Date taken out.	For what purpose.			Initials of Referencer.	Date returned.	Initials of attender.
	Department.	C. No.	Year.			

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Local & Munl. (1896) Department.

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G.O., No. 2427 L

DATED 19-12-96

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DESPATCHED

[Despatch Abstract.]

Mortality from Anthrax

Comp. to the Sanitary Commissioner and the Revenue Depts. endorsement of the Pub. Works Dept. on the subject of —.

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 {1896} of Madras.

LOCAL AND MUNICIPAL.

Recd. } 1896. *Enclosures*
Regd. } *Spare copies*

G.O., No. 2427 L., 19th December 1896.

DECEMBER.

Mortality from Anthrax.

Communicating to the Sanitary Commissioner and the Revenue Department endorsement of the Public Works Department on the subject of —.

BACK PAPERS.

GOVERNMENT OF MADRAS.

LOCAL AND MUNICIPAL DEPARTMENT.

Read—the following papers:—

From Surgeon-Lieutenant-Colonel W. G. KING, M.B., C.M., D.P.H., Sanitary Commissioner for Madras, to the Chief Secretary to Government, dated Fort St. George, 9th June 1896, No. 1134–S.

I have the honour to invite the attention of Government to the fact that during 1894–95 there perished of anthrax in this Presidency no less than 16,123 cattle. Instructions have doubtless been issued from time to time by the Board of Revenue and Veterinary authorities that the disposal of the bodies of animals dead of this disease should be accomplished, by effecting their burial without making incisions for any purpose, or by cremation. But it is evident that nothing short of very much more elaborate measures than are at present employed would secure that such precautions are really carried out in villages. It may therefore be assumed that a considerable proportion of the skins of animals dead of anthrax are collected by skin merchants for export. In confirmation of this opinion I may state that careful inquiries by the Medical Inspectors of the Local Government Board of England have shown that anthrax has been conveyed to workmen in that country by medium of skins imported from India from time to time. In 1890, whilst Acting Sanitary Commissioner I made certain inquiries on this point from municipalities in which the skin trade is largely carried on. I found that in Vániyambádi,* Coonoor and Gudiyáttam fatal cases of anthrax infection of man had occurred. Statistics of this character would, of course, in view of the state of registration in this Presidency only take cognizance of the external form of anthrax (malignant carbuncle), whilst the very fatal form of "internal" infection would, in all probability, be simply returned as due to "fever." Hence the chances are that the mortality from this cause is much greater than can be readily ascertained. Indeed, in view of the well-recognized great vitality and resistance of anthrax spores to conditions inimical to other microbes, it goes without saying that in a country where this disease is endemic considerable risk is incurred by human beings brought by accident or duty in contact with skins prepared for sale.

2. In the case of municipalities, this fact is recognized by the law requiring that places in which skins are stored should be subject to license, thus leaving it to Municipal authorities to insist that the trade shall be conducted with such safeguards as they may think proper. But this leaves the question of protection of human beings during transport of skins unaffected. It is certainly undesirable that any trade should be subject to disabilities that would affect its prosperity, and I therefore do not propose to suggest elaborate measures to minimize risks. There is, however, one point on which I believe by Government simply issuing an order considerable good in the matter of precaution could be effected. In the course of my tours, I have from time to time found in mofussil stations skins of animals piled on platforms intended for passengers and carried by the same trains. The mere act of moving a skin to place it in a train, or the blowing of a breeze over the skin would be sufficient to convey particles to which deadly anthrax spores might be attached, so as to come in contact with the skin, mouth or nose of passers-by. This being so, passengers are subjected to a definite danger.

* 31 cases with 10 deaths.

3. Under the above circumstances, I respectfully advise that Government should issue an order requiring that skins of animals be not collected for transport nor be landed upon a platform, any part of which is intended for the use of passengers, and that skins shall, under no circumstances, be conveyed in vans intended for receipt of passengers' luggage.

No. 715.

Referred to the Surgeon-General for remarks.

(By order.)

Fort. St. George,
22nd June 1896.

(Signed) W. W. PHILLIPS,
Ag. Assistant Secretary.

To the Surgeon-General.

From Surgeon-Colonel D. F. BATEMAN, Acting Surgeon-General with the Government of Madras, to the Chief Secretary to Government, dated Madras, 22nd July 1896, No. 321.

With reference to the letter of the Sanitary Commissioner inviting the attention of Government to the large mortality from anthrax during 1894–95, and requesting that, under the circumstance stated, Government be pleased to issue an order requiring the Railway authorities not to allow skins of animals on platforms used by passengers, and that the same be not conveyed in vans intended for the receipt of passengers' luggage, forwarded with your endorsement No. 715, dated the 22nd June 1896, and herewith returned, I have the honour to state that I called upon Brigade-Surgeon-Lieutenant-Colonel A. M. Branfoot and Surgeon-Lieutenant-Colonels W. R. Browne and A. J. Sturmer for their views on the subject, and to state what number of cases of anthrax, malignant pustule, they had seen in Southern India.

2. The following are their replies:—

Brigade-Surgeon-Lieutenant-Colonel Branfoot states: "I have not seen a case of 'anthrax' due to the specific 'Bacillus anthrax' in a human being in India, though I have seen many cases of the disease in both its forms in horses. I am certainly of opinion that the skins of animals, which have been simply prepared by sun-drying and which may contain the germs of disease such as anthrax do form a source of risk to human beings brought in contact with them, though the risk does not appear to be a serious one except to persons who actually handle the skins, and I think that such skins should not be conveyed in vans in which passengers' luggage is received or be allowed to stand or be stored on platforms used by passengers."

Surgeon-Lieutenant-Colonel Browne states: "My experience coincides with that of Brigade-Surgeon-Lieutenant-Colonel Branfoot in that I have not seen a case of anthrax in man during my service in India.

"Fagge states in his Practice of Medicine, volume I, page 353, 'By far the most important cause of anthrax in man is infection from the dried skins or hair of diseased animals', and this is so universally accepted that though the disease in man is not, in Madras, often met with or at any rate recognized (and in its internal forms it is easily overlooked) the two measures of precaution recommended by the Sanitary Commissioner seem to be eminently desirable."

