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PARLIAMENT OF TASMANIA.

CENTRAL BOARD OF HEALTH:

REPORT FOR THE YEAR 1894.

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

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CENTRAL BOARD OF HEALTH.

REPORT FOR THE YEAR 1894.

TO THE HONOURABLE THE CHIEF SECRETARY.

SIR,

WE have the honour to submit to you the following Report of the work of this Department in administering the Public Health Acts, the Vaccination Act, the Quarantine Act, and the Chinese Immigration Act, during the year 1894.

CENTRAL BOARD OF HEALTH.

1. There has been no change during the year with respect to either the members or the officers of the Board. But we regret to have to record that at the end of the year we had, in connection with the general retrenchment of the Civil Service, to lose the services of Mr. T. R. Atkinson, our clerk, who for six years has worked with us with much zeal and ability.

LEGISLATION.

Proposed amendments of Public Health Acts.

2. As no amendments of the Health Acts were made during the last Session of Parliament, we beg to repeat the recommendations and suggestions made in our Reports of the years 1892 and 1893. They relate to the empowering of Local Boards to make further by-laws with respect to the milk supply of their districts, and for the prevention of the spread of infectious diseases; the amendment of the Sections of the Acts relative to the notification of infectious diseases, and to the transport and exposure of the bodies of persons who have died of such diseases; to the control of sanitary work such as plumbing and drainage; to the inspection of the sanitary condition of houses before occupation; and to the amendment of the Section of the Act relative to the closing of polluted wells. Particulars relating to these recommendations and suggestions will be found in paragraphs 3 to 9 of our Report of 1892, and paragraphs 22 and 26 of that of 1893, so that we need not enlarge upon the matter here. Our experience every year strengthens our conviction of the necessity of making the amendments and new provisions we suggest.

Towns without proper Sanitary Administration.

3. We again would call attention to the undesirable condition of things at present in the towns of Wellington, a suburb of Hobart, and Invermay, a suburb of Launceston. In both these places there are large communities living without any sanitary administration having rating powers. In both efforts have been made by a part of the inhabitants to ameliorate the condition of things by establishing sanitary services and other useful work, but in both the efforts have failed from want of a proper authority to secure the acquiescence of the people whose properties were in most need of improvement. We have done what we could during the year, but the result has been that we are more convinced than ever that the only courses open are, either to establish Town Boards in these towns, or to give the Corporations of Hobart and Launceston, respectively, sanitary authority with rating powers over these suburbs.

HEALTH DEPARTMENTS OF OTHER COLONIES.

4. We have had the usual interchange of Reports with the Health Departments of the other Colonies. In October, in consequence of sensational reports in New Zealand papers, we were asked by the New Zealand authorities for the particulars of an epidemic said to have broken out at Avoca. The reports were doubtless based on the following facts, which we furnished in reply:—Fourteen cases of influenza of the ordinary type had occurred at Avoca during August and September. Two members of a family there on their recovery continued to work in the wet mines in

the ranges north of Avoca, and brought on pneumonia, and another member of the same family also took the disease. Within three weeks after her confinement, the mother, who had also had influenza, had to nurse the patients, and in turn developed pneumonia. There was no medical aid in the neighbourhood, and, as the patients grew worse and worse, they were taken on separate occasions in such vehicles as were locally procurable, thirty miles across the country, in bad weather, to Campbell Town Hospital, where they arrived in a condition that left no chance of life. They all four died there, and also a neighbour in a similar condition.

DEPARTMENTAL WORK.

Districts without Local Boards.

5. Owing to the unwillingness of properly qualified persons in the Health Districts of Invermay, Mersey, Russell, Rural Scottsdale, Straits Islands, and Tasman's Peninsula to act as Local Boards of Health, the Central Board is still obliged to act as Local Board in them under the provisions of the 6th Section of the Public Health Act of 1887. This condition of things is not satisfactory, notwithstanding that we have the services of excellent inspectors, as it is much better that persons in each locality should take the necessary interest in the health of the district to secure immediate action in case of necessity, and to see that preventive measures are properly carried out, than to have to regulate every detail from Hobart.

Special Inspections.

6. During the year our Inspector has made special examinations with relation to sanitary matters at Franklin, Hobart (three inspections), Invermay, Launceston, Mount Stuart, New Town, Queenborough, Rural Queenborough (two inspections), St. Leonard's, and South Franklin. But the greater part of his time is now necessarily occupied with office work.

Local Boards.

7. Two new Health districts have been proclaimed during the year—the Town of Beltana, and the District of South Franklin: and the boundaries of the Health Districts of Boobyalla, Derby, Franklin, Port Cygnet, and Ringarooma have been altered and redefined.

Public Buildings.

8. After due examination we have sanctioned the opening to the public of churches, halls, and other "Public Buildings" within the meaning of the 114th Section of the Public Health Act, 1888 at Campania, Evandale, Gresford, Hobart, Launceston, New Norfolk, New Town, Trevally Tunnack, and Ulverstone. In one instance at Hobart we refused to sanction the opening; and another case the matter is still pending.

THE PUBLIC HEALTH.

General Conditions.

9. The year 1894, with a slightly higher mean temperature than any of the preceding five years, and a considerably larger rainfall than in any of the preceding three years, was on the whole a healthy period. It is gratifying to note that coincidentally with the more systematic administration of the Health Acts there is a marked diminution in the death-rate. With the exception of a slight rise in 1891, caused by the influenza epidemic, there has been a steady progression in this diminution year by year during the last six years; the death-rates having been as follows for each thousand living:—

1889.	1890.	1891.	1892.	1893.	1894.
14.96	14.74	15.00	13.53	13.47	12.54

If the deaths from influenza in 1891 had equalled the yearly mean of the preceding decade, the death rate for that year would have been 14.40 instead of 15.00, and the downward line of the curve would have been continuous. The rate for 1894 is the lowest on record in the vital statistics of the Colony, which when read with the rate for 1889 means a saving of 377 lives in the year.

