Commissioner of Customs and the Commissioner in Sind should be requested to expedite the submission of the reports called for in paragraph 2 of Government Resolution No. 213, dated the 17th January 1899.

R. B. STEWART,
Acting Secretary to Government.

To

The Health Officer of the Port of Bombay,
The Sanitary Commissioner for the Government of Bombay,
The Commissioner of Customs,
The Collector of Customs, Bombay,
The Surgeon General with the Government of Bombay,
The Commissioner in Sind,
The Private Secretary to His Excellency the Governor,
The Political, Resident, Aden,
The Supervising Medical Officer, Railway Medical Inspection,
The General Department of the Secretariat (Plague).

With copies of Government Resolution No. 213, dated the 17th January 1899, and accompaniment,

With copies of the accompaniment to the letter from the Government of India.

No. of 1899.

Copy forwarded for information and guidance to

Measures to be taken to prevent the importation into India from British East Africa of the disease called Jigger.

General Department.
No. 1458

Bombay Castle,
29th March 1899.

Letter from the Commissioner of Customs, Salt, Opium and A'bkári, No. 841, dated the 16th February 1899 :—

"In reply to Government Resolution No. 213 of the 17th January, asking me to report what steps can be taken to prevent the importation of the penetrating-flea disease known as 'Chigger' into India, I have the honour to observe that the question would appear to be one primarily for the consideration of the Sanitary Authorities.

"2. But in view of our very imperfect knowledge of the gravity of the disease and of the area over which it prevails in Africa, it seems to me that attention should be mainly directed towards the prevention of the embarkation, at any African port on vessels bound for India, of persons suffering from 'Chigger.' This can best be done by African Authorities.

"3. We can, meantime, on our side safeguard ourselves to some extent by adding to the rules notified under Government Notification No. 3873 of 18th September 1889, the following rule :—

'The Master of every vessel which has touched at Mombássa (or any other port where Chigger prevails) shall on arrival deliver to the Port Health Officer a certificate in the following form signed by the Medical Officer of the vessel, if there is one, and, if not, by the Master himself :—

'I hereby certify that I have this day carefully examined each of the passengers and crew of the S. S. . . . . , with a view to discover if any of them is suffering from "Chigger," and that as the result of this examination, I find that . . . . . persons are suffering from the above disease.' (It may be mentioned that all steamers, at present, trading to and from Mombássa and this Presidency carry doctors).'

"4. Until this certificate has been duly delivered, no such vessel will be allowed to communicate with shore or land any of her passengers or crew.

"5. In the event of any one suffering from Chigger being found on board, the Port Health Officer shall, with the assistance of the Police and Municipal Authorities, arrange for his or her removal to hospital or other suitable place.

"6. The above rule will secure the examination of all passengers, &c., before the vessel comes to anchor and will prevent delay, thus materially aiding the Health Officer of the Port and facilitating the work of detection and prevention of spread of the disease."

Memorandum from the Commissioner in Sind, No. 403, dated the 21st February 1899 :—

"The Acting Commissioner in Sind presents compliments, and with reference to Government Resolution No. 213, dated the 17th January 1899, General Department (Subject—Importation of Chigger), has the honour to state thate after consulting the marginally noted officers, he is of opinion that the measures (*a*), (*b*), (*c*) and (*d*), suggested by the Surgeon General with the Government of Bombay in his letter No. 169, dated 11th January 1899, paragraph 5, could be adopted with advantage and without undue difficulty, provided that it can be insisted that all vessels carrying passengers from an infected country should carry a qualified doctor. Of these measures only those detailed in clause (*d*) are to be taken in India, and for their performance, the Commissioner in Sind could at once, if Government approve, arrange by the inclusion of the words 'or of Chigger' after the word 'Scarlatina' in Rule 30 made under Section 6 (*p*) of the Indian Ports Act of 1889. The subsequent rules would then give ample power to deal with cases of 'Chigger.' The rules are published under the Commissioner's Marine Notification No. 1061, dated 11th July 1891.