Surgeon-Lieutenant-Colonel Sturmer states: "I have never seen a case of anthrax in man in India, although I have met with many cases among animals. I cannot believe it is common among human beings, or else we should have met with cases in Madras, as there is a skin factory or tannery near the Mount, and if persons had been often affected, some of them would certainly have come to the Madras hospitals for treatment. Woolsorters' disease is a very uncommon one in England.

"I think the Sanitary Commissioner's advice is sound and that skins should not be placed in vans in which passengers' luggage is carried, and that they should not be kept piled on railway platforms where passengers congregate.

"Almost as much danger is exhibited by the way bandy-loads of skins are carried about the Madras roads on their way to a station or tannery."

3. I concur in the opinion of these officers. I have never seen a case of malignant pustule in a human being during my practice in Southern India, but do not doubt that they occur, and I consider that, if the precautions suggested by the Sanitary Commissioner could be carried out, they would diminish the chance of the disease spreading.

No. 917.

Transferred to the Public Works (Railway) Department.

Fort St. George,
6th August 1896.

(Signed) W. W. PHILLIPS,
Ag. Assistant Secretary.

To the Public Works (Railway) Department.

Proceedings of the Board of Revenue (Revenue Settlement, Land Records and Agriculture), dated 21st October 1896, Mis. No. 5106.

Read—the following papers :—

From the Inspector-General, Civil Veterinary Department, Simla, dated 10th September 1896, No. 1534–85 M.

I have the honour to forward herewith a cutting from the *Englishman*, of the 3rd September 1896, relating to the occurrence of malignant carbuncle (anthrax) having occurred among people at Vániyambádi, &c., and to ask if you can kindly give me any information on the subject. As the Madras Government appears to have had the matter before them, no doubtful particulars are forthcoming. It is presumed that the diagnosis of the cases was made by qualified men who have probably retained some of the tissues affected. If this be the case, I should be very glad to have a portion of tissue for examination. May I suggest that, in cases of this kind, the Government of Madras may be asked to avail themselves of the assistance of the Imperial Bacteriologist in the examination of diseased tissues. The address of the Imperial Bacteriologist is Muktesar *viâ* Peora Kumaon hills, Naini Tal district.

The "Englishman", dated 3rd September 1896.

It having been brought to the notice of Government that during the past eighteen months some 20,000 cattle have died from anthrax in the Madras Presidency, the skins of a considerable portion of which have been sold in trade, and that fatal cases of anthrax infection (malignant carbuncle) have occurred among people at Vániyambádi, Gudiyáttam, Coonoor (Chingleput district, a station on the Madras Railway), and other places where skin merchants have their depôts, the Madras Government has issued orders to the Railway authorities not to allow sun-dried skins of animals to be piled on station platforms used by passengers, and to see that these skins are not conveyed in vans intended for the reception of passengers' luggage.

Reference thereon, dated 29th September 1896.

The extract enclosed by the Inspector-General will be forwarded to the Consulting Engineer for Railways with the request that he will inform the Board what orders have been issued in the matter, and on what information they were based.

From the Consulting Engineer for Railways, Madras, dated 1st October 1896, No. 3122.

In reply to your Reference on No. 5366, dated 29th September 1896, I have the honour to inform you that no orders have as yet been issued, but that Local and Municipal endorsement No. 917, dated 6th instant, submitting remarks and reports from certain Medical officers regarding the large number of cases of mortality from anthrax during 1894–95 has been forwarded to the Agents of the Railway Administration for remarks.

From the same officer, dated 17th October 1896, No. 3278, returning the cutting from the *Englishman* of 3rd September 1896 relating to the occurrence of malignant carbuncle at Vániyambádi.

Resolution—dated 21st October 1896, Mis. No. 5106.

The letter from the Inspector-General, Civil Veterinary Department, will be submitted to Government for consideration and orders, with reference to the correspondence referred to by the Consulting Engineer for Railways.

(True Copy and Extract.)

(Signed) R. V. SRINIVASIAR,
Secretary.

To the Secretary to Government, Revenue Department,
with the extract from the *Englishman.*

Endorsement R. No. 2103.

Transferred to the Public Works Department.

Fort St. George,
12th November 1896.

(Signed) LIONEL DAVIDSON,
Ag. Under Secy. to Govt.

To the Public Works Department (Railway Branch).

Letter from the Agent, South Indian Railway, to the Consulting Engineer for Railways, Madras, dated 28th September 1896, No. 895.

With reference to your endorsement No. 2468, dated 11th August 1896, I have the honour to forward copies of reports furnished to me by the Traffic Manager and the Superintending Physician on the question of the propagation of anthrax by the stacking of hides on passenger platforms, or their carriage in passenger brake-vans. On this railway hides are unloaded on the goods shed loading banks, and are not carried in brake-vans. The procedure has, however, not been introduced with a view of guarding against anthrax infection, but simply on account of the objectionable smell of dried skins. The Superintending Physician points out that the treatment to which skins are subjected before being tendered for railway transport renders them innocuous, and that no danger to the public would result by their being handled on passenger platforms or carried in brake-vans. Under these circumstances there appears to be no necessity for the proposed legislation in respect to skins so far as Railway Companies are concerned. If any preventative measures are required they should be introduced to regulate the handling and treatment of animals and skins while they are in the infectious stage.

Enclosure to above.

Copy of a letter from the Superintending Physician, South Indian Railway, Trichinopoly, to the Agent, South Indian Railway, dated 1st September 1896, No. A/2747–119.

[Animals and skins not to be allowed on passenger platforms or conveyed in passenger brake-vans.]

Your letter No. 14245–156 of 14th August 1896.

