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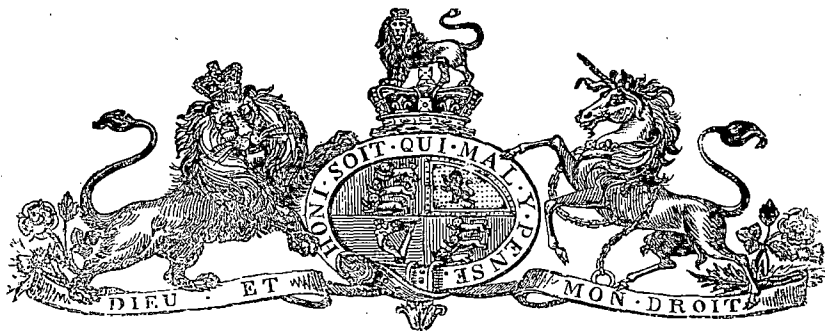
1888.

PARLIAMENT OF TASMANIA.

CENTRAL BOARD OF HEALTH:

INTERIM REPORT.

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



CENTRAL BOARD OF HEALTH.

INTERIM REPORT, 1888.

To the Honourable the Chief Secretary.

SIR,

WE have the honour to submit the following Interim Report upon the administration of the Public Health Acts, the Vaccination Act, and the Quarantine Act, during the first half of the current year.

1. The Central Board of Health, appointed in January, 1886, having resigned, the Governor in Council, by proclamation in the *Hobart Gazette* of the 17th January, 1888, notified the appointment of William Belbin, Esquire, M.H.A., William Benson, Esquire, the Honourable Philip Oakley Fysh, M.L.C., Henry Hunter, Esquire, and John Wemyss Syme, Esquire, to be Members of the Central Board of Health, and of the Honourable Philip Oakley Fysh to be President thereof. On the 4th of April Mr. Hunter, in consequence of his leaving the colony, resigned his seat: and the Board, in accepting his resignation, recorded its high appreciation of the qualities which had made his services, both on the former and present Boards, so useful to the country, and so helpful to his fellow members. By a proclamation, which appeared in the *Gazette* of the 10th April, the Governor in Council notified the appointment of Charles Harbottle, Esquire, to be a Member of the Board in succession to Mr. Hunter. Central Board.

2. On the recommendation of the Board, the Governor in Council appointed Alfred Mault, Esquire, Engineering Inspector under the Public Health Acts, to be its Secretary, and the notification of this appointment was published in the *Gazette* of the 24th January. Secretary.

3. In addition to the fulfilment of the duties imposed upon it by the provisions of the Public Health Acts of 1885 and 1887, the Board has undertaken the administrative work connected with the Vaccination Act, 1882, the Quarantine Act, 1881, and the vaccination clauses of the Chinese Immigration Act, 1887; and the principal matters that have been attended to in connection with each of these Acts are hereinafter set forth. Public Health Acts.
Vaccination Act.
Quarantine Act.
Chinese Immigration Act.

PUBLIC HEALTH ACTS, 1885 AND 1887, (49 VICT. NO. 18 AND 51 VICT. NO. 35.)

4. At the beginning of the year an alarming number of cases of febrile diseases were reported, and it seemed very probable that the occurrences of the preceding year, especially in regard to typhoid fever, were about to be repeated. If any remedial or preventive action were to be taken it was of the utmost importance that exact knowledge should be had of every case that occurred, so that local causes could be enquired into and removed, and steps taken to prevent spread of infection. With the view of obtaining this knowledge a letter was sent to all medical men in the colony, calling their attention to the provisions of the 10th section of the Act of 1887, and at the same time forms were supplied upon which the necessary returns of cases of miasmatic disease should be reported. To further facilitate their observance of the law, the Honourable the Postmaster-General, at the request of the Board, arranged that such returns, when signed by the sender, should be carried free by post. While gladly acknowledging the assistance it has derived from many members of the profession by the regularity of their returns, the Board feels bound to record its regret that this regularity is not universal. The proportion of deaths to returns, and especially the difference in this proportion in the two principal towns of Miasmatic Diseases :
Returns from Medical
Men.

the colony, show that a large number of cases are not reported. It is very undesirable that the fulfilment of provisions of a law, that the medical faculty knows is necessary and important, should depend upon its being enforced by legal proceedings to recover penalties. The Board therefore appeals to every member of the profession to assist it in its work, instead of making it more difficult, and, to a certain extent, useless and incomplete by the suppression of information.

Returns from
Hospitals.

5. The managers of the various public hospitals were also asked to furnish returns of all cases of miasmatic diseases treated either as in-patients or out-patients. These returns have been regularly supplied, and have proved very useful.

Typhoid Fever.

6. In respect of typhoid fever and fever of typhoid character, the following table gives the cases reported and the number of deaths registered :—

Months.	Cases reported.	Deaths registered, 1888.	Deaths, 1887.
January	61	12	6
February	112	14	9
March	85	14	13
April	60	12	25
May	57	10	18
June	33	5	10
Total for six months.....	408	67	81

As already stated, it is evident that all cases of typhoid fever are not reported. If the usual ratio of deaths to cases of this fever be taken, it is probable that the total number of cases for the six months was nearer 800 than the number above given. It is too early to establish any comparison in regard to mortality with that of preceding years, but it is evident that the rate will greatly exceed the mean of the last ten years. Details of some of the above cases, and of action taken in connexion with them, will be given in the paragraphs referring to the various Local Boards.

Diphtheria.

7. The following cases of diphtheria were reported :—

Months.	Cases reported.	Deaths registered, 1888.	Deaths, 1887.
January	12	2	0
February	18	2	5
March	13	0	0
April	17	6	6
May	31	4	4
June	12	4	5
Total for six months.....	103	18	20

Further details will also be given in regard to action taken in these cases.

Scarlet Fever.

8. A large number of cases of scarlet fever or scarlatina have occurred, and the disease is still very prevalent. Fortunately, it is of a very mild type, and no deaths from it have been registered during the six months. In all, 156 cases have been reported, of which 7 were reported in January, 7 in February, 23 in March, 26 in April, 53 in May, and 41 in June. Last year there were two deaths registered in the corresponding six months.

Measles.

9. There were 5 cases of measles reported, but no deaths from it were registered.

Inspection of Dairies,
Bakers' and
Butchers' premises.

10. As there is frequently to be traced a connexion between the spread of infection and the distribution of the food supply of the population, especially the milk supply, particular attention was paid to all cases of the above diseases that occurred in the families of dairymen, butchers, and bakers. The Board also asked for a special inspection to be made by all Local Boards of all dairies and butchers' and bakers' establishments in their respective districts, and for a report thereon. These reports were upon the whole satisfactory, especially as they shewed that means had at once been taken to remedy the evils that had been found by the inspectors.

11. In some of the special reports made upon cases of the above-mentioned infectious diseases, particular mention was made of the quality of the water used for drinking. In all these cases samples were procured and submitted to the Government Analyst. In nearly every case his analysis shewed pollution, and due precautions were at once taken, as detailed below.

Water Analyses.

12. In connexion with the monthly returns of cases of miasmatic diseases, the attention of the Board was drawn to the great mortality of infants, especially in Hobart, from infantile diarrhoea and debility, and it asked the Local Board of the City to give consideration to the subject. In reply, a report was received from the Medical Officer of the Local Board, in which the mortality from infantile diarrhoea was generally attributed to climatic influence to the exclusion of preventible causes; but no detailed examination of cases was made to support this view. The Central Board is therefore getting information in regard to each particular case with the view of ascertaining how far the high infant mortality of Hobart is preventible, and how far inevitable.

Infant Mortality in Hobart.

13. The passing of the Amendment Act of 1887 has necessitated the preparing of a new edition of the "Instructions, Regulations, and Model By-laws for the guidance of Local Boards of Health," first issued by the Board in 1886. As this will require some time to complete, and as the prevalence of miasmatic disease rendered it desirable that Local Boards and the public should be immediately in possession of information as to the best methods of preventing the spread of such diseases, the portion of the new Instructions relating to this subject was printed separately and widely distributed.

Instructions, &c. to Local Boards.

14. The Board has also prepared a wall-sheet for distribution containing simple directions as to what to do "till the doctor comes" in all cases of ordinary accident, based upon a similar sheet published by the Australian Health Society and adopted by the Victorian Government. This sheet is now ready for printing.

Accidents and emergencies.

15. During the half-year new Local Boards of Health have been constituted at Kingston, Lefroy, and West Tamar; and the appointment by the Governor in Council of the members of the respective Boards, and the definition of the boundaries of their Districts, by proclamation, have been duly published in the *Gazette*.

New Local Boards.

16. As in the appointment of many Local Boards during 1887 under the Act of 1885, no specific Districts had been assigned to them, it was found necessary to re-appoint them under the Amendment Act of 1887. This re-appointment involved the reduction of the numbers of members of some of the Boards, as a maximum limit is fixed by the Amendment Act. Some difficulty was experienced in fixing the boundaries of neighbouring districts so as, while leaving no strips of country without a sanitary authority, to study the requirements of local convenience as far as practicable. As all the new Boards are in Police Districts, and as the inspecting part of their work would have to be done by the police, the system adopted was to divide each Police District between the Local Boards established within its boundaries. The arrangements have now been completed, and the Boards and their Districts gazetted in respect of Beaconsfield, Boobyalla, Brothers' Home, Burnie, Franklin, George Town, Gordon, Gould's Country, Hamilton-on-Forth and Don, Latrobe, New Town, Penguin, Port Cygnet, Queenborough, St. Helen's, St. Leonard's, Scottsdale, Sheffield, Torquay and Formby, Ulverstone, Upper Piper, Waratah, Weldborough, and Wynyard. Other matters have retarded the completion of arrangements in respect of Invermay and Ringarooma.

