

1919.
NEW ZEALAND

TRANSPORT EPIDEMIC COMMITTEE

(REPORT OF THE).

(MR. MALCOLM, CHAIRMAN.)

Presented to the House of Representatives, 11th September, 1919, and ordered to be printed.

ORDERS OF REFERENCE.

Extracts from the Journals of the House of Representatives.

MONDAY, THE 9TH DAY OF DECEMBER, 1918.

Ordered, "That a Committee be appointed to inquire into the epidemic which took place on the transport conveying the 40th Reinforcements; to have power to call for persons and papers: the Committee to consist of Mr. W. H. Field, Mr. Forbes, Mr. McCallum, Mr. Malcolm, Mr. Scott, Mr. Veitch, and the mover."—(Hon. Sir J. ALLEN.)

Ordered, "That leave be granted the Committee to sit if the House is not still sitting."—(Hon. Sir J. ALLEN.)

REPORT.

THE Transport Epidemic Committee, which was set up for the purpose of inquiring into the epidemic which took place on the transport conveying the 40th Reinforcements, has the honour to report that it has taken evidence on the matter; but, as none of the officers and men of the 40th Reinforcements on board the "Tahiti" have yet returned to New Zealand, the Committee was limited to the evidence submitted by Mrs. J. R. Gibbons, consisting of extracts from letters of soldiers and others, and, on the other hand, to the evidence of officers of the Defence Department, the hearing of such evidence being open to the Press; and that on the evidence given before it the Committee finds as follows:—

1. *Command*.—The "Tahiti" was under the command of an officer who had previous transport-command experience and also a long experience in command in the actual firing-line, and has a reputation as an officer who is particularly careful of his men and who is devoted to their welfare and comfort.

2. *Accommodation*.—It was freely admitted that the conditions on board a transport are never equal to those on board a passenger-vessel, and that in times of rough weather or general sickness the conditions are exceedingly unpleasant. The "Tahiti," however, was as well (or better) provided for in respect of air-space and other accommodation as any other troopship. Though discomfort was suffered owing to the bad weather experienced immediately after leaving New Zealand, things went as well as usual until Sierra Leone was reached, where the troops arrived in normal condition, although some of the men were still suffering from the effects of vaccination.

3. *Food*.—The supply of food to the ship on leaving New Zealand was ample, and similar to that supplied to other transports. The quantity of food and delicacies for the sick was greater than usual, a six-months supply being on board; and the quality was fully up to the standard. The regulations provided that the menu should be as varied as possible, but the confinement, want of exercise, and tediousness of a long voyage make the meals appear monotonous. Experience in New Zealand convinces the Committee that, the epidemic having appeared on board, inevitable disorganization would follow, and that arrangements for cooking and supply of food would therefore suffer. The evidence submitted affirms that the regulations provide for less distinction between the officers and men than do those of the Expeditionary Forces of any other country.

4. *Medical Attention and Drugs.*—There were two Medical Officers on board, and fortunately a third joined the ship *en voyage*. The two ship's Medical Officers went down almost at once, but resumed duty at the earliest possible moment, and appear to have done everything possible. The third doctor, the nurses, and the orderlies appear to have done splendid work. The quantity of drugs on board was equal to the ordinary supply, but was not sufficient to meet the exigencies of an epidemic.

5. For the information of the public the Committee incorporates in this report the finding of the Court of Inquiry held in England. If further evidence is required it would need to be taken on the return of the men and the ship to New Zealand.

The Committee desires especially to thank Mrs. J. R. Gibbons for the trouble she has taken in collecting the evidence, and for the lucid, concise, and capable manner in which she submitted same to the Committee. The Committee desires to express its sincere sympathy with those who lost relatives.

A. S. MALCOLM, Chairman.

24th December, 1918.

FINDING OF COURT OF INQUIRY HELD IN ENGLAND.

THE COURT FIND—

1. That the health of the troops was very good until their arrival at Sierra Leone. It is apparent that every effort was made to keep the men fit by frequent parades in the fresh air.