Legislation with reference to anthrax should not be a difficult public health problem. All the knowledge we possess of this cattle-disease especially as to the circumstances of its communicability to man was arrived at, and I might even say, completed in the earlier years of the last decade. Spear, Greenfield and Klein in reports of the Medical officer to the Government Board for the years 1880, 1881, 1882 and 1883 have dealt with the natural history of the disease. Workers in wools and hides in factories of the old class and slaughterers occasionally developed the disease. So far as spread of that form of anthrax to man, where the germs of disease are borne on wools and hides, is concerned (and this form of disease is the only one of importance with reference to the proposed ruling quoted above) intimate handling of infected wools and hides in factories where the simplest requirements of cleanliness and ventilation are not met, is required to produce the disease in man. And so far as accidental proximity to or contact with infected wool or hides is concerned, the chances of taking the disease are exceedingly small. The skins of South Indian commerce are subjected to a process of salting and sun-drying, and sun-drying is the most potent of known germicides for Bacillus anthracis and its spores.

In the absence of information on the subject, it is difficult to explain the large reported numbers of deaths from forms of anthrax. But aided by what we know of the natural history of the disease and the habits of the people, we cannot be far wrong if we assume the chief sufferers to be of the classes who eat carrion and those whose trade is to slaughter animals or skin carcases, *i.e.*, those who are brought into contact with the skins before it is finally ready for trade purposes.

I have never seen skins stacked on passenger platforms or stowed in passenger brake-vans. I do not think there is ever occasion to do so. And, even if such were ever done, I do not think any real danger is incurred by the public.

But the smell from skins is in most cases very objectionable, and for this reason I think it desirable to follow the Surgeon-General's counsel.

I should like to see a similar ruling passed with reference to traffic in salt-fish.

Finally, I would suggest that before any ruling is brought into force that would interfere with the trade at that stage of it where it has to do with railway carriers, some such authority which would correspond to the Veterinary Department of the Board of Agriculture should be established; so that a process such as this, which menaces the public health, is dealt with and controlled in its earlier stages.

COPY of a letter No. A. 8078—A. 1347, dated 25th September 1896, from the Traffic Manager, to the Agent, South Indian Railway.

[Animals and skins not to be allowed on passenger platforms or in passenger brake-vans.]

Your No. 14245-1707 of 8th instant.

I quite agree with the views expressed by the Superintending Physician, so far as the transit of skins by rail is concerned, and I am of opinion that no special provision is necessary for dealing with this traffic, especially in the absence of danger so far as the public is concerned.

Some time ago complaints were made of the objectionable smell from the skins when placed on platform at stations where they are usually dealt with, and instructions were then given that they were to be unloaded on the goods shed loading banks, and I am not aware that any further complaints have since been made.

As a rule consignments of skins are usually forwarded in covered goods as loads or in tranship wagons, and I have never seen them carried in brake-vans. There is, however, no order at present prohibiting this, and I understand that there is no special order for dealing with this traffic on the Madras Railway.

I return the Superintending Physician's letter herewith.

Letter from the Agent and Manager, Madras Railway, to the Consulting Engineer for Railways, Madras, dated 9th October 1896, No. 9507–888.

With reference to your endorsement No. 2465 of the 11th August last on letter from the Acting Surgeon-General with the Government of Madras, I have the honour to inform you that our rules at present prohibit the loading of skins in brake or baggage vans, the only vehicles in which passengers' luggage is carried.

A large proportion of our skin traffic is carried in small consignments in road goods wagons, and these at road-side stations are necessarily loaded and unloaded on the passenger platforms. To refuse to receive skins except in large enough consignments to make a full wagon load would, the Acting Traffic Manager considers, ruin the industry which is in the hands of numerous petty dealers all over the country, and would have a most serious effect on the company's revenue.

Orders can be issued (it is, in fact, the present practice) that all skins must be placed in the goods shed where one exists, or in the road goods room where there is no goods shed, and not allowed to remain on the platform except for the time actually necessary for loading or unloading; but it is difficult to see that anything further can be done, and the risk of infection while the skins are in railway custody must be much less as pointed out in the Surgeon-General's letter than while they are being carted through the towns.

Inquiries have been made as to the practice on other railways and it is found to agree in all respects with our own.

Letter from the Agent, South Indian Railway, to the Consulting Engineer for Railways, Madras, dated 11th November 1896, No. 1046.

In reply to your letter No. 3231, dated 13th October 1896, I have the honour to inform you that instances may have occurred where small consignments of skins invoiced as road traffic were dealt with on passenger platforms. I do not think, however, that the cases have been numerous.

No. 4315 C.

Copies of the foregoing correspondence are forwarded to the Local and Municipal Department with reference to its endorsements No. 917, dated 6th August 1896, and R. No. 2103, dated 12th November 1896 (herewith returned), with the remark that it does not appear necessary to issue any orders to the Railway Companies.

(Signed) F. D. FOWLER,
21*st November* 1896. *Offg. Joint Secretary.*

To the Secretary to Government,
Local and Municipal Department.

ORDER—No. 2427 L., dated 19th December 1896.

The endorsement of the Public Works Department read above will be communicated to the Sanitary Commissioner and the Revenue Department.

(True Extract.)

G. S. FORBES,
Secretary to Government.

To the Revenue Department.
„ Public Works Department.
„ Surgeon-General.
„ Sanitary Commissioner.

Exd. C. M. Thumbuswamy.

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Proof

Government {1896} of Madras.

LOCAL AND MUNICIPAL.

Proof for approval.

[illegible] as revised 14/1/97

Recd. } 1896. *Enclosures*

Regd. } *Spare copies*

G.O., No. 2427 L., 19th December 1896.

DECEMBER.

Mortality from Anthrax.

Communicating to the Sanitary Commissioner and the Revenue Department endorsement of the Public Works Department on the subject of —

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2. In the case of municipalities, this fact is recognized by the law requiring that places in which skins are stored should be subject to license, thus leaving it to Municipal authorities to insist that the trade shall be conducted with such safeguards as they may think proper. But this leaves the question of protection of human beings during transport of skins unaffected. It is certainly undesirable that any trade should be subject to disabilities that would affect its prosperity, and I therefore do not propose to suggest elaborate measures to minimize risks. There is, however, one point on which I believe by Government simply issuing an order considerable good in the matter of precaution could be effected. In the course of my tours, I have from time to time found in mofussil stations skins of animals piled on platforms intended for passengers and carried by the same trains. The mere act of moving a skin to place it in a train, or the blowing of a breeze over the skin would be sufficient to convey particles to which deadly anthrax spores might be attached, so as to come in contact with the skin, mouth or nose of passers-by. This being so, passengers are subjected to a definite danger.