Districts, &c. of Local Boards appointed in 1887.

17. Under the 13th Section of the Act of 1885, it is provided that the authorized expenditure of Local Boards appointed by the Governor in Council shall be defrayed out of moneys that may from time to time be appropriated by Parliament for the purpose. As Parliament had made no appropriation for the purpose, the proper normal working of the Boards could not be expected. Nevertheless, thanks to the public spirit displayed by the members, and especially by the chairmen, succeeding paragraphs will show that much good work has been done, especially in the prevention of the spread of disease. In some cases of emergency some expenditure was absolutely necessary. The Board has therefore had to authorize the employment of medical men in special circumstances, and to pay their fees and the travelling expenses of local inspectors, and the cost of supplying disinfectants for the whole Island, from the small appropriation of £100 "for the purposes of 'The Public Health Act.'"

Expenditure of New Local Boards.

18. As the newly-appointed Boards could not act without inspectors, and had no funds from which to pay them, the Honorable the Attorney-General and the Inspector of Police were requested to authorize the employment of police by the Local Boards in Police Districts, and with their sanction it was arranged that the superintendent in each district might become inspector to the Local Boards whose jurisdiction was comprised

Local Inspectors.

within it, with power to employ the local constables as sub-inspectors, with the understanding that the Central Board would authorize a gratuity to be paid for extra services on the recommendation of the Local Boards. A circular letter embodying the arrangement was sent to the newly appointed Boards in the Police Districts, and it has been generally acted upon. At the same time the chairmen of these Boards were informed that the Honourable the Postmaster-General had authorized them to frank letters relating to the business of their Boards.

Estimates for 1888
and 1889.

19. The Board had the opportunity of bringing the whole subject of the expenditure necessary to carry out the provisions of the Public Health Acts under your notice in connection with the departmental estimates for the current half-year and for the year 1889. It based its estimates upon the principle that the expenses of all Local Boards, whether in Municipalities or in Police Districts, should be defrayed in the same manner. At present Local Boards in Municipalities have to pay their expenses out of local rates, and those in Police Districts out of the general taxation. So the former, after paying their own expenditure, have to pay their share of that of the latter. It is understood that this anomaly would cease under the provisions of the Local Government Bill if it should become law. If it do not pass this Session, the Board strongly urges the adoption of the estimates it forwarded to you providing for the payment of the expenses of all Boards alike from the General Revenue as the only other practical way of equalising the burden.

Appeal Case from
Invermay, Establish-
ment of a Noxious
Trade.

20. Early in the year the appellate jurisdiction of the Board had to be exercised under the 95th Section of the Act of 1885. The case came on under an appeal of 72 residents of the Town of Invermay against a decision of the Local Board of the District authorising the establishment by Messrs. W. Upton & Sons of a soap and candle manufactory in the town. Under a misapprehension of the law, the works had been already established before the consent of the Local Board had been asked. That consent was given on the 30th December, 1887. The appellants thereupon brought the matter before the Central Board. The Central Board instructed the Engineering Inspector to hold an inquiry on the spot and report thereupon. A Court of Inquiry was accordingly held at Launceston on the 24th and 25th of January, at which the appellants and their solicitor, the members of the Local Board of Invermay, and Messrs. Upton and their solicitor were present, and the Inspector received all the evidence tendered to him. He also inspected the works, and the neighbouring parts of the township and of Launceston. He reported the result of his inquiry and inspection to the Central Board at its meeting of the 10th February, and it was evident therefrom that the locality was not a suitable site for a noxious trade establishment. The Board, being anxious not to discourage industrial enterprise any more than was necessary in the interests of public health, directed the Inspector further to inquire whether any portion of the manufacturing processes of Messrs. Upton could be carried on without causing a nuisance. This further inquiry was held, but nothing was elicited to affect the result of the previous one. The Board therefore, at its meeting of the 16th March, decided in favour of the appellants, and annulled the permission granted by the Local Board of Invermay to Messrs. Upton to establish soap and candle works. The Central Board has subsequently received a numerous signed petition from inhabitants of Launceston in favour of a reversal of this decision, but it has declined to re-open the question.

Noxious Trades'
Areas.

21. The above appeal case, and other matters that have come before the Board in connection with the establishment of new, and the carrying on of old, noxious trade establishments, has brought prominently before it the desirability of ascertaining the practicability or otherwise of having areas specially set apart where such trades might be carried on without detriment to the public health on the one hand, and, on the other, without risk to the manufacturers of having legal proceedings taken against them under the common law or the nuisance clauses of the Police and Public Health Acts. With this object it has obtained from the Central Boards of Health of the other Colonies accounts of all action, legislative and other, that has been taken in connection with the establishment of "noxious trade areas." Special inquiries have also been made by the Inspector in regard to suitable sites for such a purpose in the neighbourhoods of Hobart and Launceston. The inquiry is not yet quite complete, but the Board hopes shortly to give you a special report upon the subject.

Inspector's work.

22. During the half-year the Inspector has made special inspections and reports upon matters connected with the public health at Hobart, Launceston, Queenborough, (Cascades), Invermay, New Norfolk, and New Town. He has also visited the Districts of the Local Boards of Brothers' Home, Burnie, and Ulverstone. A great deal of his time has been occupied with the examination and settlement of claims in connection with last year's outbreak of smallpox at Launceston, Evandale, and the Don. He is engaged in the revision of the book of "Instructions," &c., before alluded to. But the greater part of his time is now taken up by his duties as Secretary to this Board.

23. A Local Board had been appointed at Beaconsfield in 1887, but as fresh arrangements had to be made in regard to boundaries, it was thought advisable to re-appoint it under the provisions of the Amendment Act of 1887. This was done by proclamation of the Governor in Council, published in the *Gazette* of 1st May. In the meantime the Local Board had prepared By-laws, which, after being certified by the Attorney-General, and confirmed by the Central Board, were also published in the *Gazette* of the 1st May, and in due course laid upon the Table of both Houses of Parliament. During the half-year there have been notified to the Central Board under the provisions of the 10th Section of the Act of 1887, five cases of typhoid fever at Beaconsfield,—three in April and two in May. The three cases in April were reported simultaneously; and as one of them occurred in a baker's family, special precautions were taken. Preparations were made to isolate the house if necessary, by an Order of the Governor in Council under the 14th Section of the Act of 1887. Fortunately this was not necessary. By the personal influence of Members of the Local Board and Dr. Matthieson, the baker's business was removed from the infected house, and thus one danger of the spread of the disease averted. The nuisances existing on the premises were dealt with. A supply of disinfectants was sent to the Local Board.

Local Board of
Beaconsfield.

24. The Local Board of Boobyalla was appointed last year, but was again proclaimed, with the boundaries of its district, in the *Gazette* of the 22nd May. No outbreak of any infectious disease has been reported from this district.

Local Board of
Boobyalla.

25. A serious case of typhoid fever was reported by the Bothwell Local Board in May. As the patient was too ill to be sent to hospital, he was treated at home under Dr. Drought, the Officer of Health, and recovered. This was the only case of infectious disease reported. The Officer of Health reports satisfactorily as to the general health of the district.

Local Board of Both-
well.

26. Three cases of typhoid fever, one case of diphtheria, and one of scarlet fever have been reported from the Local Board of Brighton. The earliest reported case of typhoid was treated in the Hobart Hospital, and proved fatal. The local inspector's report traced the origin of the disease to the use of stagnant water—the only water in dry seasons procurable by most of the inhabitants of the district; and the importance of the question of its water supply is thus again exemplified. The inspection made of the bakers' and butchers' premises of the district showed a satisfactory state of things. In regard to the dairies, some alterations were suggested and carried out.

Local Board of
Brighton.

27. New arrangements in respect of the Local Board of Brothers' Home, which had been appointed last year, were made, and the Board re-appointed, and its district defined by the Governor in Council by proclamation which appeared in the *Gazette* of the 22nd May. The Board had already been calling attention to the sanitary condition of its district, especially in the matter of water supply, defective drainage, the condition of the policeman's quarters and of the public school, and the arrangements for slaughtering cattle. The Engineering Inspector paid a visit to the district and conferred with the Local Board on the above matters, the urgency of which is shown by the number of cases of typhoid fever that have been reported from the Brothers' Home district. One case was reported in February, three in March, one in April, four in May, and one in June. One case of diphtheria was also reported in January. This last case and eight of the typhoid cases were treated in Launceston Hospital. Special precautionary measures were taken, and a supply of disinfectants sent. The attention of the Honourable the Attorney-General was called to the condition of the police quarters, and that of the Honourable the Minister of Education to the public school.

Local Board of
Brothers' Home.

28. The Local Board of Health of Burnie was re-organised, and its district proclaimed by the Governor in Council in the *Gazette* of 22nd May. The Engineering Inspector paid the district a visit in the beginning of that month. No cases of infectious disease have been reported from it.

Local Board of
Burnie.