Port Officer, Karáchi.
Collector of Karáchi.
Chief Collector of Customs in Sind.

"2. But as Government are aware, the Government of India have addressed the Secretary of State on the question of the amendment of the Indian Ports Act, and Section 6 (*p*) if amended, as proposed, will only allow of rules being made for the removal and segregation of persons suffering from diseases declared to be *dangerous to life*.

"The inclusion of 'Chigger' would then become illegal, as it does not appear that it is *dangerous to life*.

"The Acting Commissioner, therefore, thinks that either this restriction must be removed, or, that 'Chigger' should be specifically mentioned.

"The Acting Commissioner considers that the measures to be taken to prevent the importation of 'Chigger' can most conveniently be taken under the Indian Ports Act, as at present, at any rate, action is only required at ports.

"3. From the report of the Special Port Health Officer, Captain Jenney, a copy of which is appended, it would seem that the measures suggested by the Surgeon General with the Government of Bombay, dealing as they do only with the persons actually suffering from the disease, will afford only a very partial safeguard. The fuller measures which, in Captain Jenney's opinion, would be required for absolute protection, would also be possible under the rules framed under Section 6. But before deciding to apply such drastic measures Government will no doubt wish to have Captain Jenney's theory indisputably established by further enquiry; and it would still, the Acting Commissioner thinks, be a question whether such measures would be politic in dealing with a disease that is not dangerous to life."

RESOLUTION.—The Government of India have, in their letter No. 196 of the 9th February 1899, republished in Government Resolution No. 756 of the 17th idem, prescribed the precautions which should be taken with a view to prevent the "Chigo" or "Jigger" pest from being introduced into India. It does not appear to His Excellency the Governor in Council that it is at present necessary to do anything further or to take any steps in the direction of amending the rules under the Indian Ports Act.

R. B. STEWART,
Acting Secretary to Government.

To

The Health Officer of the Port of Bombay,
The Sanitary Commissioner for the Government of Bombay,
The Commissioner of Customs,
The Collector of Customs, Bombay,
The Surgeon General with the Government of Bombay,
The Commissioner in Sind,
The Private Secretary to His Excellency the Governor,
The Political Resident, Aden,
The Supervising Medical Officer, Railway Medical Inspection,
The General Department of the Secretariat (Plague).

No. of 1899.

Copy forwarded for information and guidance to

8 Sp

Maritime Native States.

Measures to be taken in — to prevent the importation into India from British East Africa of the disease called *Jigger*.

No. 2283.

POLITICAL DEPARTMENT.

Bombay Castle, 18th April 1899.

Memorandum from the General Department, No. 1580, dated the 12th April 1899—Transferring, with copies of Resolutions of Government in that Department, No. 213, dated the 17th January 1899, No. 756, dated the 17th February 1899, and No. 1458, dated the 29th March 1899, for consideration and orders, a letter from the Health Officer of the Port of Bombay, to the address of Government in that Department, No. 714, dated the 6th idem, who states that the *Sirdhana* arrived on the morning of the 6th April 1899 in the Bombay Harbour from Mombassa *vid* Cutch Mándvi; and suggests, if the statement of those on board is correct, that some passengers from Mombassa, who were suffering from jigger ulcers, were landed at Cutch Mándvi, the authorities at ports in Native States may be informed so that steps may be taken for the necessary examination and supervision of passengers and coolies from East Africa.

Further memorandum from ditto ditto, No. 1656, dated the 17th April 1899—Transferring, in continuation of that Department memorandum No. 1580, dated the 12th idem, together with an endorsement No. 1995, dated the 14th April 1899, from the Commissioner of Customs, Salt, Opium and A'bkári, a letter No. c.—5706, dated the 7th idem, from the Collector of Land Revenue, Customs and Opium, Bombay, who forwards copy of a memorandum No. 61, dated the 6th idem, from the Superintendent, Preventive Department, reporting that a man suffering from jigger was recently landed from the S.S. *Sirdhana* at Mándvi in Cutch; and suggests that the same precautions against the importation of the disease should be taken at the Káthiáwár and Cutch Ports as are taken at British Ports in this Presidency.