Notification of Disease.

10. The proportion between the number of infectious diseases notified and of deaths registered as caused by them, shows that the notification is much more complete than was hitherto the case. In a country like Tasmania, where a considerable part of the population lives at a distance from medical assistance, it is impossible to secure the notification of every case of infectious disease, were it for no other reason than that many cases occur the nature of which is not known or recognised. The number of notifications received and dealt with during the year was 1082. A summary of the notified cases of typhoid fever and diphtheria is given in Appendix A. to this Report, together with those of the five previous years. The temperature and rainfall—being the means of the observations taken at Hobart and Launceston—are also given as furnishing data for establishing relation and comparison. The table in Appendix B. shows the distribution of the notified cases of the above-mentioned diseases and scarlatina throughout the Island for the same six years; and we give plans showing the location of the notified cases in Hobart and Launceston.

Typhoid Fever.

11. Of this fever 260 cases were notified, with 33 deaths. Both these numbers are in excess of those of the previous year. The disease was, as usual, most prevalent in the earlier part of the year, 219 cases being notified in the first six months. It is noticeable that these six months were very dry in comparison with the rest of the year. The deaths registered were in the ratio of 12·7 per cent. to the notified cases. The disease was severest in Hobart, where 91 cases were notified, being at the rate of 3·65 in the thousand living. Eighty of the cases were notified in the first half year, 28 being in the month of February. During three months of the year no cases were notified in Hobart, and these months were very wet. Next came Longford with 15 cases, being at the rate of 2·75 in the thousand; and then Launceston with 47 cases, or 2·65 in the thousand. A considerable part of the population of the Municipality of Longford is resident in the towns of Longford and Perth, which are among the older settlements in the Colony, and where hardly any sewerage work has been done. The slops of generations have been thrown on the ground about the houses, which must inevitably be polluted thereby; and the natural result, often observed elsewhere, is repeating itself here, and will probably prove more and more fatal until the remedial work is undertaken.

Diphtheria.

12. There were 233 cases of diphtheria notified, with 46 deaths registered; both these numbers being less than those of 1893. The disease was prevalent all through the year, the notifications fluctuating between 12 and 29 in a month. The death-rate from it was 19·74 per cent. It was not so general as usual in Hobart and Launceston; but was more so in Bothwell, Hamilton, Kentishbury, and Penguin. It was in the district of Deloraine that it assumed the most serious proportions, 48 cases being thence notified, or 9·7 in the thousand. No doubt the rise in the death-rate of the district was due to it. Deloraine forms part of the North-Western Registration Division of Tasmania, and the death-rate of that division, excluding the Deloraine Registration District, was 8·44 in the thousand in 1894, while that of Deloraine was 10·82: that is to say, if the Deloraine district had been as healthy as the rest of the division only 41 persons would have died in it instead of 53. We commend these figures to the serious consideration of the Local Board of Health. The saving of twelve lives a year is worth a great deal of effort.

Scarlatina.

13. There were notified 33 cases of scarlatina, and one death from it was registered during the year. Eight of the cases occurred at Deloraine and seven at Launceston.

Measles.

14. The epidemic of measles which marked the preceding year continued during the first half of 1895, the disease being very prevalent in February. We received 547 notifications during the year, and fifteen deaths occurred. The disease was of a mild type, and many more cases occurred than were specially notified, as from country districts without a resident medical man, we received only general notifications, such as "that a great many people are suffering from measles."

Whooping-cough.

15. The notification of this disease is still very imperfectly carried out. But it was certainly less prevalent than in 1893, as only five deaths from it were registered, against 35 in that year.

Influenza.

16. This disease after greatly subsiding and almost disappearing, again became very prevalent in the spring months. Only three deaths were registered in the first seven months of the year, while 44 were registered in the remaining five, 16 of them being registered in October. The number of deaths, 47, was more than double that of the preceding year, when only 20 were registered.

Phthisis.

17. There were 130 deaths from phthisis registered during the year, as compared with 108 registered during the preceding year, and 108 in 1892. The increase was probably due to the increased humidity of the air during the latter part of the year. In Tasmania phthisis is an urban disease, and the greater part of the mortality from it occurs in the Hobart and Launceston Districts; and this is so apart from the cases treated in the General Hospitals. The greater mortality is most likely caused by the over-crowded state of many of the smaller houses in the cities. Of the 130 deaths 82 occurred in the two urban districts, which contain only a little more than one-third of the population of the Island, so that while the deaths from phthisis in 100,000 persons living were only 48 in the country districts, they were 155 in the Hobart district, and 119 in the Launceston district. As this disease, now classed among the micro-organic and preventable diseases, is thus concentrated chiefly in the two cities, the proper preventive measures can be all the more readily undertaken, and we recommend to the two Urban Local Boards that phthisis should be treated with precautionary and preventive measures corresponding to those used with respect to typhoid fever and diphtheria.

Cancer.

18. Cancer was not quite so prevalent in Hobart and Launceston during 1894 as during the preceding year. Though it may be difficult to specify any practicable preventive measures to be taken in connexion with this disease, there are certain evident precautions that should be carried out, and where necessary, the powers for so doing should be granted by legislative enactment. The necessity for this was shown during the year. The constable stationed at Bangor, in the Health district of Upper Piper, reported to the Local Board of Health that there were two cows suffering from cancer in the jaw roaming at large in the bush. The matter was referred to us by the Local Board, which asked for advice and instructions. On consulting the Chief Inspector of Stock, he informed us that there is no law in force enabling him to deal with the matter. We could therefore only advise the Local Board to discover the owner of the cows and get him to destroy the animals and burn the carcasses.

Lead-poisoning.

19. With reference to the effects produced by silver-lead mining, Dr. Borthwick, the Officer of Health of the Local Board of Health of Zeehan, writes in his yearly report:—"No case occurred in my practice during 1894, nor did I hear of any. It seems much rarer since local smelting was abandoned, and also since carbonate ore has ceased to be worked. Both were discontinued about the same time."

