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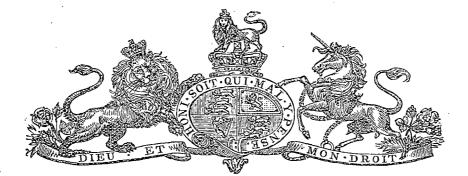
1891.

PARLIAMENT OF TASMANIA.

CENTRAL BOARD OF HEALTH:

REPORT FOR THE YEAR 1890.

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



CENTRAL BOARD OF HEALTH.

REPORT FOR THE YEAR 1890.

TO THE HONOURABLE THE CHIEF SECRETARY.

Sir,

WE have the honour to submit to you the following Report upon the administration of the Public Health Acts, the Vaccination Act, the Quarantine Act, and the Chinese Immigration Act, during the year 1890.

CENTRAL BOARD.

1. During the year Mr. Benson, having to leave the Colony, had to resign his seat at the Board. We wish to take this opportunity of publicly recording our appreciation of the able and independent manner in which he discharged his duty as our colleague. After his resignation the legal number of members of the Board was completed by the appointment by the Governor in Council of P. Barrett, Esq., M.H.A., and the Rev. J. Oberlin-Harris, M.A., to seats thereat. There have been no changes in the *personnel* of the administrative offices.

THE PUBLIC HEALTH ACTS.

2. During the Parliamentary Session of 1890 no legislation took place with reference to the statutes relating to the public health. Parliamentary action in regard to certain matters under our administration will be noticed hereinafter.

Noxious Frade Areas.

3. To carry out the provisions of the Public Health Act, 1889, relating to Noxious Trade Areas, our Engineering Inspector, acting in concert with the Local Board of Health of the City of Launceston, selected a site for such an area at a convenient distance from that city, and with good railway and road communications. The necessary surveys were made, and the arrangements for the acquisition of the land, the laying on of water from the Launceston Waterworks, and the proper drainage of the works to be erected, were in progress, when, in consequence of four petitions presented to Parliament from neighbouring owners and occupiers, it was deemed advisable to suspend action in order to give the Launceston authorities time for further consideration, and, if possible, a more eligible selection. The matter was accordingly relegated to the Local Board of Health of that city, who have as yet come to no decision upon it. Considerable difficulties naturally attend upon the selection of a good site for such an area. It should combine easy means of access, an ample water supply, good facilities for drainage, and a position which, while being sufficiently removed from thickly inhabited districts, should not be so far off as to cause a considerable displacement of population. All these points were fairly well secured by the selection made. The opposition made to its adoption was very natural—so natural as to make it evident that similar opposition will be raised against the adoption of any site that may be chosen that combines the same advantages.

Sanitary Condition of Inns and Public-houses.

4. The provisions of the 42nd Section of the Licensing Act of 1889 first came into operation during the year, and we are glad to find that the obligation placed upon the landlords of all publichouses to obtain certificates from the Local Boards of Health of their districts as to the sanitary condition and accommodation of their premises has resulted in much good. To insure, as far as possible, uniformity of action in the matter on the part of all the Local Boards of Health, and to secure proper inspection, we prepared and issued forms of certificates, and, we believe, they were universally adopted and used. The members of some of the Local Boards accompanied their officers while making the necessary inspections,—a course of action we should recommend in all cases where it is practicable. Some Local Boards also asked for special advice and help in the matter, and in such cases we authorised our Inspector to visit the localities.

Metropolitan Drainage.

5. At the beginning of the year conferences with the Municipal Council of the City of Hobart and the other local authorities having jurisdiction over the metropolitan area were held for the purpose of concerting the action to be taken in order to secure the preparation and carrying out of a general system of sewerage for the whole district draining into New Town Bay, Cornelian Bay, Sullivan's Cove, and Sandy Bay. As the result of these conferences a Bill was introduced into Parliament for defining a Metropolitan Drainage Area, and for constituting a Board having, for the meantime, only powers to have a survey made and a system of sewerage prepared. The questions of the suitability of such system, and the desirability of, and provision of means for, carrying it out were to be left for the future decision of Parliament. We greatly regret that on account of the manner in which this modest measure was received by the House of Assembly the Bill was withdrawn, and thus a year lost in regard to a matter of very great urgency. We strongly recommend the re-introduction of the Bill in the next Session of Parliament.

Loans for Local Public Works.

6. In the Session of 1890 an Act was passed for authorizing and regulating the granting of loans for local public works. Under this Act the Governor in Council may grant loans for works, such as waterworks, of the nature likely to be undertaken by Local Boards of Health, under the sanction of Parliament. The plans and estimates for the works are to be approved by the Engineer-in-Chief. The loans will be granted subject to the payment of interest at five per centum per annum, of which one per cent. is to form a sinking fund, and the interest is to be paid until the Auditor-General certifies that the sinking fund has liquidated the loan. Up to the present time no applications have been made by Local Boards of Health for loans under this Act.