29. The report of the inspection made by the Local Board of Health of Campbell Town into the condition of bakers' and butchers' premises and of dairies was very satisfactory, as it led to the immediate remedying of all matters complained of. Eight cases of infectious disease were reported, six of typhoid fever and two of diphtheria. Two of the cases of typhoid were treated in the Campbell Town Hospital, and one in the Launceston. Four cases of typhoid occurred at Epping, and were traced to the use of very bad drinking-water in the bush. All proper precautions were taken by the Local Board's inspector. Two of these cases were not reported except by the inspector. One case of typhoid and one of diphtheria occurred at Bellevue, where there was no cause found to account for the appearance of disease.

Local Board of
Campbell Town.

Local Board of
Clarence.

30. The special report from the Local Board of Clarence upon the condition of bakers' and butchers' premises, and dairies, and the ordinary half-yearly report, contained nothing calling for special remark. Two cases of typhoid fever and one of diphtheria have been reported. The two typhoid cases were treated in Hobart Hospital, one being of local origin (the probable cause of which could not be traced), and the other being that of a patient who was ill on his arrival from Melbourne.

Local Board of
Deloraine.

31. Twelve cases of infectious diseases have been reported during the half-year by the Local Board of Health of Deloraine. The outbreak of diphtheria, 8 cases and 2 deaths being reported, in outlying parts of the district, formed the most important feature of its sanitary administration. The doctor in attendance and the medical officer of the Local Board made special reports, and the suggestions they made were carried out. A public school at Mole Creek was closed by the local authorities as diphtheria appeared in the teacher's family. A special inspection was made of the Town of Deloraine, with a view of removing all probable causes of disease. One of the patients who was being treated in the Hospital at Launceston having died there, his friends proposed to bring the body home for burial. The Local Board, knowing how often diphtheria had been spread by injudicious proceedings in connection with the burial of its victims, appealed to the Central Board to prevent the bringing of the body into the District without proper precautions. The Central Board at once entered into communication with the authorities of the Hospital, and of the Railway, with the result that the body was allowed to be removed after all precautions set forth in the Board's Model By-laws had been fulfilled, and on the condition that it should not be taken into any dwelling house, but immediately to the cemetery. There were three cases of typhoid fever, one being fatal, and one case of scarlet fever, reported. Disinfectants were sent; and it was at the suggestion of the Deloraine Board that the Central Board published separately its "Instructions," &c., as to the treatment of miasmatic diseases. These instructions have been extensively distributed.

Local Board of
Evandale.

32. Early in the year the hospital which had been prepared at Evandale so as to be ready in case of any further spread of smallpox, was dismantled and removed into store at Launceston. All accounts connected with the outbreak of smallpox at Evandale have been settled. Two cases of diphtheria were reported, and in each case the inspection of the premises where the disease occurred showed no apparent cause for it. The general inspection of bakers' and butchers' premises and dairies proved that the places were well kept.

Local Board of
Fingal.

33. Reports were received from the Local Board of Fingal of the measures taken at Avoca in consequence of the Report of the Engineering Inspector, made last year, on the sanitary condition of that place. It may be remembered that in this last-mentioned report particular attention was called to the unfitness for drinking of the water from the St. Paul's River, as shown by analyses made by the Rev. G. F. M. Fielding, Incumbent of the Parish. Mr. Fielding made another analysis of the water from a sample taken on the 8th February this year, which fully confirmed the previous analyses, and proved that the bad quality of the water was not due to an accidental or temporary cause. On the last-mentioned date the gallon of water contained—total solids 8·4 grains, and chlorine 2·35 grains. And there were 0·02 parts of ammonia, and 0·35 parts of albumenoid ammonia in a million parts of water. It will therefore be seen that there is urgent necessity that the dwellers on the St. Paul's River should attend to the warning that has been given not to use its water for drinking purposes. Two cases of typhoid fever and six cases of diphtheria were reported from the district, and in all cases due precautions taken. Five of the cases of diphtheria (of which two were fatal) occurred at Mathinna, and a special report was called for. From this report it appeared that the first case occurred in a family with evident constitutional susceptibility to diphtheria, as it had lost a child from it in December, another about three years ago, and a third about six years ago while living in Victoria. None of the cases at Mathinna could be traced to bad drainage or bad water. In March the attention of the Local Board was called to the condition of things at Mangana, where the Inspector of the Board of Works had seen "closets with pits overflowing with soil on the very brink of a creek from which the residents obtained their water. This stream flowed on from where the cesspits drained into it, past the State School, with children dabbling in, and no doubt drinking from it." The Local Board at once had an inspection made, and notices served to abate the nuisances.

Local Board of
Franklin.

34. The Local Board of Franklin, appointed in 1887, was re-appointed under the Amendment Act by proclamation on the 25th June, and its district defined. But all through the half year the Local Board has been occupied. It has made By-laws which have been certified by the Attorney-General and confirmed by the Central Board. Reports have been sent in of special inspections of the various parts of the district. The difficulties

of the Local Board have been increased by the fact that there is no resident medical practitioner in any place within its jurisdiction. One case of diphtheria and five of scarlatina have been reported during the half year, and in each case proper precautions were taken.

35. The Local Board of Health of George Town was re-appointed, and its district defined by proclamation on the 1st May. There have been two cases of continued fever reported from the district, which were both treated in Launceston Hospital. Local Board of George Town.

36. The Local Board of Health of the Municipality of Glamorgan has been in the happy condition of having nothing to record in sanitary matters for the half year. No cases of miasmatic diseases have been reported, and only four deaths registered from all causes, being at the yearly rate of 9 to the thousand. Local Board of Glamorgan.

37. Two cases of typhoid fever—one fatal, one of diphtheritic sore throat, and three of scarlet fever, have been reported from Glebe Town. Local Board of Glebe Town.

38. As the proposed depositing place of the Hobart nightsoil was in the district of the Local Board of Health of Glenorchy, all correspondence on the subject was forwarded to it, with a request for its opinion on the matter. The Local Board, which at the end of 1887 had not opposed the use of land in its district for the purpose, had, in consequence of the universal feeling of opposition manifested by the inhabitants, to reconsider the matter, and passed a resolution protesting against the use of land in Glenorchy by the Hobart Corporation for depositing nightsoil. As no other arrangement could immediately be made, the Central Board felt obliged to sanction the use of the land for three months under certain conditions. As these conditions were not fulfilled the Central Board withdrew its sanction, and the land is no longer used for the purpose. Two cases of typhoid fever, two of diphtheria, and two of scarlet fever have been reported from the district, and precautions were taken to prevent the spread of disease. The dairies and bakers' and butchers' establishments have all been inspected, and, where necessary, improvements ordered. Local Board of Glenorchy.

39. The Local Board of Health of Gordon was re-appointed on the 1st May, and its district defined. It has framed By-laws which have been certified and confirmed. Two cases of typhoid fever (both treated in Hobart Hospital), and two of diphtheria were reported. The inspection of the premises in which the cases occurred pointed to the water supply—Little Oyster Cove Rivulet—as the probable common source of disease. The Government Analyst's examination of the water showed it to be unfit for use for drinking purposes, and the Local Board warned all using the supply of its improper character, and recommended those who were, nevertheless, forced to use it, to adopt the Analyst's suggestion of boiling it with the addition of a small quantity of carbonate of soda. Local Board of Gordon.

40. The Local Board of Health of Gould's Country was re-appointed and its district defined on the 1st of May. It has appointed Dr. Gormley as its Officer of Health. No cases of infectious disease have been reported. Local Board of Gould's Country.

41. A case of typhoid fever was imported into Green Ponds from New Town. Proper precautions were taken in both places. There were also two cases of scarlet fever reported. Dr. Drought, the Officer of Health, reports the district as now free from infectious disease. None of the reported cases were fatal. Local Board of Green Ponds.

42. The Inspector of the Local Board of Health of Hamilton reported that the condition of the bakers' and butchers' establishments was satisfactory. But this was far from being the case in respect of the drainage of some private houses. The state of the privies at the Public School was specially referred to on the occasion of each of two inspections made, and the attention of the Minister of Education was called thereto. It resulted from the correspondence between the Central Board and the Education Department that information was given that the proper cleansing of privies is the first charge on the special grant made for cleaning purposes to all School Boards of Advice,—a fact that may be useful to other Local Boards of Health when dealing with Public Schools. Three cases of diphtheria and one of scarlet fever were reported, and proper precautions taken. In a case where a convalescent child was taken to church before danger of infection was past, the Local Board was recommended to prosecute the parents under the 16th Section of "The Public Health Act" of 1887, as a warning to others. Local Board of Hamilton.

43. The Local Board of Hamilton-on-Forth and Don was reappointed on the 1st May, and its district defined. No cases of infectious diseases have been reported Local Board of Hamilton-on-Forth and Don.

from it. Early in the year the Local Board called the attention of the Central Board to the quality of the drinking water used at the Public School. The water was therefore analysed, and the Public Analyst made some useful suggestions as to its purification, which were duly communicated to the Local Board and the Education Department.

Local Board of the
City of Hobart.