Antitoxin.

20. Our Secretary having called our attention to the stage at which the preparation of anti-toxin and its employment in the cure of diphtheria had arrived, you authorised our sending to Paris for a small supply of it. This supply had not arrived at the end of the year, but the delay that has occurred in the sending in of this report enables us to inform you that the antitoxic serum when it arrived, was found to have preserved its therapeutic energy. The small supply was divided between the General Hospitals at Hobart and Launceston. The House Surgeon of the Hobart Hospital has reported to us that it was administered in two cases, both very grave ones. In the first case the patient was a child who had been attacked with diphtheria ten days before being brought to the Hospital, and at its admission there was extensive diphtheritic membrane all over the throat, and the patient was in a very weak prostrate condition, and suffering from inflammation of the kidneys. A dose of the serum was injected under the skin at 12 o'clock at noon; at 9 o'clock the next morning the child had greatly improved in general condition; 18 hours after the membrane became detached, and the throat was clear. The child continued to improve in general condition until the eighth day, except with regard to the kidneys; but on that day their condition produced more serious symptoms, which ended in death from albumenuria on the 11th day. In the second case, the child was admitted to the Hospital in a serious condition owing to the extension of the disease down the windpipe. A dose of antitoxin was injected, and as no improvement had occurred at the end of 24 hours, the dose was repeated. Some hours after a large tubular cast of membrane was coughed up with immediate relief of the urgent symptoms, and the necessity for performing tracheotomy was obviated. The patient made a subsequent and uninterrupted recovery. At the Launceston Hospital no cases of diphtheria have been admitted since the receipt of the serum.

Treatment of Sewage by Electrolysis.

21. In connexion with sanitary matters we have interested ourselves during the past year in the researches that have been made with respect to the purification of sewage by electrolysed seawater, and with the experiments and practical trials that have been made in relation thereto, and among the latter are some by one of our members. We have collected information from various sources, and will continue to watch further developments. But up to the present time the process does not seem to have entered into the stage of being financially practicable on a large scale.

LOCAL ADMINISTRATION OF THE PUBLIC HEALTH ACTS.

Reports of Proceedings.

22. We regret that the following reports are not as complete as they should be owing to the failure of the Local Boards of Health of Beaconsfield, Fingal, Hamilton, Richmond, Sorell, and Westbury to furnish the returns asked for.

The Central and Local Boards of Health.

23. We have again to express our satisfaction with the manner in which many of the Local Boards of Health have co-operated with us in carrying out the sanitary measures we have had to recommend. No proceedings have had to be taken under the 15th and 16th Sections of the Act of 1885. Such complaints of neglect as have been made to us have been at once met by the Local Boards concerned, and the matters complained of remedied.

Officers of Health.

24. The Local Boards of George Town, Mount Stuart, Rural Scottsdale, St. Helen's, and Sorell appointed duly qualified medical practitioners as Officers of Health during the year, and the appointments were approved by us under the 17th Section of the Act of 1885.

By-Laws.

25. Under Sections 22-27 of the Act of 1885, the Local Board of Sorell made a number of By-laws, which were certified by the Solicitor-General, confirmed by us, and duly gazetted, and presented to Parliament. Of the 65 Cities, Towns, and Districts that have Local Boards, 44 have now By-laws under the Public Health Acts, and 21 have none. As the Health Acts cannot be properly administered without such By-laws, we strongly urge all Local Boards without them to proceed forthwith to take the proper steps to make and publish them. A great deal of the most effective work recorded in the succeeding paragraphs of this Report was done under the provisions of local By-laws, and such work cannot be done without them.

Milk, Bread, and Meat Supply.

26. There are now 525 dairies registered, exclusive of those in the Health Districts above mentioned as not having sent in returns. These include those in the two cities, and in most of the larger towns. We have also returns of 416 not registered—principally in the districts of Local Boards not having By-laws. Bakeries are not generally registered as they should be, as our returns only show 25 registered and 38 unregistered, these figures being evidently quite unreliable. There are 138 butcheries returned as registered, and 111 as not registered. One of the chief values of registration is that it ought to insure regular inspection. During the past year 1272 inspections were made of registered places, and in only four cases was it necessary to enforce the orders made resulting from such inspection by legal proceedings.

Food adulteration ; unwholesome Food.

27. To prevent adulteration and secure the supply of wholesome food there were analyses made of 25 samples of milk, 3 of cheese, 6 of jam, and 9 of water. The milk samples were all taken at Launceston. The cheese was analysed in connexion with an inquiry we instituted into the causation of several cases of apparent poisoning occurring in different parts of the country. Two cases occurred in 1892 of people being taken with violent sickness after eating cheese, and the cheese in both cases was examined by the Government Analyst without finding ordinary poisons or tyrotoxin, a special animal poison (ptomaine) developed by decomposition under certain conditions. On a third case being referred to the Government Analyst in March, 1894, a similarly negative result followed analysis. He advised that the matter should be made a subject of inquiry by the Central Board, and this was accordingly done. Notwithstanding that the merchants selling the cheese refused to give up the name of the makers, the cheese was traced to the dairy in which it was made, and we obtained from the makers, through the Local Board of the District, replies to the inquiries made by the Analyst as to the health of the cows supplying the milk; and whether 'beastings' were used; full details of the mode of cheese-making; age, condition, and mode of preparation of the rennet, and the nature of the colouring matter and preservative used; condition of the dairy and cheese store as regards cleanliness, dampness, ventilation, &c.: to all these questions satisfactory answers were returned, and nothing elicited to show any cause for the effects that had followed the eating of the cheese.

On the 21st of May, 1894, the Chairman of the Local Board of Health of St. Helen's reported that three families in his district had been "taken very ill after partaking of the cheese" bought from a local merchant. "The illness came on shortly after eating the cheese, and took the form of severe vomiting and pain in the stomach." He forwarded a sample of the cheese, in reference to the maker of which he says—"This maker has made a name for the excellent quality of his cheese during the past ten years; and from my own knowledge the general sanitary condition and cleanliness of his dairy would compare with anything in the District." He adds that he and the Inspector partook of this particular cheese without feeling any ill effects.