RESOLUTION.—Copies of the Government Resolutions forwarded by the General Department should be communicated to the Political Agents of Native States having a seaboard, with a request that they will move the Darbars of the States concerned to adopt, as far as possible, the precautions prescribed in paragraph 2 of the Government of India's letter No. 196, dated the 9th February 1899, which is printed in the preamble of Government Resolution No. 756, dated the 17th February 1899, in the General Department.

S. W. EDGERLEY,
Secretary to Government.

To

The Political Agent, Káthiáwár,
The Political Agent, Cutch,
The Agent to His Excellency the Governor at Surat,
The Collector and Political Agent, Kolába,
The Collector and Political Agent, Kaira,
The General Department of the Secretariat.

} With copies of the Resolutions referred to.

9 21

Jigger.—
Measures to be taken to prevent the importation into India from British East Africa of the disease called —.

General Department.
No. 1897

Bombay Castle,
3rd May 1899.

Telegram from the Government of India, Home Department, No. 686 (Medical), dated the 25th April 1899 :—

"My letter No. 196, dated 9th February, about Jigger. Please send for information, Government India, copy of Resolution recently issued by Bombay Government on this subject, and keep Government India informed of any further action taken. Government India would suggest as additional precaution that when returning emigrants are examined for Jiggers, explanation should be given them of nature of malady, and they should be made to understand importance of immediate resort to Government Dispensary in event of suffering from painful swelling between toes or under toe nails."

RESOLUTION.—Copies of the Resolutions noted in the margin should be forwarded to the Government of India for information.

Government Resolution,	General	Department,	No. 213,	dated the 17th January 1899, and accompaniment.
"	"	"	"	"	756, dated the 17th February 1899.
"	"	"	"	"	1458, " 29th March 1899.
"	"	Political	"	"	2283, " 18th April 1899.

2. The Health Officer of the Port of Bombay and the Commissioner in Sind should be requested to carry out the suggestion of the Government of India made in the concluding portion of their telegram. Immediate information should be given to Government in case any persons land who are affected by the Jigger.

3. A copy of the telegram should be forwarded to the Political Department for the necessary action with reference to the concluding portion thereof.

R. B. STEWART,
Acting Secretary to Government.

To

The Surgeon General with the Government of Bombay,
The Health Officer of the Port of Bombay,
The Sanitary Commissioner for the Government of Bombay,
The Commissioner of Customs,
The Collector of Customs, Bombay,
The Protector of Emigrants, Bombay,
The Protector of Emigrants, Karáchi,
The Commissioner in Sind,
The Political Resident, Aden,
The Private Secretary to His Excellency the Governor,
The Supervising Medical Officer, Railway Medical Inspection,
The Political Department of the Secretariat,
The General Department of the Secretariat (Plague),
The Government of India (by letter).

No. of 1899.

Copy forwarded for information and guidance to

1894
Pol. Dept.
Proceedings. No. 3
To
1556

No. 1970, dated Bombay Castle, the 8th May 1899.

From—R. B. STEWART, Esq., I.C.S., Acting Secretary to the Government of Bombay, General Department,

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

In their letter No. 196, dated the 9th February 1899, the Government of India directed that every one on board any ship, in which the existence of Jigger was brought to light, should be carefully examined before being allowed to land, and that any person suffering from the pest should be detained until cured, and remarked that the ship should be washed down with kerosine oil, and that the ballast, if the ship was in ballast, should be discharged into the sea.

2. I am now directed to forward herewith, for the consideration and orders of the Government of India, copy of a letter No. 819, dated the 20th April 1899, from the Health Officer of the Port of Bombay, in which that officer points out certain difficulties in carrying out the instructions of the Government of India as regards the use of kerosine oil for the purpose of disinfecting vessels, and suggests that a 5 per cent. solution of carbolic acid or 1 in 1,000 solution of perchloride of mercury be used in place of kerosine oil, and that the word "ballast" may include sand or earth only. I am to add that His Excellency the Governor in Council concurs in the suggestions made by the Health Officer.