44. During the preceding year the Corporation of Hobart, which had already obtained a legislative enactment closing all cesspools in the City, determined to adopt the "pail system" for the collection and removal of nightsoil. With this object, it made a contract for the supply of pails with so-called air-tight covers, and another contract for their periodical collection and removal from the City by daylight. This latter contract contained general provisions for preventing nuisance in the City, but left it to the contractor to provide the place of deposit, and there do with the nightsoil whatever he chose to do. At the time the contract was to come into force—the 1st January—it was not signed, nor were the pails ready. The matter came before the Central Board, on an application from the Local Board, under 140th Section of the Act of 1885, for permission for the contractors to use land at Glenorchy as a depositing place for the nightsoil. The Central Board asked to see the conditions of the contract; and finding that, though there were clauses for preventing any nuisance in Hobart, there were none for preventing them at the place of deposit, required the addition of clauses to secure this latter object. In the foregoing part of this report referring to Glenorchy the natural feeling of opposition aroused in that district to the proposal of the Corporation of Hobart has been mentioned. But, in view of the urgency of the necessity of enabling the Corporation to find some depositing place, the Central Board granted a temporary and conditional permission.

In the framing of the contract the Corporation entirely overlooked the fact that, in requiring the contractor to remove the nightsoil by day, it was requiring him to act in direct contravention of the 226th Section of "The Police Act, 1865," which limits the time during which nightsoil may be removed to the five hours from midnight to five o'clock in the morning. The consequence was that the contractor was continually being fined for this contravention, and, on the other hand, was required by the Corporation to fulfil his contract. This condition of things, together with the withdrawal of the permission granted by the Central Board for reasons already stated, compelled the abandonment of the site at Glenorchy.

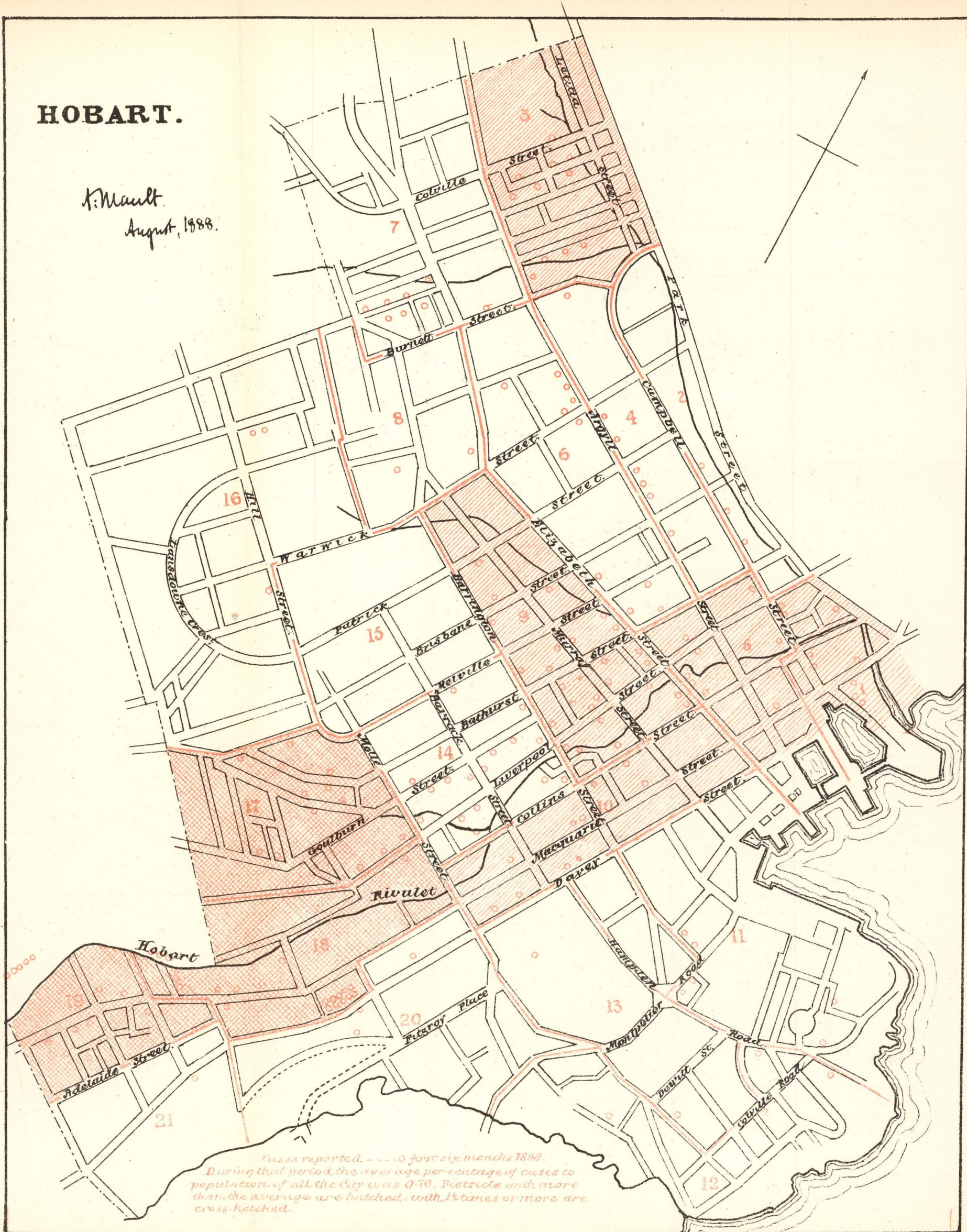
The Corporation then obtained from the Minister of Lands temporary possession of a piece of land adjoining the outlet of the Hobart Rivulet, just outside the City boundary, but which a Bill now before Parliament proposes to include within it. Its position is shown by the letter A on the accompanying sketch plan of the City. As this land was not intended to be used as a "depositing place," but only as a place for cleaning the pails after emptying them into ordinary night-carts, there was no necessity for the Local Board to obtain the sanction of the Central Board in connection with its use. But the matter came before the Central Board, first, on an application from the Honourable the Minister of Lands for its opinion as to the conditions that should be imposed on granting the use of the land; secondly, on a petition from the inhabitants of the immediate neighbourhood, complaining of the nuisance already arising from its use; and thirdly, on a report from the Local Board of New Town, in whose district the land is at present. As the methods adopted by the contractor of the Corporation for emptying and cleansing the pails were such as would always cause a nuisance, the Central Board recommended the Minister to disallow such emptying and cleansing on land so near an inhabited part of the City.

The settlement of the question of the destination and treatment of the nightsoil from the city seems as far off as ever. It is to be regretted that the work was begun without proper arrangements having been made to carry it out in all its details. The Corporation only undertook to provide the pails. All the other and more important details were left to the contractor, whose only interest in the matter is monetary and not sanitary, and who had to begin the execution of the contract while arrangements were still incomplete. They have been incomplete ever since. The consequence is that arrangements that might have been easy enough if undertaken before the work commenced, have become extraordinarily difficult on account of their urgency. From 800 to 1000 pails have to be dealt with every day. They cannot be left in the people's houses, so the proper question of, What *should* be done with them?—which ought to have been answered beforehand—has to give place in the exigency of the moment to, What *can* be done with them? And this exigency is pleaded in palliation of measures that are creating dangerous nuisances.

During the half year 129 cases of typhoid fever, 10 cases of diphtheria, and 30 cases of scarlet fever have been reported. As some of these cases were not reported through the proper channels, and were "accidentally" discovered while inspections were being made, it is evident that the above numbers do not represent all the cases that have occurred. On the 19th March the Officer of Health of the Corporation made a special report upon the typhoid fever prevalent in the city, and made some suggestions as to

HOBART.

T. Mault.
August, 1888.



preventive works in some districts, but no action thereupon was taken by the Local Board. The following table and the accompanying plan show the distribution of the reported cases. In the division of the city into districts an endeavour has been made to group together, as far as practicable without greater subdivision, houses of similar character, condition, and circumstances. It must be understood that the population of the districts is only an estimate based upon the number and character of the houses as represented by the valuation roll, and is exclusive of inmates of public institutions. The rateable value is exclusive of the estimated value of shops, &c.

City of Hobart—Infectious Diseases reported, January—June, 1888.

District Number on Map.	Population.	Average Rateable Value of Houses.	Mean Height in feet above High Water.	Cases reported.				Cases to 1000 of Population.	Cases to 1000 of Population—Typhoid only.	Remarks.
				Typhoid Fever.	Diphtheria.	Scarlet Fever.	Total.			
1	994	£ 20	11	6	0	3	9	9.1	6.0	Hobart Rivulet, Old Wharf, Wapping, &c.
2	598	30	50	3	0	0	3	5.0	5.0	Park-street Rivulet.
3	1108	22	100	10	0	0	10	9.0	9.0	Letitia-street, Ware-street, &c., Park Rivulet and branches.
4	1218	22	80	6	0	1	7	5.7	4.9	Between Argyle and Campbell-sts.
5	979	41	21	6	0	1	7	7.2	6.1	Hobart Rivulet traverses.
6	2043	27	110	9	0	2	11	5.4	4.4	Trinity Hill.
7	1316	25	167	4	2	2	8	6.1	3.0	Upper Elizabeth-street, &c.
8	994	25	160	1	0	1	2	2.0	1.0	Veterans' Row, &c.
9	3289	33	67	17	5	4	26	8.0	5.2	Hobart Rivulet and Melville-street Rivulet traverse.
10	1267	77	72	6	1	3	10	7.9	4.7	Collins, Macquarie, and Davey-sts.
11	1261	29	54	6	0	0	6	4.8	4.8	New Wharf, &c.
12	932	34	60	4	1	0	5	5.4	1.1	Quayle-street, Napoleon-street, &c.
13	741	41	95	1	0	0	1	1.3	1.3	Barracks, St. George's Hill.
14	2275	21	105	12	0	2	14	6.2	5.3	Hobart and Goulburn-st. Rivulets.
15	767	24	160	2	0	0	2	2.6	2.6	Upper Patrick-street, &c.
16	852	23	295	0	0	5	5	5.8	0.0	Launsdowne Crescent.
17	1014	23	225	6	1	4	11	10.8	5.9	Goulburn-street Rivulet traverses.
18	907	27	150	18	0	0	18	19.8	19.8	Hobart Rivulet traverses.
19	666	18	190	7	0	1	8	12.0	10.5	Hobart Rivulet bounds, and ditch from D'Arcy-street traverses.
20	1084	49	145	4	0	1	5	4.6	3.7	Fitzroy Place, &c.
21	232	82	235	1	0	0	1	4.3	4.3	Holebrook Place, &c.
...	24,537	30	...	129	10	30	169	6.9	5.0	