The Government Analyst reported—"The cheese forwarded to you by the Chairman of the St. Helen's Board of Health has been examined for poisons, organic and mineral, with, I regret to say, purely negative results. In this, as in three previous cases, tyrotoxin seemed to be indicated by the symptoms, but the condition of the cheese differed from that of cheese known to contain this peculiar product of decomposition, as it did not 'yield an acid fluid when cut' nor 'give an acid-aqueous extract'; also it was freely eaten by mice, apparently without inconvenience, although 'dogs and cats (Dr. Vaughan says) refused to eat cheese containing tyrotoxin.' I have so far tasted sufficient quantities of extracts and residues without ill effect."

Cheese is so useful an article of diet, and so important a product of dairy farming, that every occurrence is to be regretted that tends to cast suspicion on its wholesomeness, and it is rather disheartening to find that in the above cases great care and cleanliness in the processes of making it have not prevented the eating of it to be followed by the symptoms described. Any cheese, swallowed in large lumps without mastication, may produce symptoms of poisoning such as those described in the following extract from a letter sent to the Board by the Secretary of the Local Board of Fingal:—"My brother-in-law has two children aged about 9 and 7 years. Some time since these children before breakfast one morning, I suppose being hungry, partook of a considerable quantity of cheese, and very shortly were so ill that Dr. Allnutt, of Richmond, was sent for. One of them he had great difficulty in saving. When asked if he thought the cheese unsound, he answered, certainly not; sound cheese under certain circumstances will produce

symptoms of poisoning." But in the cases above mentioned the circumstances all point to a different conclusion. The illness caused simultaneously in the members of several families cannot with any show of likelihood be attributed to the same cause as that of the children seen by Dr. Allnutt, but, as the Government Analyst remarks, "tyrotoxin seemed to be indicated by the symptoms." This ptomaine is found in milk products which have undergone a peculiar fermentation. The whole subject of its origination, nature, and action seems to be very obscure still; the only practical suggestions that can be given to cheese-makers are to exercise the greatest care and cleanliness in the manufacture and in especial to see that all mouldy curd is rigorously excluded: and to cheese-eaters, to avoid partaking of cheese that exudes acid watery matter and that readily becomes mouldy.

Infant Life Protection.

28. So far as we are aware there are in Tasmania no houses for the reception of infants for nursing within the meaning of the Infant Life Protection Clauses of the Act of 1885. For some years we have shewn on our map of the distribution of zymotic diseases in Hobart, the locality of the death of every infant under one year of age, so far as we have been able to ascertain it, and where the occurrence of an undue number of deaths is shewn, we have made inspections. But we find it impossible to shew the locality of many deaths of illegitimate infants, most of whom are born in places only temporarily occupied as lodgings by the mothers. The death-rate of infants is higher in Launceston than in Hobart, the rates for 1894 being respectively 3·80 and 3·19 in the 1000 of the population.

Prevention of Spread of Infectious Diseases.

29. No special notice was received during the year from any Local Board of the existence of disease in epidemic form in its District. We had 414 reports of inspections of houses in which infectious disease had occurred, and 81 notices were given in consequence for special sanitary work to be done. There were 233 houses disinfected after the occurrence of such disease. Special supplies of disinfectants were sent to the Local Boards of Beaconsfield, Burnie, Campbell Town, Green Ponds, Hamilton, Kingston, Longford, New Town, Penguin, Queenborough, Ross, Sorell, and Wynyard. Twelve schools were closed on account of the prevalence of infectious disease among the scholars or teachers. The infected contents of five houses at Launceston were destroyed, and four public conveyances were disinfected after conveyance of patients.

Offensive Trades.

30. There are 32 offensive trade establishments registered in the various Health Districts, and only one is returned as unregistered. The establishments are periodically inspected, and no proceedings have been necessary relative thereto except at Burnie, where a manure depôt was established without the sanction of the Board. As the Local Board had no rating powers, and no funds wherewith to meet legal expenses, the case has been taken up at our request by the Crown Law Department.

Abatement of General Nuisances.

31. In the various Districts 733 notices were given to abate nuisances, and in only three cases was it found necessary to enforce the notices by legal proceedings. Our experience in this respect tallies with that of all sanitary authorities, that with regular inspection there is but little necessity for legal compulsion in order to secure the abatement of nuisances. Regular periodical inspection is carried out at Devonport, Hobart, Launceston, Queenborough, and Longford, with results proportionate to the efficiency of the inspection. We urgently recommend to all Local Boards the adoption of a thorough system of periodical inspection.

House Sanitation.

32. With respect to house sanitation, the work of the year has comprised the drainage of 228 houses, the repair or reconstruction of 373 closets and privies, and the paving or repair of 61 back-yards. Fourteen houses were declared unfit for human habitation, of which 12 were closed and two repaired to the satisfaction of the Local Board. One polluted well was closed. The length of public sewers constructed was 5170 yards, of which 4288 yards were laid in Launceston.

Miscellaneous Sanitary Work.

33. Under the New Streets and Buildings clauses of the Public Health Act, 1889, there were 41 cases dealt with; and three cemeteries have been closed under the Burial Ground clauses of the same Act.

Results of Sanitary Work.

34. The above record, incomplete as the default in reporting of some of the Local Boards has made it, shows that over 5000 proceedings took place during the year under the provisions of the Public Health Acts for the purpose of conserving the health of the colony. As we have already pointed out, the work thus steadily done year after year is bearing good fruit in the increased value of life shown by the decreasing death-rate. We claim to have done good service with the very inadequate means placed at our disposal. In speaking of the results of our sanitary administration we must not omit calling attention to that of one of the principal of our Local Boards, that of

Launceston. The record of the result of its sanitary work is quite unique in Tasmania, and, we believe, in the Australian colonies, so far as preventible diseases are concerned. The numbers of such diseases notified during the last six years show constant and uninterrupted diminution. They are as follows :—

1889.	1890.	1891.	1892.	1893.	1894.
381	146	108	85	72	64

The credit of this is almost entirely due to the unremitting zeal and determination of Mr. Bushman, the Sanitary Officer of the City. We are therefore very sorry to notice that, on the plea of economy, there has been an attempt made to get his services dispensed with. The success of such an attempt would be a public misfortune to Launceston.

