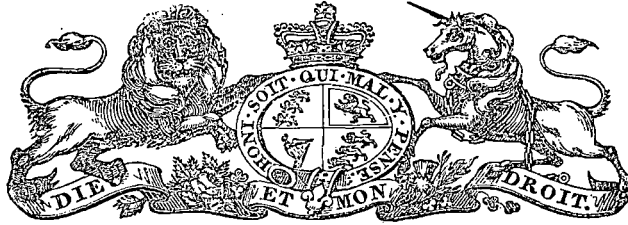


(No. 102.)



1888.

PARLIAMENT OF TASMANIA.

CENTRAL BOARD OF HEALTH:

REPORT FOR 1887.

Presented to both Houses of Parliament by His Excellency's Command.



CENTRAL BOARD OF HEALTH.

ANNUAL REPORT, 1887.

TO THE HONOURABLE THE CHIEF SECRETARY.

SIR,

As the Central Board, which had the administration of "The Public Health Act" during last year, resigned before the end of it, it has devolved upon me to put upon record the principal facts connected with that administration.

2. During the Session of 1886, Parliament declined to vote any money for the payment of the salaries of the President and Inspector of the Board, and gave such an expression of opinion on the subject of paying the compensation to Members of the Board provided by the 8th Section of the Act of 1885, that Government informed the Board that the payment of such compensation would be discontinued. Notwithstanding this action of Parliament, the Board, in answer to the appeal of the Ministry, withdrew its tendered resignation, and consented to carry on such part of its work as it was possible to do without an Inspector, on the understanding that in special cases Government would authorise the employment of one. Parliament, during the Session of 1887, having made provision for the payment of an Inspector, Mr. Mault was reinstated in his office on the 1st September. In October, on account of private business arrangements, the President, Dr. Perkins, announced his resignation, and the other Members of the Board also resigned. As Parliament had made no provision for the payment of a Secretary to the Board, the services of Mr. Graham had to be dispensed with at the same time. For the rest of the year the departmental work was carried on in the Chief Secretary's Office, the Inspector acting as Secretary also. Central Board.

3. Matters of interest connected with the administration of the Act by the various Local Boards of Health are noticed in the succeeding paragraphs relative to each subject. To obviate the inconveniences arising from the want of local administration of the law in populous places without Municipal Government, communications were opened with magistrates and gentlemen residing in such localities, with a view of enlisting their services as Members of Local Boards to be appointed under the provisions of the 6th and 7th Sections of the Act of 1885. And to give as general an interest as possible to the matter, public meetings were held, where practicable, for the purpose of nominating persons to be recommended to the Governor in Council for appointment under those Sections. It resulted from this action that new Local Boards were appointed in Beaconsfield, Boobyalla, Brothers' Home, Burnie, Franklin, George Town, Gordon, Gould's Country, Hamilton-on-Forth and Don, Invermay, Latrobe, New Town, Penguin, Port Cygnet, Queenborough, St. Helen's, St. Leonard's, Scottsdale, Sheffield, Torquay and Formby, Ulverstone, Upper Piper, Upper Ringarooma, Waratah, Weldborough, and Wynyard. Local Boards.

4. To better adapt "The Public Health Act, 1885," to the circumstances of the Colony, an amendment of some of its sections was effected by the passing of "The Public Health Act, 1887." The principal provisions of the new Act were to give the Central Board all the powers of a Local Board in such portions of Tasmania as are out of the jurisdiction of any Local Board (§ 6); to relieve Country Local Boards from being compelled to appoint Officers of Health (§ 7); to give the Central Board power to make regulations for the removal, in certain cases, of patients to Hospitals (§ 9); to require medical men to report infectious cases directly to Local Boards (§ 10); to empower Local Boards to make by-laws to regulate burials (§ 12); to make the Amendment of Public Health Act, 1885, by Public Health Act, 1887.

certificate of one medical man sufficient in cases where the Act of 1885 required the certificate of two (§§ 14, 15); to prevent the exposure of the bodies of persons who have died of infectious disease (§ 16); to partly relieve persons carrying on offensive trades who use the "best known means," &c. of avoiding nuisances (§ 17); and to give Local Boards conditional powers to order the construction of earth-closets and water-closets.