No. 819, dated Bombay Castle, the 20th April 1899.

From—MAJOR JOHN CRIMMIN, V.C., I.M.S., Acting Health Officer of the Port of Bombay,

To—The Secretary to the Government of Bombay, General Department.

With reference to Government Resolution, General Department, No. 756, dated 17th February 1899, I have the honour to state that ship commanders raise objections to the use of kerosine oil for the purpose of disinfecting the holds and decks of vessels on which cases of Jigger or Jigger-ulcers arrive from East or South African Ports.

2. They say that the proceeding makes the wood very inflammable and is dangerous in the case of vessels carrying deck or tween-deck passengers owing to the difficulty there is in preventing native passengers from smoking and lighting fires in the tween-decks.

3. I would therefore venture to suggest that a 5 per cent. solution of carbolic acid or 1 in 1,000 solution of perchloride of mercury be used in place of the kerosine oil, and that the word "ballast" include sand or earth only.

G. C. Press, Simla.—No. 563 H. D.—19-5-99—120.

No. 867 1284

From

A. H. L. Fraser, Esq., C.S.I.,

Offg. Secy. to the Govt. of India.

To

The Secretary to the Government of Bombay,

General Department.

Home Department.

(Medical)

Simla, the 18th May 1899.

Sir,

In reply to your letter No. 1970, dated the 6th May 1899, I am directed to state that the Government of India accept the two modifications of the instructions contained in this Department letter No. 196, dated the 9th February 1899, on the subject of precautions to be taken against the Jigger suggested by the Government of Bombay, namely:-

(a) that a 5 per cent solution of carbolic acid or a 1 in 1000 solution of corrosive sublimate should be used in place of kerosine oil for disinfecting vessels infected with Jigger, and

(b) that the word "ballast" should include only sand and earth.

I have the honour to be,

Sir,

Your most obedient Servant,

Sd/ A. H. L. Fraser,

Offg. Secretary to the Government of India.

True copy,

V. Smilie.

Registrar, Home Department.

H.L.B.

1894
Pub. Dept.
Misc. No. 4
1556

No. 860

From

A. H. L. Fraser, Esq., C.S.I.,

Offg. Secy. to the Govt. of India.

To

The Chief Secretary to the Government of Madras.

Home Department.

(Medical)

CHIEF SECRETARIAT 20 MAY 1899 GOVERNMENT OF MADRAS

Dated the 18th May 1899.

Sir,

In continuation of my letter No. 195, dated the 9th February 1899, I am directed to forward, for the information of the Governor in Council, a copy of the correspondence noted in the margin, with the Government of Bombay, regarding the measures taken in that Presidency to prevent the importation of Jigger into India.

Telegram to the Govt. of Bombay, No. 686, dated the 25th April 1899.
Letter from ditto No. 1896, dated the 3rd May 1899 and enclosure.
Letter from ditto No. 1970, dated the 8th May 1899 and enclosure.
Letter to ditto No. 867 dated the 18th May 1899.

2. I am to invite attention to the suggestion made to the Government of Bombay in the telegram of the 25th ultimo that, as an additional precaution, when returning emigrants are being examined for Jigger the nature of the malady should be explained to them and they should be made to understand the importance of immediate resort to a Government Dispensary in the event of their suffering from painful swelling between toes or under toe nails.

3. It will also be observed that the Governor General in Council has accepted the following modifications suggested by the Government of Bombay in the orders contained in the circular from this Department Nos./95-98, dated the 9th February last, namely—

(a) that a 5 per cent solution of carbolic acid or a 1 in 1000 solution of corrosive sublimate should be used in

1894 Public Dept. Enclos. No. 5 To No. 1556

place of kerosine oil for disinfecting vessels infected with jigger; and

(b) that the word "ballast" should include only sand and earth.

I have the honour to be,

Sir,

Your most obedient Servant,

A A Fraser

Offg. Secretary to the Govt.of India.

H.L.B.

Ref. 4

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