LICENSING ACT, 1889.

35. We have received returns of 322 certificates granted to Inns and Public-houses under the provisions of the 42nd Section of the Licensing Act, which requires the production to the Licensing Bench of a certificate from the Local Board of Health of the district that it is satisfied with the sanitary condition and accommodation of the house. The granting of these certificates insures that all such houses get a thorough inspection at least once a year.

VACCINATION ACT.

36. As you are aware, the Vaccination Act is virtually in abeyance under a promise made in Parliament that it shall not be enforced until Parliament has had an opportunity of considering the Report of a Royal Commission that has been holding an enquiry into the subject of vaccination in England. We understand that the Report has now been made, but we have not yet received a copy of it. The result of the non-enforcement of the Act has been that only 19 children and adults were vaccinated during 1894. We have consequently greatly reduced our supply of calf-lymph.

QUARANTINE ACT.

37. The usual precautions were taken in connexion with occasional cases of smallpox introduced into the Australian Colonies from over sea. The presence on board the R.M.S. *Massilia* of a patient suffering from that disease who was refused permission to be landed for quarantine purposes at Albany again raised the question of the necessity to provide federal quarantine stations at the "first ports of call" of the Colonies, where cases like that of the *Massilia* patient might be received and treated at the joint expense of all the Colonies. When such federal quarantine stations are established, Hobart should certainly be classed as a "first port of call."

CHINESE IMMIGRATION ACT.

38. During the year 57 Chinese immigrants landed in the Colony, 23 at Hobart and 34 at Launceston. They were all examined by the Health Officers and found to be in good health, and to have been comparatively recently vaccinated. All the Chinese landing in Tasmania pass through other Australian ports, where they are transhipped; but, as it is probable that much of their baggage is never examined during transshipment, nor from the time of its leaving Hong Kong or some Chinese port, we have thought it necessary to have some provision made at Hobart and Launceston for its examination, and if necessary, its disinfection, during the prevalence of plague or other communicable diseases in China. We shall therefore be prepared, when occasion arises, to get the necessary authority to carry out our plan of providing examination and disinfection chambers at the two ports.

39. In conclusion, we have to record our thanks to the officers of other Departments of the Government, especially to those connected with the Law Department, and the officers of the Commissioner of Police, Registrar-General, and Analyst, for much valuable assistance.

We have the honor to be,
Sir,

Your obedient Servants,

P. O. FYSH, *President.*

C. E. BARNARD, *M.D.*

THOS. BENNISON,

CHARLES HARBOTTLE,

WILLIAM PERKINS,

J. WEMYSS SYME,

HENRY L. A. TOTTENHAM.

Major-General, Rd.

A. MAULT, *Secretary.*

Hobart, 12th June, 1895.

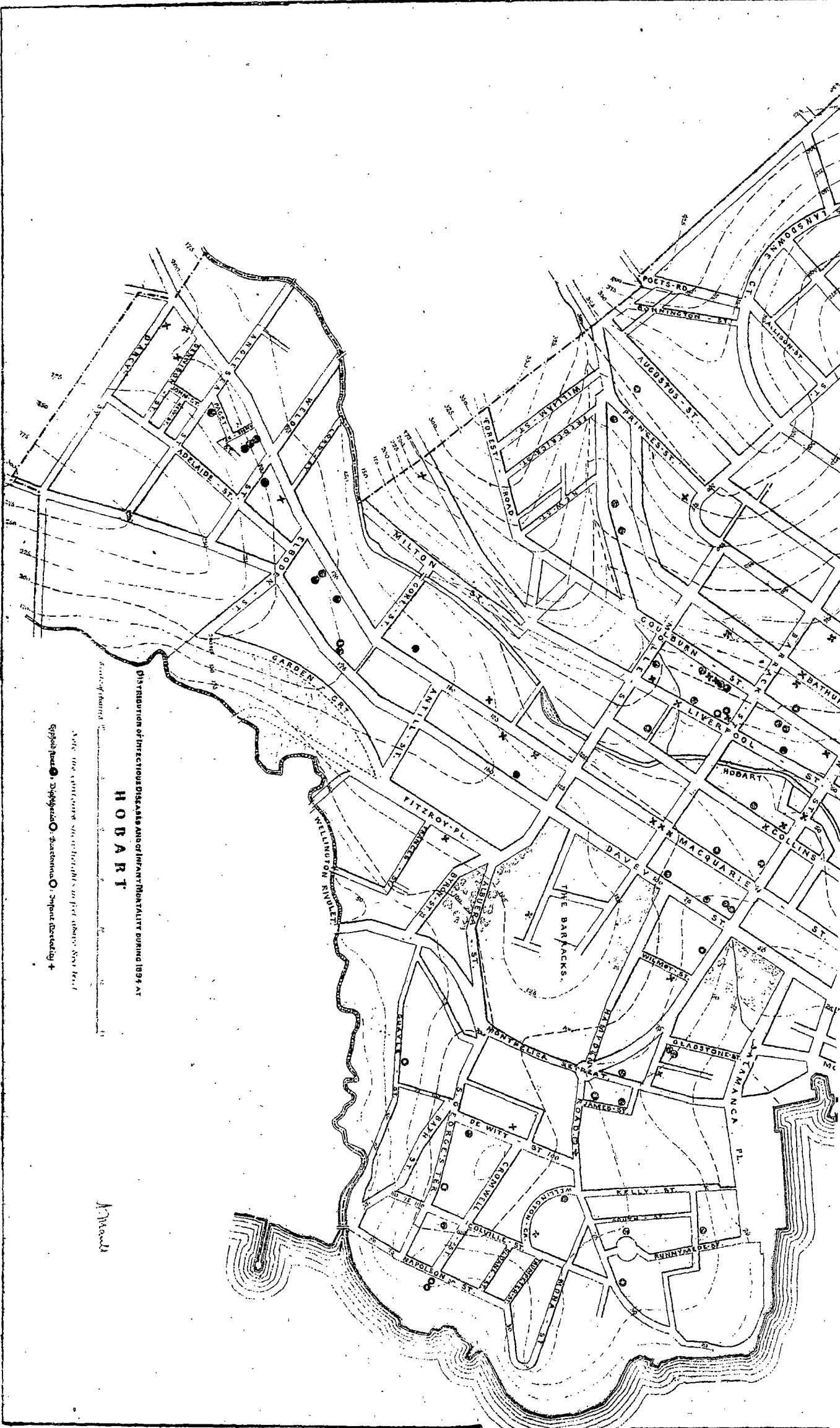
APPENDIX A.