**Special
Reports.**

5. During the year the Inspector sent in special Reports upon inspections made under the instructions of the Board upon the sanitary condition of New Town (two), Glebe Town, Avoca, part of Hobart (Byron-street), Glenorchy, Upper Piper (Scottsdale Tunnel), and upon the outbreak of Smallpox at Launceston, copies of which have been forwarded to you. Those upon Glebe Town, Avoca, Hobart, and Launceston have been printed and presented to Parliament.

**Public
Health.**

6. The two principal events during the year in connection with public health were the prevalence of typhoid fever at its commencement, and the outbreak of smallpox towards its close. Though the latter disease, from its character and exceptional occurrence here, attracted the greater attention, the former was by far the more serious affair, and deprived the country of tenfold more lives than were lost by smallpox; the deaths from typhoid being 112 as compared with 11 from smallpox.

**Typhoid
Fever.**

7. The cumbrous machinery devised by the 80th section of the Act of 1885, for procuring returns of cases of infectious diseases, acted very imperfectly, and consequently not more than fifty cases of typhoid fever, other than those treated in the Hospitals, were reported to the Board. In the Hospitals 473 cases were treated, and 53 deaths occurred—equal to 11·2 per cent. If the mortality of outside cases were as high—and this is not to be expected, as usually the severe cases are only removed to Hospital—at least a thousand cases of typhoid must have occurred in Tasmania, with 112 deaths. The mere number of this fearful mortality from a preventible disease does not represent the full gravity of this outbreak. To properly appreciate that gravity it must be borne in mind that typhoid fever is practically a disease of adult people. Of the above deaths 59 were of young or full-grown men between the ages of 15 and 45 years; 35 were of women between the same ages, 3 were of men and 3 of women above 45 years of age; leaving only 12 deaths of persons under 15 years of age. The community, therefore, lost a hundred valuable lives,—sixty being probably those of men who were the bread-winners of families, and forty those of women who were either bread-winners or household managers. And these were people of all classes, rich and poor: the law, the civil service, the banking and commercial interests suffering, if anything, more severely than their poorer neighbours. Nor does this even represent all the loss. If the above-mentioned proportion between sickness and death held good, there must have been some 500 other bread-winners temporarily laid aside, and causing expense to their families instead of earning money. Taking all these things into consideration, and yet not attempting to appraise the value of priceless lives, the outbreak of typhoid fever in Tasmania in 1887 must have cost the community at least £60,000.

**Typhoid
Fever in
Hobart.**

8. Hobart suffered more severely than the rest of the country, 70 of the 112 deaths occurring here. Of these deaths 38 took place in the General Hospital. Up to the end of March, 85 cases had been received into this Hospital, of which 66 were from the town and 19 from the country. If this proportion held good throughout the year, and if the above-mentioned proportion between sickness and death also held good, it is probable that there were over 500 cases of typhoid fever in Hobart, with 59 deaths. Early in the year the Central Board called the attention of the Local Board to the urgent necessity that existed to take immediate steps to remove the causes that are well known to produce the fever. A conference was held with the Local Board on the 6th May, and specific recommendations made as to the steps to be taken. But little was done, and that only of a temporary character, and the city was left at the end of the year as absolutely liable to, and at the mercy of, a fresh outbreak as it was at the beginning. The expenditure of so much life, suffering, and money went for nothing. And the sad experiences of the earlier months taught no profitable lesson to the sanitary authorities of the city, and the natural result followed at the beginning of this year.

Diphtheria.

9. During the year 35 deaths occurred from diphtheria, being about the average number occurring yearly during the last ten years. This mortality makes it probable that at least 200 cases occurred without a fatal termination. Of these, only four were reported from Longford and four from Cambridge. Special reports were made from each of these localities.

Smallpox.

10. The arrival of the *Preussen* with smallpox patients on board, in the beginning of January at Sydney, after having called at other Australian ports, created an uneasy feeling, which extended to Tasmania. The Local Board of Launceston, with a seeming

presentiment of what was to happen to their town, asked that special precautions should be taken. As the *Preussen* cases were all confined to quarantine, no regulations were issued as to intercourse with the other colonies. In July the occurrence of smallpox in a passenger who had arrived at Sydney by the *Port Victor* revived the alarm, especially as a number of Chinese passengers were transhipped from that vessel to the *Pateena* for Launceston. Information of this was not received until many of these passengers had left the town. They were all, however, found, and kept under strict observation until all danger of development of smallpox was past. And during the whole course of the subsequent outbreak no case occurred among the Chinese, nor was any case traceable to any intercourse with them.