As previously to the first half-year of 1888 no similar accounts have been kept in respect of infectious diseases, it would not be safe to formulate any positive conclusions from this table and the accompanying plan, especially as the returns are incomplete. But some remarks are permissible, particularly in regard to typhoid fever, as they agree with observations made elsewhere. The sewage of the greater part of Hobart is drained into the natural water-courses which traverse the city, which have been turned into open sewers. An examination of the plan and table will show that generally speaking the districts in which typhoid fever has been most prevalent are those most exposed to the influence of these open sewers. Of District No. 18, with its very high rate of cases, particulars are given in the succeeding paragraph of this report. District No. 19, which stands next highest in rate of cases, is particularly exposed to exhalations not only from the Hobart Rivulet but from the open ditch draining the district from D'Arcy-street downwards. And the influence of the Hobart Rivulet here is further shown by the number of cases that occurred on its right bank in the District of the Queenborough Local Board. District No. 3 is a comparatively flat low-lying tract, receiving the drainage of the Upper Elizabeth-street part of the City as well as its own, in comparatively sluggish open ditches. The influence of these open sewers is in like manner shown in the other districts that give the higher rates. And even in districts like No. 14, where the average for the whole district is not very high, the map shows that in the part of it adjoining the course of the Hobart Rivulet disease was very rife. All these facts point out that in Hobart, as elsewhere, the great preventative of typhoid fever is to be found in proper drainage.

The attention of the Engineering Inspector of the Central Board being attracted by the number of cases of typhoid fever that were reported from the block of buildings surrounded by Davey-street, Antill-street, Macquarie-street, and Watch-house Lane, forming part of District No. 18 above alluded to, he made a particular inspection, and reported its result to the Central Board. From this report, which was dated 15th March,

Typhoid Fever in Hobart.

it appeared that ten cases of typhoid fever had then occurred in five houses of this block fronting Davey-street, five having occurred in one house, two in another, and one each in the other three. The houses were small, with small rooms, and had an average of 8.8 persons living in each house, and 1.63 in each room, including some unfit for habitation. The houses required repairing, whitewashing, and cleaning; the yards were unpaved; there were no ashpits nor receptacles for refuse; the drains were badly constructed and emptied themselves into the street gutters, along which the chamber slops and washing water of the patients and their clothing had to run 500 yards, mixed with street ordures, exposed to sun and air, side by side with the street traffic, and in front of houses and shops, before falling into a street grating. The works necessary for remedying these evils were suggested, and they agreed in character with those subsequently and independently recommended by the Health Officer to the Corporation in his report upon typhoid fever before alluded to. The Engineering Inspector's report was forwarded to the Hobart Local Board on the 19th March, with a request that attention should immediately be given to removing the evils complained of. On the 10th April the Central Board received a reply covering a report from the Health Committee of the Corporation, who stated that after considering the Inspector's Report, "they cannot agree that the comprehensive plan suggested is necessary, and as it would entail a large expense they do not recommend it." Acting upon the advice of the Law Officers of the Crown, the Engineering Inspector made a formal complaint to the Central Board that the Local Board of Hobart had made default in enforcing the provisions of the 117th Section of the Act of 1885, and the Central Board made an order on the Local Board under the 16th Section of the same Act, requiring it to do the necessary work within three months. The three months have not yet elapsed.

A complaint of residents in its neighbourhood of the condition of the open drain running through St. David's burial ground also came before the Central Board, and was forwarded to the Local Board, which promised to have the necessary remedial works done.

In connection with the outbreak of typhoid fever, the water supplied to various parts of the city was analysed and found pure.

The reports received from the Local Board of inspections of bakers' and butchers' premises and dairies were very complete.

Local Board of
Invermay.

45. After the decision of the Central Board in the matter of the establishment of Messrs. Upton's soap works at Invermay, the Local Board of that district resigned, and the Central Board has subsequently been acting as Local Board, under the 6th section of the Act of 1887. In this capacity it has refused to allow the establishment by Messrs. Miller and Co. of new soap works in the town of Invermay; and it has dealt with five cases of typhoid fever and one of diphtheria that have been reported.

Local Board of
Kingston.

46. The appointment of a Local Board of Health at Kingston, and the definition of its district, were duly published in the *Gazette* of the 22nd May. Four cases of typhoid fever have been reported and treated in Hobart Hospital.

Local Board of
Latrobe.

47. The Local Board of Latrobe was re-appointed and its district defined by proclamation published in the *Gazette* of the 1st May. In March its attention was called to a case brought under the notice of the Central Board by the police authorities of possible pollution of a source of domestic water supply by cattle suffering from cancer, and of the use of milk from a cow suffering from that disease, and all proper precautions were at once taken. Three cases of typhoid fever were reported from the district, and measures taken to prevent spread of infection. A reported case of the arrival from Launceston of a patient suffering from scarlet fever was also properly dealt with. The Local Board has framed and passed by-laws, which are awaiting confirmation.

Local Board of
Launceston.

48. The whole of the claims arising out of and in connection with last year's outbreak of smallpox in Launceston have now, after due examination, been settled.

In order to be prepared for any emergency that might arise similar to the outbreak of smallpox last year, Parliament had voted a sum for the purchase and preparation of a site for a hospital for infectious diseases at Launceston. A site has accordingly been selected within three miles of the centre of the town, at a proper distance from all dwellings, on suitable soil, with good aspect, easy of access, and within reach of the Corporation water supply.

Early in the year some of the relatives of the patients who had died in the temporary smallpox hospital at Mowbray, and who had been buried at the graveyard which had been improvised there, wished to have their dead removed into other cemeteries. The Central Board felt bound to oppose such removal, but recommended the Government to purchase the graveyard and proper approaches to it, in order that the ground might be properly fenced and consecrated as a cemetery. The purchase has been effected.

There has been a great deal of sickness prevalent in Launceston during the half year, 137 cases of typhoid fever, 24 of diphtheria, and 92 of scarlet fever having been reported; a total of 253 cases, being 16·5 to the 1000 of the population,—a very high rate, but one which it would not be fair to compare with that of Hobart, as the system of medical reporting is very imperfect there, and very perfect at Launceston. Fortunately the cases have, on the whole, been very mild in character. The diseases were most prevalent in the following streets:—

<i>Street.</i>	<i>Typhoid Fever.</i>	<i>Diphtheria.</i>	<i>Scarlet Fever.</i>	<i>TOTAL.</i>
Balfour	4	2	3	9
Bathurst	5	2	1	8
Brisbane	15	1	1	17
Cameron	6	0	1	7
Charles	5	2	2	9
Elizabeth	7	0	3	10
George	9	1	12	22
High	3	0	6	9
Margaret	4	0	2	6
St. John	5	0	0	5
Wellington	12	4	8	24
York	15	2	3	20

In the low-lying district of Inveresk the cases in the above order were 7, 2, and 5 respectively, making a total of 14; and in "Galvin Town," where, before the drainage work was done, fever was very rife, there were 3, 1, and 6 cases respectively, making a total of 10.

The report of the Sanitary Officer on the condition of bakers' and butchers' premises and dairies was very complete, and gave information in regard to extra urban ones, which was duly taken advantage of to secure the removal of nuisances by causing inspection in the neighbouring district.

Dr. Maddox has been duly appointed Officer of Health of the Local Board.

In March the Local Board referred to the Central Board the question as to how far the 85th section of the Act of 1885 empowered Local Boards to act as regards the removal of patients to a hospital. The Secretary wrote: "We have had families down with typhoid whose houses do not afford proper accommodation, and who refuse to go to the hospital; what is to be done in such cases?" The matter was referred to the Hon. the Attorney-General, whose opinion was transmitted to the Local Board to the effect that, in cases of the diseases mentioned in the above section, and on fulfilling its stipulations as to medical certificate and consent of hospital authorities, it had power to remove to hospital persons without "proper lodging accommodation," either in their own houses or in lodging-houses; and also persons, wheresoever living, in whose case "isolation cannot be effectually carried out."

In connection with the Local Board, the Engineering Inspector made inquiries as to the desirability and practicability of finding a "noxious trade area" for the Launceston district, as referred to in § 21 of this Report.

49. The Local Board of Health of Lefroy was re-appointed and its district defined by proclamation on the 1st May. No cases of infectious diseases have been reported, cases that had been reported as scarlet fever having turned out otherwise. The false alarm, however, gave an opportunity of showing the promptitude with which the Local Board was prepared to act. Local Board of Lefroy.