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* 31 cases with 10 deaths.

3. Under the above circumstances, I respectfully advise that Government should issue an order requiring that skins of animals be not collected for transport nor be landed upon a platform, any part of which is intended for the use of passengers, and that skins shall, under no circumstances, be conveyed in vans intended for receipt of passengers' luggage.

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(By order.)

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"Fagge states in his Practice of Medicine, volume I, page 353, 'By far the most important cause of anthrax in man is infection from the dried skins or hair of diseased animals', and this is so universally accepted that though the disease in man is not, in Madras, often met with or at any rate recognized (and in its internal forms it is easily overlooked) the two measures of precaution recommended by the Sanitary Commissioner seem to be eminently desirable."

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Fort St. George,
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(Signed) W. W. PHILLIPS,
Ag. Assistant Secretary.

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The extract enclosed by the Inspector-General will be forwarded to the Consulting Engineer for Railways with the request that he will inform the Board what orders have been issued in the matter, and on what information they were based.

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(True Copy and Extract.)

(Signed) R. V. SRINIVASIAR,
Secretary.

To the Secretary to Government, Revenue Department,
with the extract from the *Englishman.*

Endorsement R. No. 2103.

Transferred to the Public Works Department.

Fort St. George,
12th November 1896.

(Signed) LIONEL DAVIDSON,
Ag. Under Secy. to Govt.

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[Animals and skins not to be allowed on passenger platforms or conveyed in passenger brake-vans.]

Your letter No. 14245–156 of 14th August 1896.

Legislation with reference to anthrax should not be a difficult public health problem. All the knowledge we possess of this cattle-disease especially as to the circumstances of its communicability to man was arrived at, and I might even say, completed in the earlier years of the last decade. Spear, Greenfield and Klein in reports of the Medical officer to the Government Board for the years 1880, 1881, 1882 and 1883 have dealt with the natural history of the disease. Workers in wools and hides in factories of the old class and slaughterers occasionally developed the disease. So far as spread of that form of anthrax to man, where the germs of disease are borne on wools and hides, is concerned (and this form of disease is the only one of importance with reference to the proposed ruling quoted above) intimate handling of infected wools and hides in factories where the simplest requirements of cleanliness and ventilation are not met, is required to produce the disease in man. And so far as accidental proximity to or contact with infected wool or hides is concerned, the chances of taking the disease are exceedingly small. The skins of South Indian commerce are subjected to a process of salting and sun-drying, and sun-drying is the most potent of known germicides for Bacillus anthracis and its spores.

In the absence of information on the subject, it is difficult to explain the large reported numbers of deaths from forms of anthrax. But aided by what we know of the natural history of the disease and the habits of the people, we cannot be far wrong if we assume the chief sufferers to be of the classes who eat carrion and those whose trade is to slaughter animals or skin carcases, *i.e.*, those who are brought into contact with the skins before it is finally ready for trade purposes.

I have never seen skins stacked on passenger platforms or stowed in passenger brake-vans. I do not think there is ever occasion to do so. And, even if such were ever done, I do not think any real danger is incurred by the public.

But the smell from skins is in most cases very objectionable, and for this reason I think it desirable to follow the Surgeon-General's counsel.

I should like to see a similar ruling passed with reference to traffic in salt-fish.

Finally, I would suggest that before any ruling is brought into force that would interfere with the trade at that stage of it where it has to do with railway carriers, some such authority which would correspond to the Veterinary Department of the Board of Agriculture should be established; so that a process such as this, which menaces the public health, is dealt with and controlled in its earlier stages.

Copy of a letter No. A. 8078—A. 1347, dated 25th September 1896, from the Traffic Manager, to the Agent, South Indian Railway.

[Animals and skins not to be allowed on passenger platforms or in passenger brake-vans.]

Your No. 14245-1707 of 8th instant.

I quite agree with the views expressed by the Superintending Physician, so far as the transit of skins by rail is concerned, and I am of opinion that no special provision is necessary for dealing with this traffic, especially in the absence of danger so far as the public is concerned.

Some time ago complaints were made of the objectionable smell from the skins when placed on platform at stations where they are usually dealt with, and instructions were then given that they were to be unloaded on the goods shed loading banks, and I am not aware that any further complaints have since been made.

As a rule consignments of skins are usually forwarded in covered goods as loads or in tranship wagons, and I have never seen them carried in brake-vans. There is, however, no order at present prohibiting this, and I understand that there is no special order for dealing with this traffic on the Madras Railway.

I return the Superintending Physician's letter herewith.

Letter from the Agent and Manager, Madras Railway, to the Consulting Engineer for Railways, Madras, dated 9th October 1896, No. 9507–888.

With reference to your endorsement No. 2463 of the 11th August last on letter from the Acting Surgeon-General with the Government of Madras, I have the honour to inform you that our rules at present prohibit the loading of skins in brake or baggage vans, the only vehicles in which passengers' luggage is carried.

A large proportion of our skin traffic is carried in small consignments in road goods wagons, and these at road-side stations are necessarily loaded and unloaded on the passenger platforms. To refuse to receive skins except in large enough consignments to make a full wagon load would, the Acting Traffic Manager considers, ruin the industry which is in the hands of numerous petty dealers all over the country, and would have a most serious effect on the company's revenue.

Orders can be issued (it is, in fact, the present practice) that all skins must be placed in the goods shed where one exists, or in the road goods room where there is no goods shed, and not allowed to remain on the platform except for the time actually necessary for loading or unloading; but it is difficult to see that anything further can be done, and the risk of infection while the skins are in railway custody must be much less as pointed out in the Surgeon-General's letter than while they are being carted through the towns.