2. *Food.*—That the food supplied up to this date was of good quality (with the exception noted below), well cooked, well served, and that proper and sufficient arrangements were made as to its distribution. There were complaints as to the quality of the meat taken on board at Cape Town for the use of the troops, and the Officer Commanding Troops has pointed out in his report that the bread occasionally had a tendency to turn sour. It is not considered that these two matters in any way affected the health of the troops or their power of resistance to any disease, as it is apparent from the evidence that there was an abundance of other foods to supplement the bread and meat on the occasions on which they were not satisfactory.

3. *Accommodation of Troops.*—The men were quartered as follows:—

In hammocks—

Forward, 'tween-decks	..	..	..	..	..	320
Midships, main decks	..	..	..	..	..	170
Aft, 'tween decks	..	..	..	..	..	280
Sergeants', aft main deck	..	..	..	..	..	50
						—
						820

In bunks—

Lower deck	..	..	..	..	..	162
Main deck	..	..	..	..	..	60
Boat deck	..	..	..	..	..	45
						—
						267

1,087

The ventilation in the troop-decks containing hammocks was satisfactory during the times that the ports were opened, but was not satisfactory when the ports were closed during rough weather, at night-time, and during the period when the ships were passing through the danger-zone. The Officer Commanding Troops considered that the placing of the hammocks 16 in. apart led to overcrowding. The only ventilation supplied was by means of port-holes and windsails, the latter being quite effective in certain weather and when the ports are closed. It is recommended that electric blowers or some other recognized form of artificial ventilation be placed on all troop-decks.

The conditions of the men quartered in cabins was not satisfactory, and it is recommended that if this ship is again used for troops that these cabins be removed and hammock fittings be substituted.

It is abundantly clear from the evidence that the ship was kept clean and that every facility was given to the men to sleep on deck during the hot weather, thus materially assisting the maintenance of proper sanitation on troop-decks.

4. *Nature of Epidemic.*—The epidemic was one of purulent bronchitis, a disease with a mortality far higher than that of pneumonia, due in this instance to the symbiosis of two microbe organisms—*influenza bacilli* and *Streptococcus longus*.

5. *Origin of Epidemic.*—The infection gained entrance at Sierra Leone from contact with an epidemic there.

6. *Cause of High Mortality.*—This was due to the virulent nature of the infection, which affected a large number of men massed together on a ship where the ventilation was defective owing to the enforced closing of the ports and the absence of any form of recognized artificial ventilation. It is considered in this connection that the vaccination of the men on board, taking place as it did so soon before the epidemic arose, would have had the effect of further reducing their resisting-power, and it is recommended with reference to future drafts that the men should be vaccinated sufficiently long before embarkation to ensure them embarking in a normal state of health.

7. *Inhalation-chamber.*—The evidence shows that no attempt was made to use the inhalation-chamber. The S.M.O. in his voyage shows that one gargle parade was held on the 27th August, 1918, the second day of the epidemic. Although there is some difference of opinion as to the effectiveness of this measure as adduced by the evidence of Lieutenant-Colonel McDonald and Captain Eagleton respectively, it is considered that free use should have been made of this chamber. It is recommended that full use be made of this chamber on all subsequent voyages, particularly after leaving port.

8. *Treatment of Epidemic.*—It is abundantly clear that once the epidemic commenced everything possible (except as noted in paragraph 7) was done to check the disease and to prevent it from spreading. In this respect an extract from Lieutenant-Colonel A. Marshall MacDonald is quoted: "From the evidence it can be taken that the steps taken to cope with the epidemic were successful, particularly in view of the fact that it was got under control in ten days."

9. *Supply of Drugs.*—The supply of drugs and stimulants was ample for normal conditions, but gave out under the heavy strain caused by the epidemic. In view of the fact that this epidemic may again arise, it is recommended that an ample supply of suitable drugs and stimulants for dealing with a widespread epidemic should be placed on board. Special attention is drawn to the evidence of Captain Eagleton and Lieutenant-Colonel MacDonald as to the treatment of such an epidemic by serra and prophylactic use of suitable vaccine before embarkation.

10. *Nursing.*—Too much praise cannot be allocated to Sister Maxfield and the nurses under her charge, as all worked most assiduously and effectively to cope with the epidemic. It is regretted that from the evidence the same cannot be said about the medical orderlies, who were apparently ill-trained and did not show any marked capability or zeal. It is reported that the men from the troops who volunteered for orderlies during the epidemic did excellent work.