50. Three cases of typhoid fever were reported from Longford, and all necessary precautions taken in regard to them. Local Board of Longford.

51. Eight cases of typhoid fever having been reported from New Norfolk, some of them connected with the Hospital for the Insane, and the rest from the neighbourhood of it, a special report was asked for and sent in by the Inspector of the Local Board. This report did not reveal any special cause for the outbreak. At the suggestion of Dr. Gray, the Central Board had the water from the various sources that supply the town and hospital analysed by the Government Analyst. That of the waterworks supplying the hospital and the greater part of the town was found to be good; that from the Derwent, bad. In the case of the latter, further analyses were made of water taken at both high-water and low-water, still showing that the water was unfit for drinking purposes. The Local Board has, consequently, been advised to warn the people using this water of the necessity of previously boiling it. The Official Visitors of the Hospital having requested that the Engineering Inspector should examine and report upon the drainage of the buildings, he has commenced an inspection, and his report will be forwarded to you in due course. Local Board of New Norfolk.

Local Board of New Town.

52. The Local Board of New Town was re-appointed, with additional members, and its district defined by proclamation dated the 21st May. Eight cases of typhoid fever, one case of diphtheria, and eight cases of scarlet fever, have been reported. In respect of the whole of these cases the Inspector of the Local Board has made reports of the premises in which they occurred. One of the cases of typhoid, a fatal one, occurred in a dairy farm. Dr. Barnard made a special report thereupon, and the dairy was temporarily closed. Before this could be done a case of the fever occurred in the house of one of the customers of the dairy. The drainage of the district is very imperfect, and the Engineering Inspector to the Central Board is engaged in a report thereupon. Reference is made hereinbefore to the action of the Local Board in respect of the matter of a depositing-place for the nightsoil from Hobart. The report upon the bakers' and butchers' premises and dairies of the district was very complete.

Local Board of Oatlands.

53. A fatal case of diphtheria was reported from Oatlands district, and all due precautions, were taken in connection therewith.

Local Board of Penguin.

54. The Local Board of Penguin was re-appointed, and its district defined by proclamation, on the 1st of May. No cases of disease were reported during the half-year.

Local Board of Port Cygnet.

55. The Local Board of Port Cygnet was re-appointed, and its district defined by proclamation, on the 1st May. Five cases of scarlatina have been reported from the district, one of which was treated in the Hobart Hospital. In all cases every precaution was taken to prevent the spread of infection.

Local Board of Queenborough.

56. The Local Board of Queenborough was reappointed, with additional members, and its district re-defined by proclamation, on the 21st May. This district has to share the sanitary fortunes of Hobart, and has accordingly suffered much during the half-year. Fifteen cases of typhoid fever, one case of diphtheria, and six cases of scarlet fever were reported. All the premises where these cases occurred were inspected and reported on by the Local Board. Reference has been made to some of them in close proximity to the Hobart Rivulet. In another case the open drain from a house in which a fatal case of fever had occurred flowed through the yard of a house in which another case occurred—we might almost say, inevitably occurred. The report on the dairies, butchers' and bakers' premises, was carefully prepared by the Inspector to the Local Board, and showed how great a need exists for periodical inspection. As there was some question of taking the nightsoil from Hobart into the Queenborough District, the Local Board forwarded to the Central Board a strong protest against any sanction being given to such a proceeding. The Central Board has also, at the request of the Local Board, referred questions connected with the *status* of the latter to the Law Officers of the Crown for their opinion.

Local Board of Richmond.

57. The report upon the condition of dairies, bakers' and butchers' premises received from Richmond was satisfactory. Three cases of typhoid fever were reported, and all necessary precautions were taken, and a supply of disinfectants sent.

Local Board of Ringarooma.

58. The arrangements for re-constituting the Local Board of Ringarooma are not completed. No cases of disease have been reported from the district.

Local Board of Ross.

59. Three cases of typhoid fever were reported from Ross. One of them was treated in Campbell Town Hospital. In all cases proper precautions were taken, and a supply of disinfectants was sent.

Local Board of St. Helen's.

60. The Local Board of St. Helen's was re-appointed, and its district defined by proclamation, on the 1st of May. Dr. Gormley was appointed Officer of Health by the Local Board, and his appointment duly confirmed. By-laws have been duly made, certified, and confirmed. Only one case of typhoid fever has been reported from the district, and it was treated in Launceston Hospital. The report on dairies, &c. was satisfactory.

Local Board of St. Leonard's.

61. The Local Board of St. Leonard's was re-appointed, and its district defined by proclamation, on the 1st May. It has appointed Dr. Macdonald Officer of Health, and it has framed by-laws, which have been duly certified and confirmed. A full report was sent in of the condition of dairies, &c. Six cases of typhoid fever from St. Leonard's have been reported, and one case of diphtheria, and most of them treated in the Launceston Hospital. As the case of diphtheria was connected with a baker's shop, special precautions were taken to prevent the spread of infection.

Local Board of Scottsdale.

62. The Local Board of Scottsdale was re-appointed, and its district defined by proclamation, on the 1st of May. It has made by-laws, which have been certified by the Attorney-General, and since the end of the half-year have been confirmed by the Central

Board, and published in the *Gazette*. Four cases of typhoid fever have been treated in the Launceston Hospital from the railway works in this district.

63. The Local Board of Sheffield was re-appointed, and its district defined by proclamation, on the 1st May. Three cases of scarlet fever, with diphtheritic symptoms, were reported from the district as occurring in one family whose circumstances were such that almost entire charge had to be taken and medical expenses allowed. The condition of the house was aggravated by overcrowding, so lodgers who helped to sustain it were sent away, and thus the family was still further straitened. But ample provision seems to have been made by public benevolence.

Local Board of
Sheffield.

64. Five cases of typhoid from the district of Sorell have been treated in the Hobart Hospital.

Local Board of
Sorell.

65. Four cases of diphtheria were reported from Maria Island, in the Municipality of Spring Bay. In the first reported in February, there was evidence of overcrowding of workmen in rooms with unhealthy surroundings, and prompt measures were taken. The patient, had been removed to the Hobart Hospital; two other inmates of the room he had occupied, who were suffering from sore throats, were isolated, the places cleaned, and the drainage seen to, and a supply of disinfectants sent. No immediate spread of the disease occurred. Three months later three other mild cases were reported. By this time there was a resident medical man on the island, and under his direction all proper steps were taken.

Local Board of
Spring Bay.

66. The Local Board of Torquay and Formby was re-appointed, with additional members, and its district defined by proclamation published on the 22nd May. One case of typhoid fever and one of scarlet fever have been reported. In both cases all proper precautions were taken to prevent the spread of infection.

Local Board of
Torquay and Formby.

67. One case of typhoid fever was reported from Trevallyn. No local cause for it could be found, and the doctor in charge had all proper precautions taken.

Local Board of
Trevallyn.

68. The Local Board of Ulverstone was re-appointed, and its district defined, on the 21st May. The Engineering Inspector had a conference with the Board during that month. Eight cases of typhoid fever have been reported, attributable to the undrained condition of the site of the town. All proper precautions were taken, and a supply of disinfectants sent. As the town of Ulverstone has now been proclaimed under the Town Boards Act, and has a Board with rating powers, it is desirable that the drainage of the town should be at once attended to.

Local Board of
Ulverstone.

69. The Local Board of Upper Piper was re-appointed, and its district defined, on the 1st May. There has been a great deal of sickness in the locality during the half year. Nineteen cases of typhoid fever from Lilydale, Turner's Marsh, and the railway camps were treated at the Launceston Hospital. All precautions were taken at the places whence these cases were sent to prevent spread of infection, and disinfectants were supplied. Twelve cases of diphtheria were reported and also treated in the Launceston Hospital, two of them being fatal; and two more fatal cases and one not fatal are known to have originated in the district. Ten (three being fatal) of the above 15 cases having occurred in one family named Collins, at Turner's Marsh, the Central Board obtained the services of Dr. Thompson, Surgeon-Superintendent of the Hospital, to make a medical inspection of the locality. From his report, dated 8th May, it appeared that a daughter of the family died last year of diphtheria, and it is suggested that the germs of the disease lay dormant in her clothes. On the 19th March this year another daughter, Ellen, aged 10 years, came home ill from school, was taken to a private house in Launceston, where she died of diphtheria on the 29th March. The body seems to have been taken home and "waked." The wake was attended by Mrs. Burke, who contracted the disease, and communicated it to her son, who died of it on the 18th April. Mrs. Burke recovered. None of these cases had been previously reported from the district. On the 1st April two daughters of the Collins family were admitted to the Launceston Hospital suffering from diphtheria, one of whom died. Other children were admitted on the 2nd, 4th, 9th, and 30th April (this last a fatal case), on the 4th May, and two on the 28th. On the 1st May Margaret Burke was admitted to the hospital, and on the 28th May, Thomas Thompson. All the above cases of diphtheria were from Turner's Marsh. There was a case admitted on the 11th June from another part of the district. Dr. Thompson found nothing about the premises occupied by the Collins family to account for the outbreak. The house is situated on a steep hill-side. The water was obtained from a dug-out hole in which there is apparently a perennial spring. He found stagnant marshy matter below the spring, about 200 feet from the house. The water from the water-hole was subsequently analysed, and found contaminated with sewage. All the animals about the place were healthy. Some neighbouring children were found suspiciously ill, and were separated and taken proper care of.