MONTHS.	TEMPERATURE.						RAINFALL.						TYPHOID FEVER.					
													Cases.					
	1889.	1890.	1891.	1892.	1893.	1894.	1889.	1890.	1891.	1892.	1893.	1894.	1889.	1890.	1891.	1892.	1893.	1894.
	F.°	F.°	F.°	F.°	F.°	F.°	In.	In.	In.	In.	In.	In.						
January	65.6	66.8	62.1	60.9	63.37	65.75	0.13	0.96	2.85	2.01	4.59	1.96	119	46	22	14	23	39
February	65.2	67.3	62.5	63.6	64.99	64.75	1.15	2.51	0.49	0.47	0.14	0.61	136	60	48	20	28	58
March	61.4	62.2	65.0	62.8	61.65	62.90	0.75	2.89	0.60	2.51	1.27	1.82	171	73	65	73	39	48
April	58.1	56.2	55.7	55.1	57.52	59.10	2.51	1.96	0.11	1.10	1.42	2.24	156	34	50	60	29	36
May	52.5	51.6	52.4	48.4	50.94	51.00	1.74	1.02	2.73	2.90	2.75	2.23	144	32	37	20	16	28
June	48.9	50.4	48.5	47.0	47.12	50.30	7.00	5.83	0.96	3.00	2.39	2.16	61	12	42	29	11	18
July	46.5	44.5	47.2	45.5	46.98	45.75	1.48	3.47	2.68	2.50	3.89	4.27	34	21	61	13	6	6
August	48.3	47.7	50.2	47.8	50.05	47.85	2.35	3.45	1.55	1.38	2.79	3.48	23	6	42	4	6	9
September	50.6	51.9	52.8	50.1	53.02	51.20	2.34	2.33	1.40	1.31	2.47	2.95	26	8	35	4	3	2
October	56.1	52.6	56.2	52.4	57.85	59.00	3.49	3.33	3.93	1.25	1.14	2.70	22	10	19	5	7	2
November	59.2	57.1	58.2	60.0	58.58	59.10	3.73	1.75	1.53	1.59	1.77	1.71	17	15	13	2	12	4
December	61.1	58.9	60.4	59.0	63.50	64.00	2.60	1.21	4.99	1.65	1.13	3.05	16	19	12	12	10	18
Whole year	56.1	55.6	55.9	54.4	56.30	56.72	29.27	30.71	23.82	21.67	25.75	29.18	925	336	446	256	190	266

MONTHS.	TYPHOID FEVER.						DIPHTHERIA.											
	Deaths.						Cases.						Deaths.					
	1889.	1890.	1891.	1892.	1893.	1894.	1889.	1890.	1891.	1892.	1893.	1894.	1889.	1890.	1891.	1892.	1893.	1894.
January	5	5	4	5	3	3	9	31	2	6	11	14	1	6	0	2	7	2
February	18	6	9	4	2	4	4	25	13	11	43	12	2	8	1	3	8	4
March	21	9	6	10	2	9	14	13	2	33	19	19	0	6	1	9	5	3
April	19	5	6	6	4	6	9	12	10	16	44	29	2	1	1	9	5	3
May	13	5	8	5	3	3	17	16	5	20	29	18	8	7	5	10	2	3
June	9	3	8	2	3	2	18	16	9	38	15	19	3	2	3	12	3	3
July	5	6	10	3	1	2	12	8	14	32	22	20	4	0	0	7	5	5
August	8	1	11	1	3	2	27	14	4	21	39	22	5	3	2	4	2	7
September	4	3	7	1	0	—	21	11	7	14	21	15	7	7	3	1	2	8
October	5	0	4	3	2	—	15	29	5	9	22	24	5	2	1	5	3	3
November	0	3	4	2	1	—	21	18	6	5	42	27	1	3	0	3	5	3
December	6	3	4	2	1	2	23	9	2	14	13	14	5	4	2	2	3	2
Whole year	113	49	81	44	25	33	190	202	79	219	320	233	43	49	19	67	50	46

APPENDIX B.