Inquiries have been made as to the practice on other railways and it is found to agree in all respects with our own.

Letter from the Agent, South Indian Railway, to the Consulting Engineer for Railways, Madras, dated 11th November 1896, No. 1046.

In reply to your letter No. 3231, dated 13th October 1896, I have the honour to inform you that instances may have occurred where small consignments of skins invoiced as road traffic were dealt with on passenger platforms. I do not think, however, that the cases have been numerous.

No. 4315 C.

Copies of the foregoing correspondence are forwarded to the Local and Municipal Department with reference to its endorsements No. 917, dated 6th August 1896, and R. No. 2103, dated 12th November 1896 (herewith returned), with the remark that it does not appear necessary to issue any orders to the Railway Companies.

(Signed) F. D. FOWLER,
Offg. Joint Secretary.

21*st November* 1896.

To the Secretary to Government,
Local and Municipal Department.

Order—No. 2427 L., dated 19th December 1896.

The endorsement of the Public Works Department read above will be communicated to the Sanitary Commissioner and the Revenue Department.

(True Extract.)

Secretary to Government.

To the Revenue Department.
,, Public Works Department.
,, Surgeon-General.
,, Sanitary Commissioner.

Exd. C. M. Thumbuswamy.

LOCAL AND MUNICIPAL DEPARTMENT.

[5]
700—6-4-96.

186

Papers to be read in Proceedings :—

Again G.O., dated 189 , No.

Current No 1661 L of 1896, dated 9th June 1896 from the Sanitary Commissioner

Current No. 2054 L of 1896, dated 22nd July 1896 from the Surgeon General

Current No. 3202 L of 1896, dated 21st November 1896 from the Public Works Department.

P.S. Order. No. 2427 L d/ 19-12-96

The endorsement of the Public Works Department read above will be communicated to the Sanitary Commissioner and the Revenue Department.

18/12/96

To

The Revenue Department.
" Public Works Department.
" Surgeon General
" Sanitary Commissioner.

Despd 20/1/97

Current No. 583 of 1896
No. 1134/S

OFFICE OF SANITARY COMMISSIONER,
Fort St. George, 9th June 1896.
Despd. 10 "

1661 L

From

SURGEON LIEUT.-COL. W. G. KING, M.B., C.M., D.P.H.,
SANITARY COMMISSIONER FOR MADRAS,

To

THE Chief Secretary to Government,
Local and Municipal Dept.

Lr 2427 LS 19/12

Enclosure.

SIR,

I have the honour to invite the attention of Government to the fact that during 1894-95, there perished of anthrax in this Presidency no less than 16,123 cattle. Instructions have doubtless been issued from time to time by the Board of Revenue and Veterinary authorities that the disposal of the bodies of animals dead of this disease should be accomplished, by effecting their burial without making incisions for any purpose, or by cremation. But, it is evident that nothing short of very much more elaborate measures than are at present employed would secure that such precautions are really carried out in villages. It may therefore be assumed that a considerable proportion of the skins of animals dead of anthrax are collected by skin merchants for export. In confirmation of this opinion, I may state that careful enquiries by the Medical Inspectors of the Local Government Board of England have shown that anthrax has been conveyed to workmen in that country by medium of skins imported from India, from time to time. In 1890, whilst Acting Sanitary Commissioner I made certain enquiries on this point from Municipalities, in which the skin trade is largely carried on. I found that in Vaniyambadi,* Coonoor and Gudiyatam fatal cases of anthrax infection of man had occurred. Statistics of this character would, of course, in view of the state of registration in this Presidency only take cognizance of the external form of anthrax (malignant carbuncle) whilst the very fatal form of "internal" infection would, in all probability, be simply returned

as

* 31 cases with 10 deaths

as due to "fever". Hence, the chances are that the mortality from this cause is much greater than can be readily ascertained. Indeed, in view of the well-recognized great vitality and resistance of anthrax spores to conditions inimical to other microbes, it goes without saying that in a country where this disease is endemic considerable risk is incurred by human beings brought by accident or duty in contact with skins prepared for sale.

2. In the case of Municipalities, this fact is recognized by the Law requiring that places in which skins are stored should be subject to licence, thus leaving it to Municipal Authorities to insist that the trade shall be conducted with such safeguards as they may think proper. But this leaves the question of protection of human beings during transport of skins unaffected. It is certainly undesirable that any trade should be subject to disabilities that

would affect its prosperity, and I, therefore, do not propose to suggest elaborate measures to minimize risks. There is, however, one point on which I believe by Government simply issuing an order considerable good in the matter of precaution could be effected. In the course of my tours, I have from time to time found in Mofussil stations skins of animals piled on platforms intended for passengers, and carried by the same trains. The mere act of moving a skin to place it in a train, or the blowing of a breeze over the skin would be sufficient to convey particles to which deadly anthrax spores might be attached, so as to come in contact with the skin, mouth or nose of passers-by. This being so, passengers are subjected to a definite danger.

3. Under the above circumstances, I respectfully advise that Government should issue an order requiring that skins of animals be not collected

for

for transport nor be landed upon a platform, any part of which is intended for the use of passengers, and that skins shall under no circumstances be conveyed in vans intended for receipt of passenger's luggage.

I have the honour to be,
Sir,
Your Most Obedt Servant,
W G King
Surgn Lieut Col,
Sanitary Commissioner.

Local and Municipal DEPARTMENT.

~~Local & Municipal Dept.~~

~~1661 L~~

From

SURN.-LT.-Col. W. G. KING, M.B., C.M., D.P.H.,
SANITARY COMMISSIONER FOR MADRAS,

To

THE Chief Secretary
to Government
Local & Municipal

No. 1134/S

Dated 9th
Despatched 10th } June 1896.
Received 11 JUN. 96

ENCLOSURES.

Subject

Inviting the attention of Govt. to the large use of mortality from anthrax during 1894-95 and requests that under circumstances stated Govt. be pleased to issue an order requiring the Railway authorities not to collect skins of animals on platforms used by passengers & that the same be not conveyed in vans intended for receipt of passengers luggage.