INFECTIOUS DISEASES.

Notification.

7. We have again to notice with regret the manifest incompleteness of the returns sent to us under the provisions of the 10th Section of the Act of 1887. A great deal of the incompleteness is certainly due to the fact of the occurrence of disease in places where it is impossible to procure medical attendance, but much of the defaulting takes place in large towns, and we again appeal to the members of the medical profession to help us in our efforts to cope with preventible diseases by giving notice of every case coming under their observation.

Typhoid Fever.

8. The following Table shows the number of cases of typhoid fever notified to the Board during each month of the year, as compared with those of the two preceding years, and the deaths registered as taken from the monthly returns of the Registrar-General, and also the temperature and rainfall :---

Months.	TEMPERATURE.		RAINFALL.			CASES.			DEATHS.			
	1890.	1889.	1888.	1890.	1889.	1888.	1890.	1889.	1888.	1890.	1889.	1888.
January February March April May June July August September October November December TOTAL	$\begin{array}{c} 67 \cdot 3 \\ 62 \cdot 2 \\ 56 \cdot 2 \\ 51 \cdot 6 \\ 50 \cdot 4 \\ 44 \cdot 5 \\ 47 \cdot 7 \\ 51 \cdot 9 \\ 52 \cdot 6 \\ 57 \cdot 1 \\ 58 \cdot 9 \end{array}$	F.º 65.6 65.2 61.4 58.1 52.5 48.9 46.5 48.3 50.6 56.1 59.2 61.1 56.1	$\begin{array}{c} F. \circ \\ 65 \cdot 2 \\ 63 \cdot 9 \\ 58 \cdot 6 \\ 55 \cdot 7 \\ 50 \cdot 8 \\ 48 \cdot 6 \\ 45 \cdot 1 \\ 47 \cdot 6 \\ 52 \cdot 2 \\ 54 \cdot 3 \\ 59 \cdot 7 \\ 64 \cdot 9 \\ 55 \cdot 6 \end{array}$	Inches. 0 · 96 2 · 51 2 · 89 1 · 96 1 · 02 5 · 83 3 · 47 3 · 45 2 · 33 3 · 33 1 · 75 1 · 21 30 · 71	Inches. 0·13 1·15 0·75 2·51 1·74 7·00 1·48 2·35 2·34 3·49 3·73 2·60 29·27	Inches. 1·23 0·14 0·58 1·19 1·59 3·55 2·27 2·02 2·81 1·08 1·76 1·38 19·60	46 60 73 34 32 12 21 6 8 10 15 19 336	119 136 171 156 144 61 34 23 26 22 17 16	61 112 85 60 57 33 29 21 13 14 14 48 547	5 6 9 5 5 3 6 1 3 0 3 3 49	5 18 21 19 13 9 5 8 4 5 0 6	12 14 14 12 10 5 3 1 5 1 2 5 84

The average yearly number of deaths for the ten years ending 1890 was 61.80, so that the mortality from this kind of fever during last year shows a very satisfactory decrease—and especially so when compared with the death-rate from it in 1889, when the numbers were 113, and in 1888, when they were 84.

9. The temperatures and amounts of rainfall given in the above table are the means of those occurring in Hobart and Launceston. The influence of climatological conditions upon the prevalence of the fever is not so marked as last year. There can be but little doubt but that the influence of these conditions is exercised not in the way of production of whatever may be the cause of the disease, but rather in the way of activating such cause, and in affecting the receptivity of subjects. Climatic conditions are beyond control, but universal experience shows that the cause of typhoid fever is not. As Dr. Hirsch says—

"There are few points in the etiology of typhoid on which there is so much agreement in the opinions of observers as on the influence exerted by these nuisances on the development of epidemics or endemics of typhoid, or on the occurrence of isolated cases ; although there is still much difference of opinion as to the import of the connection which subsists between the cause of the disease and the morbid condition ensuing. The best evidence of this connection has been obtained naturally from experiences in small narrowly circumscribed and more easily surveyed fields of observation—in single houses, public institutions, and the like. It is just in these cases that one learns how, amidst seemingly good hygienic circumstances, the conditions for an outbreak of typhoid fever are furnished by badly laid, insufficiently emptied, choked, or ill-ventilated drains, by leaking or over-filled cesspools, and the like ; we see cases of typhoid, singly or in groups, beginning to occur from the moment the noxious influences associated with these nuisances make themselves felt and precisely among those who occupy the rooms or buildings exposed to those influences in one way or another (of which more anon), and we find that the attacks cease to occur when the defects are repaired. But evidence on a large scale for the importance of this etiological factor in the production of typhoid is furnished by the lowering of the typhoid sick-rate and death-rate in towns through attention to the cleansing of fæcal matters from the streets, the houses, and the soil, and through an efficiently carriedout system of drainage and sewerage; and this evidence comes mostly from the country which takes incontestably the first place among the States of Europe for its sanitary administration, as laid down by statute—I mean England."