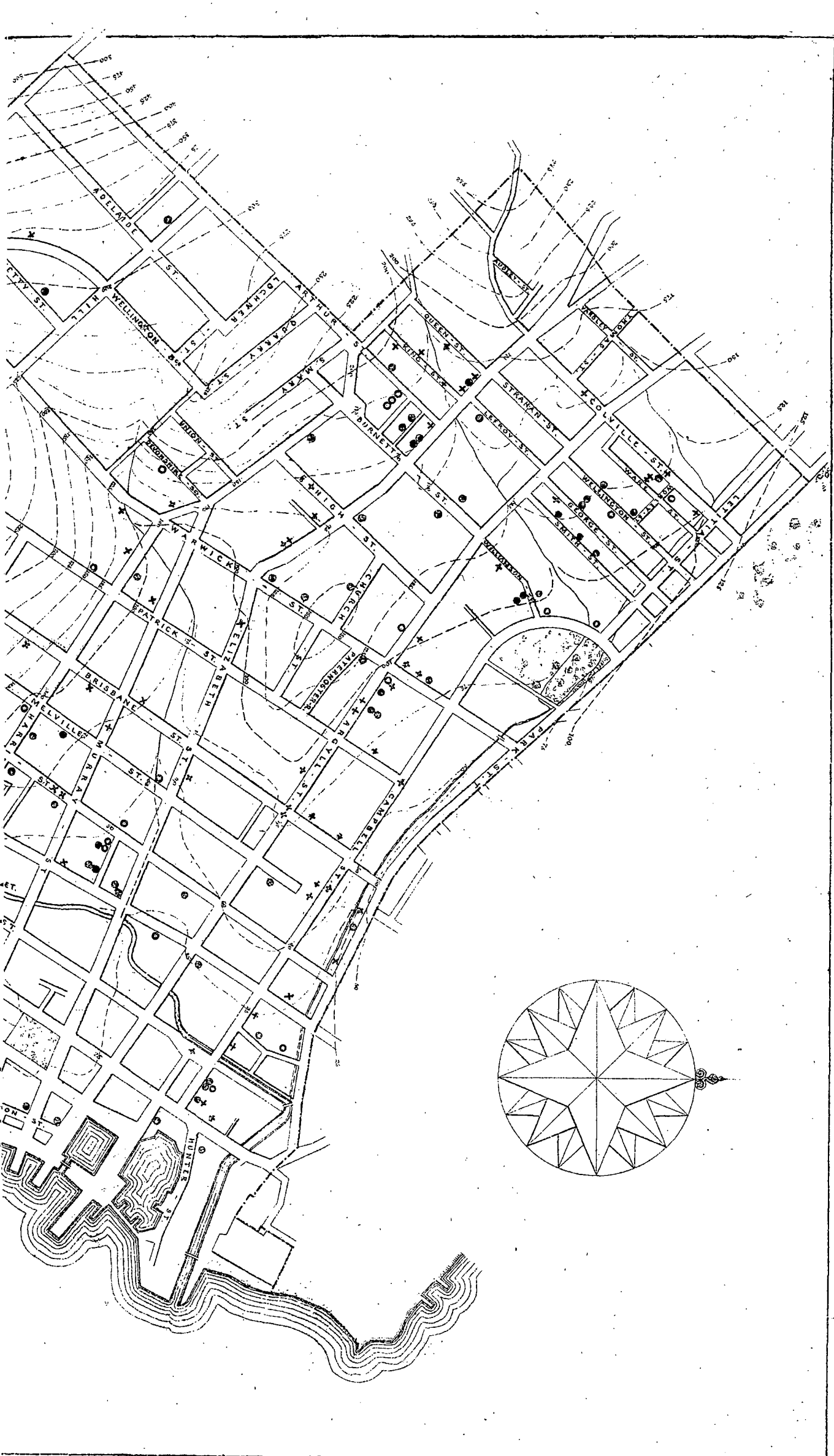
In the District of the Local Board of	Typhoid Fever.					Diphtheria.					Scarlet Fever.					TOTAL.						
	1889	1890	1891	1892	1893	1889	1890	1891	1892	1893	1889	1890	1891	1892	1893	1889	1890	1891	1892	1893		
Beaconsfield.....	46	3	4	4	...	1	31	48	5	3	2	5	4	...	...	...	81	51	9	7	2	6
Bellerive.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	5	6	1	1	...	...
Boobyalla.....	3	...	1	1	...	...	2	6	...	...	...	...	...	...	...	...	...	5	4	1	1	13
Bothwell.....	...	5	4	1	1	...	...	...	...	...	...	13	...	...	...	...	...	5	4	1	1	1
Brighton.....	6	5	1	3	1	1	...	...	...	2	1	...	...	...	2	...	6	5	1	7	2	1
Burnie.....	...	6	1	1	...	...	...	1	1	...	...	...	...	...	...	...	7	2	1	...	...	8
Campbell Town.....	11	4	4	...	...	3	...	29	...	...	1	2	...	...	...	3	11	33	4	...	1	8
Carnarvon.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	4
Clarence.....	1	...	8	...	...	4	...	...	6	9	...	...	...	...	...	...	1	8	6	9	9	4
Deloraine.....	11	10	6	1	5	6	8	3	11	12	18	48	1	1	58	6	6	8	20	14	75	19
Derby.....	17	3	1	9	3	...	...	3	1	1	...	...	...	...	3	...	17	6	2	13	3	...
Devonport.....	...	5	1	...	...	...	...	12	1	...	11	3	...	...	...	...	5	13	1	...	11	3
Dundas.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Evandale.....	7	2	...	1	...	1	...	...	1	...	2	1	...	...	...	3	7	2	1	1	2	5
Fingal.....	6	...	1	...	1	...	...	8	3	...	3	8	3	...	...	...	9	8	4	...	3	9
Franklin.....	1	1	11	2	1	1	19	1	9	4	43	8	...	...	...	3	20	2	20	6	44	12
George Town.....	1	1	2	...	1	...	6	...	...	19	3	4	...	...	...	...	15	1	1	19	3	7
Glamorgan.....	...	1	1	...	...	3	15	...	...	19	3	4	...	...	...	...	1	3	6	1	3	1
Glebe Town.....	1	3	6	...	1	...	...	...	1	2	1	...	...	...	...	...	1	3	6	1	3	1
Glenorchy.....	33	2	6	3	6	...	3	2	2	4	7	1	...	...	...	37	4	6	5	10	7	2
Gordon.....	4	...	3	...	...	2	1	...	...	2	1	5	...	...	...	11	1	3	...	2	...	...
Gould's Country.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1
Green Ponds.....	...	...	1	...	...	1	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1
Hamilton.....	3	2	...	3	5	4	...	1	1	1	...	12	2	...	...	...	5	3	1	4	5	16
Hamilton-on-Forth and Don.....	...	...	...	...	...	5	...	6	1	...	1	...	...	...	...	6	...	...	7	1	...	...
Hobart.....	184	86	197	78	62	95	12	6	5	82	49	36	16	1	2	7	4	2	212	93	204	167
Invermay.....	23	7	5	6	6	11	5	10	1	2	5	8	...	1	...	7	1	...	28	18	6	15
Kentishbury.....	...	...	...	...	...	3	5	...	3	10	...	...	...	1	...	...	...	3	5	1	3	10
Kingston.....	1	...	1	...	1	2	3	6	...	3	1	...	...	...	...	4	6	1	...	4	3	3
Latrobe.....	1	1	...	...	...	...	...	...	...	14	7	...	...	...	...	1	1	...	...	1	14	7
Launceston.....	291	105	87	54	44	47	43	33	18	12	21	10	47	8	3	19	7	381	146	108	85	
Lefroy.....	5	...	1	5	2	...	2	...	...	...	...	...	...	...	...	...	5	2	1	5	2	...
Leven.....	2	...	...	1	...	4	...	...	...	...	...	...	...	...	...	6	...	...	...	1	...	...
Longford.....	94	2	18	12	13	15	4	1	2	...	7	1	8	11	28	8	1	106	14	48	20	
Macquarie.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Mersey.....	1	...	...	...	...	3	...	...	...	1	...	...	...	...	...	...	...	...	...	2	1	3
Mount Stuart.....	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