Local Board of Upper
Piper.

Local Board of
Waratah.

70. The Local Board of Waratah was re-appointed, and its district defined, on the 1st May. The dairies, &c. were reported to be in a satisfactory condition. No cases of infectious diseases have been reported.

Local Board of
Weldborough.

71. The Local Board of Weldborough was re-appointed, and its district, defined on the 1st May. Dr. Gormley has been duly appointed Officer of Health. One case of mild scarlet fever was reported.

Local Board of
Westbury.

72. Five cases of diphtheria were reported from one family living at Black Sugarloaf, in the district of the Westbury Local Board of Health, as being under treatment at Launceston Hospital, and three other cases were reported from Glenore and treated at home. One of these was a fatal case. One case of typhoid fever was also reported, and was treated in Launceston Hospital. All due precautions were taken to prevent the spread of infection.

On the 3rd June the Surgeon-Superintendent of Launceston Hospital called the attention of the Central Board to the case of a patient who had been treated for diphtheria in April, and just re-admitted for paralysis. He had lived with his father at Glengarry, in the Westbury District, and one of the family had died on 27th May, and another on the 2nd June, with "ulcerated throats." The Local Board of Westbury was informed, and its Inspector visited Glengarry. He found there the mother, who was suffering from "sore throat," one boy of 14, who was recovering, another of 12, and a girl of 2, who had recovered from it. "The premises were in a very filthy state, two rooms about 12 feet by 13 feet, one used as kitchen, living-room, and bedroom, and the other used by the father and mother. The floor is an earthen one, and very cold. * * I found the father, who was at work, and pointed out to him the necessity of more accommodation so as not to have his children—boys and girls—all huddled together in one bed in the room in which they cook and eat. He promised me he would build, and abandon the old hut." Is it surprising that disease is bred and spread? The Inspector saw the beginning of cleansing operations properly carried out.

Local Board of West
Tamar.

73. A Local Board of Health was appointed for West Tamar, and its district defined by proclamation dated the 21st May. A case of diphtheria was reported from a dairy farm at Rosevears, and special measures were at once taken to prevent spread of infection.

Local Board of
Wynyard.

74. The Local Board of Wynyard was re-appointed, and its district defined on the 1st May. Dr. Graham has been duly appointed its Officer of Health. It has framed By-laws, which have been certified by the Attorney-General, confirmed by the Central Board, published in the *Gazette*, and laid on the tables of both Houses of Parliament. One case of diphtheria was reported by the Officer of Health.

Cape Barren Island.

75. The Inspector of Police forwarded to the Board a letter dated 15th March, 1888, from the constable, Allen F. Smith, on duty at Cape Barren Island, calling attention to the habits of the people employed in killing and curing mutton-birds, who leave the offal lying about their houses, stating that there had been fever among them last year, and asking for advice how to act. The Central Board, under the 6th Section of the Act of 1887, immediately appointed the Superintendent of Police of Ringarooma Inspector under the Public Health Acts for the whole group of islands in his district, with power to appoint the constable Sub-inspector, and gave full instructions how the latter should proceed to enforce the necessary cleanliness about the dwellings of the people.

Resolutions of Muni-
cipal Conference at
Launceston.

76. In April there was a Conference of the Municipal Councils of Hobart and Launceston held at Launceston, at which resolutions were passed upon matters connected with local government. One of these resolutions, affecting the public health, was referred by you to the Central Board for consideration, and by it to a Committee. The resolutions referred to the desirability of amending the Police Act so as to prevent the laying out of land for building purposes until the Council of the Municipality had approved the plan "setting forth the width and direction of such street" and a "sketch shewing the proposed drainage." The Committee presented a report, which has been approved by the Board, recommending more complete legislation than that proposed in the resolution, and based upon the provisions of the clauses of the English Public Health Act of 1875 referring to the matter. The Committee further recommended that advantage should be taken of any legislation required to give effect to the above suggestion, to give Councils and sanitary authorities power to levy "private improvement rates," spreading the cost of necessary sanitary work over a number of years so as to meet the case of owners of property who are not in a position to immediately pay the whole cost of such work. This report has been referred for the opinion of all Municipal Councils and Local Boards of Health, and has been approved by the great majority of them, including those of Hobart and Launceston. There are sections of the Local Government Bill now before Parliament wherein the above suggestions could be embodied, and a recommendation to that effect has been made.

QUARANTINE ACT.

77. The Board asked you to have brought before the Federal Council during its session the Memorandum of the Engineering Inspector on the subject of quarantine, so as to call its attention to the matter of intercolonial quarantine. The Memorandum was accordingly laid on the table of the Conference by the Tasmanian delegates, and gave rise to correspondence with New South Wales, Victoria, South Australia, and Western Australia, showing that at the present time it was not probable that common action on the matter could be secured. But the opening of the question for discussion has not been altogether useless, and with the continual increase of intercolonial traffic the arrangements for quarantine interference with it must be reconsidered. In moving in the matter we desired to bring colonial practice abreast of that of England and America, who have found that the only real safeguard against the introduction of disease is sanitary preparedness at home; that quarantine is not only untrustworthy in itself, but is dangerous as breeding a false security, which interferes with all efforts made to obtain real safety.

Papers laid before
the Federal Council.

78. On the 1st of April a telegram from the Board of Health, Sydney, announced that smallpox had occurred in a family at Manley, comparatively near the quarantine station. The origin of the disease was not traced. The family were all removed into quarantine, and no further outside cases occurred. The Central Board decided that vessels from Sydney having a clean bill of health should be admitted to pratique, and that no steps should be taken for declaring that port infected. Information of this was sent to Launceston and all the outports, and arrangements made for the inspection of vessels. This inspection was discontinued after three weeks from the news of the outbreak.

Smallpox in Sydney.

79. The attention of the Board having been called to the manner in which the medical inspection of intercolonial steamers was often carried out, it was determined that your attention should be called to the desirability of coming to an understanding with the Governments of the other Colonies to either totally discontinue such inspection or to have it conducted in such a manner as to be of real service. At your suggestion communications were opened on the subject with the Boards of Health of the other Colonies, and the correspondence that has taken place is now under consideration.

Medical Inspection of
Intercolonial
Steamers.

80. In connection with the quarantine stations on both the Derwent and Tamar, it is necessary that regulations should be made under the provisions of the Quarantine Act by proclamation by the Governor in Council. The necessary information for preparing such regulations is being obtained by the Engineering Inspector, and we shall soon be enabled to present you a report on the matter.

Regulations under
Act.

81. In May a telegram from the Central Board of Health announced that all vessels, intercolonial and other, bringing Chinese into any port in Victoria would be quarantined. Due notification of this was sent to all Tasmanian ports as requested. Information was asked of the Central Board of Melbourne in regard to the motives for this quarantining, and was obtained to the effect that China, Japan, and the Eastern Archipelago had been declared infected with cholera in September, 1885, that Hong Kong had been declared infected with smallpox in July, 1887, and that the *Lancet* had stated that smallpox was prevalent there in January of this year. As the Board did not see how the facts cited justified any interference with intercolonial traffic, even in the case of Chinese, and did not think that any other considerations than those of public health should instigate the putting in force of the provisions of the Quarantine Act, it did not advise the Government to follow the example of the neighbouring Colony.

Victorian Quarantine
of Chinese.

THE CHINESE IMMIGRATION ACT, 1887, 51 VICT. No. 9.

82. In order to facilitate the duties of Health Officers in connection with the Vaccination Clause of the Chinese Immigration Act of last Session, an arrangement was made with the manager of the Tasmanian Steam Navigation Company that at the time of the shipment at any Australian port of call of the Company's ships of any Chinese passenger, information thereof should be telegraphed to the Board. On the receipt of the telegram the Health Officer of the port of arrival is at once informed, and thus no unnecessary delay is caused to the steamers and passengers at this end of the voyage. Information has thus been given of the arrival of 37 Chinese passengers on 13 occasions. Hearty thanks are due to Mr. Fisher and his agents for their attention to the matter.

Vaccination of
Chinese Immigrants.

VACCINATION ACT, 1882, 46 VICT. No. 19.

83. Among the reasons given by the Victorian Government for the strict enforcement of quarantine against Tasmania during last year's outbreak of smallpox, was the

Non-enforcement of
Vaccination Act.

fact that the compulsory clauses of the Vaccination Act had been allowed to become dormant. When the administration of the Act was transferred to the Central Board in March, the above allegation was found to be too true, and steps were immediately taken to remedy the evil. The experience of Tasmania during the outbreak at Launceston as to the value of vaccination, agreeing with universal experience elsewhere, had led to such an amount of vaccination being done last year as partly to make up for lost time. But there is still much to be done, especially in connection with the vaccination of infants, that will require a patient and persistent application of the means placed at the disposal of the Board.

Means for carrying out Act.

84. The means by which the Act is carried out are the following:—Two Public Vaccinators paid by salary, and sixty paid by fees, have been appointed by the Governor in Council under Sections 4 to 7 of the Act. That parents may know their obligation, they are given by the Deputy Registrar at the time of registration a printed notice of the requirements of the Act, and that they may know how to fulfil those requirements due notice is given of the tours of the Public Vaccinators by advertisements, posters, and letters addressed to the parents. The Board is satisfied that all this is now regularly done.

Registration of Certificates of Vaccination.