11. *Complimentary.*—The Court place on record their appreciation of the invaluable assistance rendered by the master of the ship and his ship's company, the service of Lieutenant-Colonel Allen, the medical officers, nurses, and those who so ably assisted them.

Signed at headquarters, New Zealand Expeditionary Force, Bloomsbury Square, London, this 21st day of September, 1918.

EUGENE J. O'NEILL, Colonel, President.	}	Members.
T. H. DAWSON, Major,		
KENNETH TAPPER, Captain, N.Z.M.C.,		
JAS. T. WATSON, Major,		

Wellington, 10th January, 1919.

Memorandum for A. S. Malcolm, Esq., M.P., Chairman of Parliamentary Committees, Balclutha. For your information I enclose herewith copy of memorandum which I have addressed to Captain Blackburn *re* amount of cubic space per man which the accommodation on the transport "Tahiti" afforded at the time of the outbreak of influenza.

R. W. MAKGILL, Lieut.-Colonel,
Assistant Director of Medical Services (San.).

10th January, 1919.

Memorandum for Captain Blackburn, Marine Department, Wellington.

I HAVE been instructed by the Hon. the Minister of Defence to forward to you the attached note from Mr. A. S. Malcolm, Chairman of Parliamentary Committees. During the inquiry into the outbreak of influenza on H.M.N.Z. transport "Tahiti" certain evidence was given as to the amount of cubic space per man which the accommodation on the transport afforded. You are asked to check such evidence, and to enable you to do so I forward the following data from which the evidence was deduced:—

- (a.) Plan to scale of s.s. "Tahiti" in separate package. This plan was the one produced as evidence during the inquiry.
- (b.) Cubic capacity of each area occupied as sleeping-accommodation. This is given on the plan, the figures being compiled by the officials of the Union Company.
- (c.) The number of men actually occupying the areas when the transport was at sea. These figures are—
- | | | | | | |
|--------------------------|----|----|----|----|-------|
| In hammocks— | | | | | |
| Forward, 'tween-decks | .. | .. | .. | .. | 320 |
| Midships, main deck | .. | .. | .. | .. | 170 |
| Aft, 'tween-decks.. | .. | .. | .. | .. | 280 |
| Sergeants, aft main deck | .. | .. | .. | .. | 50 |
| | | | | | 820 |
| In bunks— | | | | | |
| Lower deck | .. | .. | .. | .. | 162 |
| Main deck | .. | .. | .. | .. | 60 |
| Boat deck | .. | .. | .. | .. | 45 |
| | | | | | 267 |
| Total.. | .. | .. | .. | .. | 1,087 |

Will you please forward your report to Mr. Malcolm when completed.

R. H. MAKGILL, Lieut.-Colonel,
Assistant Director of Medical Services (San.).

Marine and Inspection of Machinery Department, Wellington, 31st January, 1919.

WITH reference to your memorandum of the 10th instant, addressed to Captain Blackburne, Nautical Adviser to this Department, asking for certain evidence which was given as to the cubic space per man which the accommodation on the transport "Tahiti" provided on the occasion when the influenza epidemic broke out, I have to state that the evidence has been checked and an inspection has been made of the space on board the vessel. This inspection shows that the space *per man* on the different decks was as follows:—

In hammocks—	320 men.	Forward, 'tween-decks	.. .. .	103 cub. ft.
"	280 "	Aft, 'tween-decks	.. .. .	106 "
"	170 "	First saloon, on spar-deck	.. .. .	87 "
"	50 "	Second saloon, on spar-deck	.. .. .	148 "
In bunks—	162 "	Main deck : Rooms including passages	... .. .	189 "
		Main deck : Rooms alone, average over	.. .. .	110 "
"	60 "	Poop : When 81 berths are occupied	.. .. .	92 "
"	36 "	Boat-deck : In house on port side	.. .. .	72 "
"	9 "	Boat-deck : These men must have been in hospital or in a similar house on the starboard side. In either case the space would have been ample.		

The space against poop is shown when fully occupied, as I do not know how the 60 men were berthed.

I return herewith the plan forwarded with your memorandum.

GEORGE ALLPORT, Secretary.

Lieut.-Colonel R. H. Makgill, Assistant Director of Medical Services,
Defence Department, Wellington.

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