11. There were certainly cases of smallpox at Launceston early in September, but the first report of any case was made on the 23rd of that month. For the history of the outbreak in Launceston, and of all the measures that were taken to relieve the sick and prevent the spread of the disease, I beg to refer you to my Report dated the 17th November, 1887, which has been presented to both Houses of Parliament.

Smallpox at
Launceston.

12. Coincidentally with the first reports of the outbreak, information was received of the landing at the Don, from the s.s. *Devon*, of a seaman named William Smith, who had been lodging at one of the houses in which smallpox had appeared in Launceston, and who was himself suffering from the disease. As soon as possible Smith was isolated in a separate cottage, with his wife, to assist Miss Lefebvre, a trained nurse sent down from Hobart; and Dr. Dundas, Government Health Officer, took charge. Members of four families that had been in communication with the patient were also isolated under police supervision. Smith recovered, and the precautions taken sufficed to prevent any spread of the disease.

Smallpox at
the Don.
Wm. Smith's
case.

13. Immediately upon receiving intelligence of the outbreak of smallpox at Launceston, the Governor in Council by proclamation ordered that the 78th Section of the Act of 1885 should come into force; and the Central Board, in accordance with the provisions of that section, made a series of regulations, that were published in the *Gazette* of the 27th September. These regulations contained full and precise directions as to smallpox hospital accommodation and regulation, ambulance arrangements, removal of patients to hospital, and the disinfection of their houses; action to be taken where patients could not be removed, and arrangements for the burial of the dead. At the same time there were issued to all Local Boards memoranda to assist them in making all necessary preliminary arrangements in regard to hospitals in view of any emergency. These memoranda treated of the situation, isolation, water supply, drainage, and ward-space of hospitals; of the adaptation of existing buildings to hospital use; of the different arrangements in case huts were built or tents used as hospitals; of the isolation of persons who had been exposed to infection; and of arrangements that might be made for joint provision of hospital accommodation by Local Boards of adjoining districts. A circular was at the same time issued urging upon all Local Boards to exercise such prevision by the immediate selection of sites for hospitals, and the making of such preliminary arrangements in regard to medical attendance as would enable them to immediately act should the necessity arise.

Regulations
on smallpox.

14. To meet the want of any provision under the Public Health Act of 1885, (a want that has been subsequently remedied by the Amendment Act of 1887) for the isolation of houses in which smallpox had occurred, and the removal of smallpox patients to Hospital, a proclamation was issued by the Governor in Council, under the 7th Section of the Quarantine Act, giving power to act in such behalf to Stipendiary Magistrates and other persons deputed thereto by the Chief Secretary.

Proclamation
under the
Quarantine
Act.

15. The Central Board urged upon Government the necessity of immediately carrying out the provisions of the Vaccination Act, that had been allowed to fall into almost complete disuetude. Its action was supported by some of the Local Boards. The Government at once appointed twenty-three additional public vaccinators for the southern division, and forty-two for the northern division of the island, arranging to pay them a small fee for every successful vaccination.

Appointment
of additional
Public Vac-
cinators.

16. On the 2nd of November intelligence was received that an unvaccinated child, Mary Lewis, had developed smallpox at Evandale. The Inspector at once proceeded there. Miss Lefebvre, the nurse who had been employed at the Don, and whose period of isolation was completed, was at once transferred to Evandale. To minimize the chances of spread of infection through the medical attendants, Dr. Pike, who was in charge of the Launceston cases, was given the charge of this case also. The patient, her mother and nurse, were isolated in the cottage in which she lived. Her father, brother, two sisters who had lived with her, and a third sister who had visited her, were vaccinated, and

Smallpox at
Evandale.

isolated in tents pitched within a fenced enclosure made in a neighbouring field, the use of which had been granted by the Warden, Mr. J. Smith. To be prepared for the eventuality of the occurrence of further cases, a site was selected about a mile and a half from the town, on land temporarily granted for the purpose by Mr. Von Stieglitz and his tenant, and a hospital constructed in wood thereupon, containing accommodation for eight patients, with separate quarters for nurses and attendants, kitchen, disinfecting chambers, &c. There was a good supply of water from the South Esk River, and telephonic communication established with Evandale. Happily, this provision of accommodation was not required. The outbreak was confined to the one case. It was a very severe one of confluent smallpox, but the girl, after lying some days in an apparently hopeless condition, was brought back to health and strength. The temporary hospital has been removed, and the cottage, a wooden building, in which the case occurred, destroyed and rebuilt.