85. To enable the administration to ascertain how far the Act is being complied with, every medical practitioner, whether Public Vaccinator or not, is required to send a duplicate of the certificate of every vaccination that he performs to the Deputy Registrar of the district, who is to register it; and every quarter the Deputy Registrar is to send to the Public Vaccinator of his district a return of all children who during the quarter have passed the age of six months in respect of whom he has received no certificate of vaccination. As regards medical practitioners, these requirements had practically never been fulfilled; and as regards Deputy Registrars, they had in most cases either fallen into disuetude, or been so misunderstood as to be useless. To re-organize this part of the service, with the co-operation of the Registrar-General, regulations under the Act were published by the Governor in Council (March 19th), to the effect that the Deputy Registrars' returns should be sent to the vaccinators through the Central Board, and should be accompanied with the returns of the Certificates of Vaccination received. What has been done in connection with these returns is detailed in another part of this Report.

Provision for enforcement of the Act.

86. To enforce the Act, the vaccinators of each district are required to forward every quarter to the Superintendent of Police the names of parents of children whose names appear in the above-mentioned returns from the Deputy Registrars, and who are still unvaccinated; and the Superintendents are thereupon to take proceedings against the parents. These proceedings had fallen into disuetude. It was determined to revive them, and to enable the Board to ascertain what was done, the Governor in Council made a regulation, under the 25th Section of the Act, to the effect that Superintendents of Police should make monthly returns of action taken. The effect of this is detailed below.

Performance of Vaccination.

87. In regard to the performance of vaccination no regulations have been hitherto made, nor any standard fixed of what is "successful" vaccination, but each medical practitioner has been left to operate as he thinks fit, and judge the result of the operation. Some of the returns show that the proper development of one vesicle is regarded as successful, while in some it is regarded as imperfect. In view of the proved superior results as regards immunity from infection shown where more vesicles have been developed, it is desirable that some standard should be fixed, and at the same time some regulations laid down on other matters. The Board would therefore suggest that such of those of the English Local Government Board's Regulations on the subject as are applicable to Tasmania should be adopted.

Supply of lymph.

88. Much attention has been paid to the securing of a proper supply of lymph. As the use of calf lymph is greatly preferred by many parents, special arrangements have been made to have a succession of calves fit for vaccination purposes kept at the Government farm at New Town; and the services of Mr. Park, M.R.C.V.S., who has had experience in the "cultivation" of calf lymph, have been engaged. The earlier trials were not successful, as the lymph appeared to lose its vitality very soon; but the experience gained has been useful, and for the future the method of cultivation so successfully practised by Dr. Worlomont will be followed. During the experimental stage supplies of good lymph, prepared on that method by Dr. Faulkner, of Hawkes Bay, New Zealand, were obtained and distributed.

Public Vaccinators.

89. The general laxity that had prevailed regarding vaccination had much affected the proceedings of Dr. Davis, Vaccinator for Northern Tasmania, and Dr. Willes, Vaccinator for the Southern Division. At most places there was usually a very small

attendance on the day appointed for vaccination, whereas on the eighth day after—the day appointed for the examination of the vaccinated—much larger numbers would be presented for vaccination. To examine these the vaccinator would pay another visit, when perhaps a fresh batch of children would come. The vaccinators were thus kept too long in one locality, while the parents in another would be complaining of being neglected. To obviate this, it has been arranged that the vaccinators shall only visit any locality twice—once for vaccination and once for examination—until the turn of the locality comes again after all others have been visited. If children be presented on the examination day they will be vaccinated, but the parents run the risk attaching to the non-possession of a vaccination certificate that can only be given after inspection.

90. Up to the present time returns of vaccinations for the first six months of the year have been received from 29 public vaccinators, recording 917 successful vaccinations. It is not probable that more than 150 more vaccinations were performed during the period in Tasmania by other medical practitioners. It is estimated that 200 children more had been presented for vaccination, but the operation had either failed on the first attempt, or the cases had been postponed. So the population is being increased by births much more rapidly than the rate at which it is being protected from small-pox by vaccination. It is, however, satisfactory to know that matters are improving in this respect since the administration of the Act was placed in the hands of the Board. Of the 917 successful vaccinations 286 were of children under one year old, 624 were of children between one and fifteen years old, and 7 of adults. Dr. Davis returned 282 successful vaccinations, and Dr. Willes 243. In considering these numbers it must be borne in mind that they chiefly represent vaccinations performed in very thinly peopled districts—the appointment of vaccinators in every town having taken from the two Public Vaccinators the more easily worked portions of their districts. In their journals it is not at all unusual to find that a long day's ride results in finding no one at the place appointed for vaccination. Consequently each one of the above successful cases represents many miles of travelling.

Vaccination Returns.

91. At the beginning of April a return was due from the Deputy Registrars of the names of all children born during the quarter ending 30th September, 1887, in respect of whom no certificates of vaccination had been received; that is, of all children who on the 1st of April, 1888, had passed the statutory age of six months without having been vaccinated. At the same time, under the new Regulations of March 19, returns of the children born during the above-mentioned quarter whose vaccination certificates had been registered were also sent in. Registers of all these births and vaccinations are kept by the Secretary. During the quarter 1226 children were born, of whom 66 were registered as having died. It is probable that at least 50 more had died whose deaths were subsequently registered, leaving 1110 to be accounted for. So lax had become the observance of the law that of this number the vaccination of only 9 had been registered. From accounts sent in it was ascertained that 70 more had been vaccinated whose certificates had not been sent to the Deputy Registrars. These 79 vaccinations are about 7·2 per cent. of the births. In England and Wales the percentage of vaccinations to births is about 95. It was evidently time that something should be done.

Birth Returns.

92. The lists of children who had not been vaccinated were in due course sent to the Superintendents of Police in the Northern part of the island and in Hobart city and district, but, from a misapprehension, were not sent to the Superintendents in the rest of the Southern division in time for their action to be included in this Report. In some of the districts the action taken has been very complete. In the Town of Launceston, the Rural Municipalities of Campbell Town, Deloraine, Evandale, Fingal, Longford, and Westbury, and the Police Districts of Emu Bay, George Town, Mersey, Russell, and Selby, every child born during the quarter in question has been accounted for. The following are the results of the proceedings taken:—

Police Returns.

Children vaccinated.....	171
Certificates of postponement produced	48
Cases adjourned to allow parents time to comply with the law.....	68
Parents fined.....	154
Cases dismissed (children insusceptible, dead, &c.)....	13
Parents left country.....	31

Total Number of Proceedings..... 485

Proceedings, not included in the above table, were also taken in respect of children born during the quarter preceding the one in question, which resulted in getting some

vaccinated. And it is satisfactory to find that the fining of parents does not prevent their subsequent performance of their duty to their children, as in 27 of the cases children have been vaccinated after the fining of their parents.

Results of the proceedings of the Quarter.

93. The following is the probable result in regard to the surviving 1110 children born during the quarter in question, as ascertained up to the 1st July, 1888:—

Vaccinated by public vaccinators	364	
Probably vaccinated as private patients	50	
		414
Postponed by certificate		91
Declared insusceptible by certificate		3
Adjourned to allow time for vaccination		68
Parents fined, and children still unvaccinated		127
Parents left (known cases 31), probably		60
Action still to be taken in the case of		347
Total		<u>1110</u>

If the children who have left the country be allowed for, it shows that the proportion of vaccinations to births for the quarter under consideration had improved from 7·2 per cent. on the 1st of April to 39·4 per cent. at the 1st of July, and that in an additional 15·5 per cent. of cases the parents are known to be willing to have their children vaccinated. All this gives promise that by steady administration of the Act the condition of things may in time be brought up to the standard at which vaccination matters have arrived at home.

Suggested Amendments of Act.

94. To reach this standard, the Board is disposed for the present to rely upon the powers given by the existing Act until it has clear evidence by experience that they are insufficient. Probably the first matter to be attended to will be the compulsory attendance of gratuitously vaccinated children on the eighth day after the operation, in order that the result of the operation may be ascertained. The non-attendance of many at present not only robs the Public Vaccinators who are paid by fees of a portion of them, but interferes with the supply of fresh humanised lymph. It is probable that if all who have been vaccinated had allowed verification on the eighth day, the vaccination returns would have presented a better aspect.

The Police.

95. The action of the Central Board and of the Local Boards has been greatly facilitated by the cordial co-operation of the Inspector of Police, the Superintendents of the various Municipalities and Districts, and the Members of the force generally, and this co-operation is thankfully acknowledged. Special thanks are due to the Officers of Launceston and the Municipalities and Districts mentioned in § 92 of this Report. In many of them the number of fines imposed is very small in comparison with the vaccinations effected, showing how much intelligence has been displayed as well as zeal, and demonstrating that the real utility of the compulsory clauses of "The Vaccination Act" consists in the opportunity they give to capable officers to get the law obeyed without resorting to actual penal enforcement.

Correspondence.

96. The carrying on of the business of the Department during the half-year has involved the receipt of 1446 letters, reports, accounts, and other documents, and the despatch of 1626. There have also been 562 printed circulars posted, and 1560 printed reports, instructions, and other documents; making a total of 5194 dealt with.

All which we respectfully report to you; and have the honour to remain,

Your faithful Servants,

P. O. FYSH, *Premier.*

WM. BELBIN.

WM. BENSON.

CHARLES HARBOTTLE.

J. WEMYSS SYME.

A. MAULT, *Secretary.*

Hobart, 21st August, 1888.