New Norfolk.....	8	11	3	6	11	7	1	...	...	...	1	...	...	...	...	9	11	3	6	11	8	8
New Town.....	14	5	6	8	2	4	4	...	...	3	...	5	...	...	1	1	18	5	6	11	3	9
New Town, Rural.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Oatlands.....	1	4	5	1	1	1	...	1	...	...	...	12	1	...	2	4	...	1	5	7	5	1
Penguin.....	2	...	...	2	...	2	...	...	...	...	...	...	...	...	...	...	3	...	...	...	...	14
Port Cygnet.....	...	...	2	...	...	1	5	...	4	...	...	...	8	4	...	...	1	13	4	6	...	...
Queenborough.....	21	5	3	9	2	4	...	1	...	4	...	3	1	...	...	2	...	22	6	3	13	4
Queenborough, Rural.....	...	...	...	...	5	...	...	...	...	1	1	...	...	...	...	...	...	...	...	...	1	6
Richmond.....	6	2	2	1	...	3	1	...	1	1	1	...	...	...	...	...	7	2	3	2	1	3
Ringarooma.....	2	...	...	1	...	7	...	...	...	4	...	...	...	...	...	...	2	7	...	...	5	...
Ross.....	1	1	...	2	...	3	...	...	5	...	1	...	...	...	...	...	1	1	...	7	...	4
Russell.....	2	4	...	...	1	1	...	...	1	...	1	1	...	...	...	...	2	4	1	...	2	2
St. Helen's.....	26	14	5	13	3	8	...	...	...	...	...	...	...	...	...	...	26	14	5	13	3	8
St. Leonard's.....	48	9	3	15	2	9	12	3	...	12	3	...	2	...	...	3	...	62	12	3	30	5
Scottsdale.....	...	...	3	...	...	...	...	...	13	...	5	...	...	...	...	1	1	...	...	17	1	5
Scottsdale, Rural.....	2	3	1	1	...	...	...	...	22	...	4	...	...	...	4	2	...	3	1	27	7	...
Sheffield.....	3	...	1	...	...	...	...	...	...	...	4	...	...	...	...	...	3	...	1	...	4	...
Sorell.....	2	2	4	1	2	3	1	...	...	...	41	3	...	...	3	...	3	2	4	1	46	6
South Franklin.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Spring Bay.....	4	1	1	...	...	...	...	...	1	...	1	...	...	...	...	...	4	1	3	2	...	1
Strahan.....	...	4	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	4	1	...	...	...
Straits Islands.....	1	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Tasman's Peninsula.....	1	...	2	...	...	...	...	...	...	...	3	...	2	...	...	...	1	...	4	...	3	...
Trevallyn.....	1	3	1	...	...	...	...	...	...	13	1	...	...	...	2	...	5	3	...	3	...	...
Ulverstone.....	1	3	1	...	...	1	3	...	...	...	13	1	...	...	8	...	4	3	1	8	13	3
Upper Piper.....	4	1	1	...	2	5	5	1	2	1	...	1	...	...	...	1	9	2	3	1	3	6
Waratah.....	...	1	2	...	1	...	4	...	...	...	1	...	...	...	...	...	4	1	2	...	2	...
Weldborough.....	2	1	1	1	...	...	...	...	...	...	...	...	...	...	...	...	2	1	1	1	...	...
Westbury.....	14	3	4	1	2	5	4	8	...	...	37	4	13	1	1	7	...	31	12	5	8	
West Tamar.....	1	3	2	1	2	...	1	...	...	1	...	...	...	...	...	...	2	3	2	1	3	...
Wynyard.....	...	11	1	2	1	...	...	1	...	...	7	...	...	...	...	...	...	11	2	2	1	7
Zeehan.....	...	...	15	1	4	6	...	...	...	...	1	1	...	...	...	...	3	...	15	1	5	10
TOTALS.....	925	341	432	256	190	266	195	208	69	219	320	233	107	31	100	83	28	33	1227	580	605	558



DISTRIBUTION OF INFECTIOUS DISEASES AND OF INFANT MORTALITY DURING 1897 AT
HOBART

NOTE THE CONTOUR SURFACE OF THE TOWN AND NEAR IT
 Epidemic Fever ● Typhoid ● Scarlatina ○ Infant Mortality +

1898



Sketch Plan of LAUNCESTON

LOCATION IN 1894 of TYPHOID-FEVER (●) DIPHTHERIA (○) SCARLATINA (⊙)

Scale of 0 10 20 30 40 Chains

The contours are approximate heights in feet above mean high water level.