(with Endorsement)

A164

Current No. 583/1 of 1896

TO BE RETURNED WITH

OFFICE OF SURGEON-GENERAL
23 JUN. 96
WITH GOVT OF MADRAS.

C.S.

No. 715

Referred to the Surgeon-General for remarks.

(By order)
W. W. Phillips
Ag. Assistant Secretary

Fort St. George
22nd June 1896

V.R.
16/6/96

20/6/96

To
The Surgeon-General.

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[2]

50

No. 321

OFFICE OF SURGEON-GENERAL
WITH THE GOVERNMENT OF MADRAS,
Madras, the 22d July 1896.

From

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

Local & Municipal Dept.
CURRENT No. 2054 L

To

THE HON'BLE THE CHIEF SECRETARY TO GOVERNMENT,
Local and Municipal ----- DEPARTMENT.

SIR,

With reference to the letter of the Sanitary Commissioner inviting the attention of Government to the large mortality from anthrax during 1894-95 and requesting that, under the circumstance stated, Government be pleased to issue an order requiring the railway authorities not to allow skins of animals on platforms used by passengers and that the same be not conveyed in vans intended for the receipt of passengers' luggage, forwarded with your endorsement No.715, dated the 22nd June 1896 and herewith returned, I have the honour to state that I called upon Brig: Surgeon-Lt: Colonel A.M. Branfoot & Surg: Lt: Cols: W.R. Browne and A.J. Sturmer for their views on the subject and to state what number of cases of anthrax, Malignant pustule, they had seen in southern India.

2. The following are their replies:-

Brig: Surgeon Lieut: Colonel Branfoot states - "I have not seen a case of 'Anthrax' due to the specific 'Bacillus anthrax' in a human being in India, though I have seen many cases of the disease in both its forms in horses. I am certainly of opinion that the skins of animals, which have been simply prepared by sundrying and which may contain the germs of disease such as anthrax do form a source of risk to human beings brought in contact with them, though the risk does not appear to be a ----- serious one except to persons who actually handle the skins, and I think that such skins should not be conveyed in vans in which passengers' luggage is received or be allowed to stand or stored on platforms used by passengers".

Surgeon-Lieut: Colonel Browne states-"My experience coincides with that of Brig. Surgn. Lt. Col. Branfoot in that I have not seen a case of Anthrax in man during my service in India.

Fagge states in his practice of Medicine Volume I page 353, 'By far the most important cause of anthrax in man is infection from the dried skins or hair of diseased animals' and this is so universally accepted that though the disease in man is not, in Madras, often met with or at any rate recognised (and in its internal forms it is easily overlooked) the two measures of precaution recommended by the Sanitary Commissioner seem to be eminently desirable".

Surgeon-Lt. Col. Sturmer states-"I have never seen a case of Anthrax in man in India, although I have met with many cases among animals. I cannot believe it is common among human beings or else we should have met with cases in Madras, as there is a skin factory or tannery near the Mount and if persons had been often affected, some of them would certainly have come to the Madras hospitals for treatment. Woolsorters disease is a very uncommon one in England.

I think the Sanitary Commissioner's advice is sound and that skins should not be placed in vans in which passengers' luggage is carried, and that they should not be kept piled on railway platforms where passengers congregate.

Almost as much danger is exhibited by the way bandy-loads of skins are carried about the Madras roads on their way to a station or tannery."

3. I concur in the opinion of these officers. I have never seen a case of Malignant pustule in a human being during my practice in southern India but do not doubt that they occur and I consider that, if the precautions suggested by the Sanitary Commissioner could be carried out, they would diminish the

chance

chance of the disease spreading.

I have the honour to be,
Sir,
Your most obedient Servant,

Surgeon-Colonel,
Ag: Surgeon-General with
the Government of Madras.

Send to Rlys for report -
8/8

P. W. CURRENT No. 7155

~~(1896.)~~ Local & Municipal DEPARTMENT.

2054 L

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

No. 321

Dated 22nd } July 1896.
Received 24 JUL 96 }

Cur 1661 L retd.

Subject.

Submitting remarks and reports from certain Medical Officers regarding the large number of cases of mortality from Anthrax during 1894-95.

(With Encl.)

C.S.

Cur. Nos. 1661 and 2054 L

Encls 1

Recd: 7.8.96

No. 917

Transferred to the Public Works (Railway) Department.

4/8/96 W. W. Phillips
Acting Assistant Secretary

V.R.
31/7/96

Fort Saint George,
6th August 1896 }

To
The Public Works (Railway) Department

30/7.

(13—1,000—21-1-93.)

REVENUE BOARD OFFICE MADRAS.

Proceedings of the Board of Revenue

(Revenue Settlement, Land Records and Agriculture).

Dated 21st October 1896.

No. 5106 Misc:

READ ~~the~~ following letter from the Inspector-General, Civil Veterinary Department, Simla, dated, 10th September 1896 No. 1534—85 M:—

I have the honour to forward herewith a cutting from the "Englishman" of the 3rd September 1896, relating to the occurrence of malignant carbuncle (Anthrax) having occurred among people at Vaniembady &c., and to ask if you can kindly give me any information on the subject. As the Madras

Government appears to have had the matter before them, no doubt full particulars are forthcoming. It is presumed that the diagnosis of the cases was made by qualified men who have probably retained some of the tissues affected. If this be the case, I should be very glad to have a portion of tissue for examination. May I suggest that, in cases of this kind, the Government of Madras may be asked to avail themselves of the assistance of the Imperial Bacteriologist in the examination of diseased tissues. The address of the Imperial Bacteriologist is Muktesar, via Peora, Kumaon Hills,

Naini

THE ENGLISHMAN,
SEPTEMBER 3, 1896.