Total number
of smallpox
cases.

17. In all there were thirty-five cases of smallpox, of which thirty-three occurred in Launceston; one, directly connected with Launceston and contracted there, occurred at the Don; and one, which could not be traced, though from local circumstances evidently connected with Launceston, occurred at Evandale. Of these 35 cases, 11, all in Launceston, were fatal—equal to 31·43 per cent. of the cases.

Cost of out-
break to
Government.

18. This was the first known outbreak of smallpox in Tasmania; and the manner in which it was dealt with, and the area of its influence circumscribed, reflects credit upon the central and local authorities who were called upon to face for the first time the attack of a new foe. In view of the circumstances Government undertook the whole cost of the necessary remedial and preventive measures, and of such further action as was necessitated by the position assumed by the other Australasian Colonies. Its total expenditure was £7665 17s. 6d. The net expenditure would be less, as some stores, &c. not used have been returned. The total expenditure is about equal to £218 a head for each of the 35 cases. The outlay may be thus apportioned:—

	£	s.	d.
Hospital Buildings.....	844	4	2
Furniture, Bedding, &c.....	733	19	10
Provisions and Medicines	281	6	3
Salaries and Allowances.....	1734	15	3
Compensation for clothes, &c., and for time	2285	12	6
Miscellaneous	1785	19	6
TOTAL.....	£7665	17	6

Comparative
cost.

19. The total outlay is large, but it compares favourably with that expended in dealing with the smallpox epidemic of 1881-2 at Sydney. In that epidemic 154 cases occurred, and the cost to the Government in connection with them was £84,142, or about £546 each case. One reason of this great outlay is that one-third of it was spent upon Hospital and Sanatorium buildings, I presume of a permanent character. On the other hand, the action in relation to quarantine taken by the other Colonies burdened Tasmania with exceptional postal and telegraphic expenditure (included in the above miscellaneous expenses) of £1030. If this and the expenditure on buildings be eliminated from the accounts, the relative cost of treating the outbreak will be about £165 a case in Tasmania to £365 a case in Sydney.

Quarantine.

20. The action taken by the other Colonies in regard to quarantine on the occasion of the outbreak of smallpox in Tasmania, and the matter of quarantine generally, I have fully dealt with in the Report above mentioned on smallpox at Launceston, and in the Memorandum I had the honour to address to you on the 19th December last.

Vaccination.

21. In the Report on the Launceston outbreak there are full particulars given of the relation of vaccination to the mortality from smallpox and to the susceptibility of persons to its contagion as shown by the particulars noted in connection with patients and "suspects." Attention is also called to the manner in which the outbreak affected the vaccination returns. It was shown that in the six weeks immediately preceding knowledge of the outbreak there had been only 179 vaccinations performed in the Island; in the six weeks immediately succeeding 6513 vaccinations had been performed. From Returns subsequently received, it seems that 2305 more vaccinations were performed by the end of the year: so that for the last 15 weeks of 1887 the number of vaccinations was 8818. Probably during the whole year 10,000 persons were vaccinated, being more than sixfold more than the number vaccinated in 1886.

22. In regard to the general working of Local Boards, comparatively few special By-laws. Reports were received. By-laws were confirmed for the Local Boards of Bothwell, Evandale, Launceston, New Town, Queenborough, and Trevallyn.

23. Special Reports were received from Local Boards and Police authorities on the subject of the pollution of rivers and streams by noxious trades establishments all over the country. These Returns are not yet quite complete, but the matter will be dealt with. Pollution of rivers by noxious trades.

24. During the year intercourse on many matters of common interest was kept up with the Central Boards of Health of the other Colonies, together with an interchange of departmental papers and documents. Throughout the period of the prevalence of small-pox a daily bulletin was telegraphed to each Colony. Intercourse with Central Boards of other Colonies.

All which matters I respectfully submit to your consideration.

I have the honour to remain,

Sir,

Your faithful Servant,

A. MAULT,

Engineering Inspector and Secretary.

*Central Board of Health, Hobart,
12th July, 1888.*