It having been brought to the notice of Government that during the past 18 months some 20,000 cattle have died from anthrax in the Madras presidency, the skins of a considerable portion of which have been sold in trade, and that fatal cases of anthrax infection (malignant carbuncle) have occurred among people at Vaniembady, Gudiyattam, Cunur (Chingleput District, a station on the Madras Railway), and other places where skin-merchants have their depôts, the Madras Government has issued orders to the Railway authorities not to allow sun-dried skins of animals to be piled on station-platforms used by passengers, and to see that these skins are not conveyed in vans intended for the reception of passengers' luggage.

1896
REVENUE
1
Enclosure No.
7602

Snc 4283/1

PWC 1/6398/96

gl 6154/96

gl 5366/96

Naini Tal Distric

Read also the following reference thereon dated 29th September 1896:—

The extract enclosed by the Inspector-General will be forwarded to the Consulting Engineer for Railways with the request that he will inform the Board what orders have been issued in the matter, and on what information they were based

Read also the following letter from the Consulting Engineer for Railways, Madras, dated 1st October 1896 No. 3122

In reply to your Reference on No. 5366 dated 29th September 1896, I have the honour to inform you that no orders have as yet been issued, but that Local and Municipal Endorsement No. 917 dated 6th instant submitting remarks and reports from certain Medical officers regarding the large number of cases of Mortality from Anthrax during 1894-95 has been forwarded to the Agents of the Railway Administration for remarks.

Read also letter from the same officer, dated 17th October 1896, No. 3278, returning the cutting from "the Englishman" of 3rd September 1896 relating to the occurrence of malignant carbuncle at Vaniyambadi.

Resolution:

The letter from the Inspector-General, Civil Veterinary Department will be submitted to Government for consideration and orders, with reference to the correspondence referred to by the Consulting Engineer for Railways.

(True copy and extract)

R.V. Srinivasiar
Secretary.

To
The Secretary to
Government, Rev: Department
with the extract from "the Englishman"

Exd reps

P.W.92
10358/96

Revenue (1896) Department.

CURRENT No. 7682

GOVERNMENT OF MADRAS
23 OCT 96
REVENUE DEPARTMENT

~~Order~~ Endt mis

Referred to the P.W.D. for remarks.

To the P.W.D. Ry.

This endorsement seems to me to be useless. Get the L & M papers referred to by the C.E.

They get them from P.W.D.
D
11-XI-96

It has been ascertained from the L & M Dept that they have transferred all the papers to the P.W.D.
13/11/96.

E.H. 11/11

Explained and revised engt. & reason submitted
BRM
10-XI-96
BRM
12-XI-96

2427 L
19-12-96

From
The Board of Revenue,
Revenue Settlement, Land Records and Agriculture,
Madras

No. 5106 Misc:

Dated 21st October 1896
Received 23-10-96
Registered 24-10-96
Enclosures one
Spare copies

SUBJECT.

Cattle disease – Submitting to Government, Revenue Department, for orders letter from the Inspector-General, Civil Veterinary Department, regarding the occurrence of malignant Carbuncle at Vaniyambadi –

BACK PAPERS.

G.O.	No.	Department.	Da

FURTHER PAPERS.

G.O.	No.	Department.	Date.

Furnished

Jas. F. Calder

Asst P.W.D. Ry Branch

12/12

Ref 12/12

Rc

For C. No. 3202 ~~L~~/96.

MEMORANDUM.

Requested for reference the under-mentioned papers:—

(1) Original Endt. No. 917 of 6-8-96.

(2) R 2103 of 12-11-96 referred to in the P.W. Dept. endt. No. 4315 C of 21-11-96.

× C No. 7155
sent to R off in on 8/8

Chief Secretariat,
Local and Municipal Department,
3—12—1896

V. Raghava Charlu
1st Assistant.

To
The 1st Assistant, P.W. Dept.

A.R.
11-12-96

Revenue (1896) Department.

CURRENT No. 7602

Dp 12/11

1770

From

Endorsement R. 2103. d/12th Nov 96
~~Order~~

The Board of Revenue,
Rev. Sett., L.R. & A.
Madras

Transferred to the Public Works Department

Lionel Davidson
Ag. Under Secy. to Govt.

No. 5106 Mis.

Fort St. George
Nov: 1896

Dated 21st October 1896.

Received 23rd "

Registered 24th "

Enclosures 1

Spare copies

To

The P. W. D. (Ry Branch)

Copy to the Board of Rev R.S.&c

12. xi. 96

SUBJECT.

Cattle Disease.

Submitting to Govt. Rev. Dept. for orders letter from the Inspector-General, C.V.D. re: the occurrence of malignant carbuncle at Vaniambady.

BACK PAPERS.

G.O.	No.	Department.	Date.

FURTHER PAPERS.

G.O.	No.	Department.	Date.

Local & Munl. (189) Department.

CURRENT No. 3202L

Order.

From The Public Works Departt. Railway Branch

SECRETARY TO GOVERNMENT 23. NOV. 1896 L. & MUNICIPAL DEPT.

No. 4315C

Dated 21. 11. 96

Received

Registered

Enclosures 3

Spare copies

SUBJECT.

Cattle disease

Forwarding copies of reports from the Agents Madras and South Indian railways re: the propogation of Anthrax by the stacking of hides on passenger platforms or their carriage in passenger brakevans, with the remark that it does not appear necessary to issue any orders to the Ry. companies

14

BACK PAPERS.

G.O.	No.	Department.	Date.

FURTHER PAPERS.

G.O.	No.	Department.	Date.

South Indian Railway. 11 B

Copy of a letter No. A/2747/119 dated 1st September 1896, from the Superintending Physician, S. I. Ry, Trichinopoly to the Agent, South Indian Railway.

Animals and skins not to be allowed on passenger platforms or conveyed in Passenger brake vans.

Your letter No 14245/156 of 14th August 1896.

Legislation with reference to anthrax should not be a difficult public health problem. All the knowledge we possess of this cattle disease especially as to the circumstances of its communicability to man was arrived at, and I might even say, completed in the earlier years of the last decade. Spear, Greenfield and Klein in Reports of the Medical Officer to

to.

3202 L/96

to the Government Board for the years 1880, 1881, 1882 and 1883 have dealt with the natural history of the disease. Workers in wools and hides in factories of the old class and slaughterers, occasionally developed the disease. So far as spread of that form of anthrax to man, where the germs of disease are borne on wools and hides, is concerned (and this form of disease is the only one of importance with reference to the proposed ruling quoted above) intimate handling of infected wools and hides in factories where the simplest requirements of cleanliness and ventilation are not met - is required to produce the disease in man. And so far as accidental proximity to or contact with infected wool or hides is concerned, the chances of taking the disease are exceedingly small.

The

The skins of South Indian Commerce are subjected to a process of salting and sundrying: and sundrying is the most potent of known germicides for Bacillus anthracis and its spores.

In the absence of information on the subject, it is difficult to explain the large reported numbers of deaths from forms of anthrax. But aided by what we know of the natural history of the disease and the habits of the people, we cannot be far wrong if we assume the chief sufferers to be of the classes who eat carrion and those whose trade is to slaughter animals or skin carcases ie those who are brought into contact with the skins before it is finally ready for trade purposes.

I have never seen skins stacked on passenger platforms or stowed in passenger brake vans. I do not think there is ever occasion to do so. And even if such were ever done I do not think any real danger is incurred by the public.

But the smell from skins is in most cases very objectionable: and for this reason I think it desirable to follow the Surgeon General's Counsel.

I should like to see a similar ruling passed with reference to traffic in salt fish.

Finally, I would suggest that before any ruling is brought into force that would interfere with the trade at that stage of it where it has to do with railway carriers, some such authority which would correspond to the Veterinary Department of the Board of Agriculture should be established. So that a process such as this, which menaces the public health is dealt with and controlled in its earlier stages.

Letter from the Agent, South Indian Railway to the Consulting Engineer for Railways, Madras, No 895, dated 28th September 1896.

With reference to your endorsement No 2468, dated 11th August 1896, I have the honour to forward copies of reports furnished to me by the Traffic Manager and the Superintending Physician on the question of the propogation of anthrax by the stacking of hides on passenger platforms, or their carriage in passenger Brake Vans. On this railway hides are unloaded on the goods-shed loading banks, and are not carried in brake Vans. The procedure has however not been introduced with a view of guarding against anthrax infection, but simply on account of the objectionable smell of dried skins. The Superintending Physician points out that the treatment to which skins are subjected before being tendered for railway transport renders them innocuous, and that no danger to the public would result by their being handled on passenger platforms or carried in brake Vans. Under these circumstances there appears to be no necessity for the proposed legislation in respect to skins so far as Railway Companies are concerned. If any preventative measures are required they should be introduced to regulate the handling and treatment of animals and skins while they are in the infectious stage.

Enclosure to above.

Copy of a letter, No. $\frac{A\ 8078}{A\cdot 1347}$, dated 25th September 1896 from the Traffic Manager to the Agent, South Indian Railway.

Animals and skins not to be allowed on passenger platforms or in passenger brake vans.

Your No. $\frac{14245}{1707}$ of 8th Instant.

I quite agree with the views expressed by the Superintending Physician, so far as the transit of skins by rail is concerned, and I am of opinion that no special provision is necessary for dealing with this traffic, especially in the absence of danger so far as the public is concerned.

Sometime ago complaints were made of the objectionable smell from the skins when placed on platform at stations where they are usually dealt with, and instructions were then given that they were to be unloaded on the goods shed loading banks, and I am not aware that any further complaints have since been made.

As a rule consignments of skins are usually forwarded in Covered Goods as loads or in tranship wagons, and I have never seen them carried in Brake vans. There is however no order at present prohibiting this, and I understand that there is no special order for dealing with this traffic on the Madras Railway.

I return the Superintending Physician's letter herewith.

(True Copy)

Sd/ J. H. Le Mesurier, for Agent

R. Form No. 11

No.

Government of Madras.

PUBLIC WORKS DEPARTMENT,
RAILWAY BRANCH.

MEMORANDUM.

Dated Madras, November 1896.

Letter from the Agent and Manager, Madras Railway, to the Consulting Engineer for Railways, Madras, No. $\frac{2507}{888}$, dated 9th October 1896.

With reference to your Endorsement No. 2468 of the 11th August last on letter from the Ag: Surgeon General with the Government of Madras, I have the honour to inform you that our rules at present prohibit the loading of skins in Brake or Baggage vans, the only vehicles in which passengers luggage is carried.

A large proportion of our skin traffic is carried in small consignments in road goods wagons, and these at Road side stations are necessarily loaded and unloaded on the passenger platforms. To refuse to receive skins except in large enough consignments

3/3202 [illegible].96

ments to make a full wagon load would, the Ag: Traffic Manager considers, ruin the industry which is in the hands of numerous petty dealers all over the country, and would have a most serious effect on the Company's revenue.

Orders can be issued (it is in fact the present practice) that all skins must be placed in the goods shed where one exists, or in the road goods room where there is no goods shed, and not allowed to remain on the platform except for the time actually necessary for loading or unloading; but it is difficult to see that anything further can be done, and the risk of infection while the skins are in Railway custody must be much less as pointed out in the Surgeon General's letter than while they are being carted through the towns.

Enquiries have been made as to the practice on other Railways and it is found to agree in all respects with our own.

---

for Agent

Letter from the Agent, South Indian Railway, to the Consulting Engineer for Railway Madras, No. 1046, dated 11th November 1896.

Local & Municipal Dept.
~~CURRENT No.~~ 3202 L

In reply to your letter No. 3231, dated 13th October 1896, I have the honour to inform yo that instances may have occurred where smal consignments of skins invoiced as roadi traffic were dealt with on passenger platforms I do not think however that the cases have been numerous

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No. 4315 C, dated 21st November 1896.

Copies of the foregoing correspondence are forwarded to the Local and Municipal Department with reference to its Endorsements Nos: 917, dated 31st July 1896, and R 2103, dated 12th November 1896 (herewith returned) with the remark that it does not appear necessary to issue any orders to the Railway Companies.

F. W. Fowler

Offg: Joint Secretary.

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