Diphtheria.

10. The following table shows the comparative number of cases of diphtheria and deaths resulting therefrom for each month of the years 1890, 1889, and 1888, the deaths being taken from the monthly statistics of the Registrar-General.

Month.		CASES.	:	DEATHS.				
	1890.	1889.	1888.	1890.	1889.	1888.		
January February March April May June June July August September	$31 \\ 25 \\ 13 \\ 12 \\ 16 \\ 16 \\ 8 \\ 14 \\ 11 \\ 29$	9 4 14 9 17 18 12 27 21	$ \begin{array}{r} 12 \\ 9 \\ 13 \\ 17 \\ 31 \\ 12 \\ 7 \\ 12 \\ 20 \\ 7 \end{array} $	6 8 6 1 7 2 0 3 7 2	1 2 0 2 8 3 4 5 7 5	$2 \\ 2 \\ 0 \\ 6 \\ 4 \\ 4 \\ 4 \\ 6 \\ 4 \\ 5 \\ 5 \\ 5 \\ 5 \\ 5 \\ 5 \\ 5 \\ 5 \\ 5$		
October November December	$ \begin{array}{c} 29 \\ 18 \\ 9 \\ \cdot \end{array} $	$15 \\ 21 \\ 23$	9 6	2 3 - 4	1 5	1 1		
TOTALS	202	190	155	49	43	' 39		

11. The average yearly death-rate from diphtheria for the 10 years ending 1890 was 27.8. The mortality from the disease was last year not only much higher than the average, but was also the highest of any year of the decade. There does not appear with respect to the whole year, nor to any of the months characterised by the higher rates of mortality, any climatic conditions to account for this.

Scarlet Fever.

12. During the year 1890 only 31 cases of scarlet fever were reported, and one death from it registered. The numbers for the preceding year were 107 cases and one death. The average yearly number of deaths from the disease during the ten years ending 1890 was 5.8.

Whooping-cough.

13. Hardly any cases of whooping-cough are notified to us. As we mentioned in last year's Report, the disease became very prevalent towards the close of 1889. Throughout the whole of 1890 this prevalence must have continued, as the deaths registered and attributed to it were 41—the largest number during any year of the decade ending 1890—the average yearly number being 14.8.

Distribution of Infectious Disease.

14. The following table shows the distribution of typhoid fever, diphtheria, and scarlet fever in

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Beaconsfield 5 46 3 31 48 7 4 12 61 Bothwell 1 5 1 5 Brighton 7 6 5 8 7 1 1 1 1 19 10 12 12 17 7 5 Ellesmer 12 12	· · · · · · · · · · · · · · · · · · ·	Tyj	phoid Fev	ver.	_ I)iphtheria	A.	Sca	urlet Feve	er.		TOTAL.	<u> </u>
$\begin{array}{c c c c c c c c c c c c c c c c c c c $		1888.	1889.	1890.	1888.	1889.	1890.	1888.	1889.	1890.	1888.	1889.	1890.
Forth and Don. 1 - - 5 - - 1 - 1 6 Hobart 149 184 86 18 12 6 60 16 1 227 212 Kentishbury - - 6 - 3 - - 1 10 28 Kentishbury - - 6 - 3 - - - 6 - Latrobe 3 1 1 - - - - - 6 - 3 1 1 1 - 1 3 1 1 1 1 1 1	Boobyalla Bothwell Brighton Burnie Campbell Town Carnarvon Clarence Deloraine Derby Devonport Ellesmere Evandale Franklin George Town Glamorgan Glebe Town Glenorchy Goald's Country Green Ponds Hamilton	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	$ \begin{array}{c} 3 \\ -6 \\ -11 \\ -1 \\ 11 \\ 17 \\ 5 \\ -7 \\ 6 \\ 1 \\ -1 \\ 33 \\ 4 \\ \\ \\ \\ \\ \\ \\ $	$ \begin{array}{c} 5 \\ 5 \\ 6 \\ 4 \\ \hline 10 \\ 3 \\ 1 \\ 2 \\ 1 \\ 1 \\ 3 \\ 2 \\ \hline 1 \\ 1 \\ 3 \\ 2 \\ \hline 1 \\ 1 \\ 3 \\ 2 \\ \hline 1 \\ 1 \\ 3 \\ 2 \\ \hline 1 \\ 1 \\ 3 \\ 2 \\ \hline 1 \\ 1 \\ 3 \\ 2 \\ \hline 1 \\ 1 \\ 3 \\ 2 \\ \hline 1 \\ 1 \\ 3 \\ 2 \\ \hline 1 \\ 1 \\ 3 \\ 2 \\ \hline 1 \\ 1 \\ 3 \\ 2 \\ 1 \\ 1 \\ 3 \\ 2 \\ 1 \\ 1 \\ 3 \\ 2 \\ 1 \\ 1 \\ 3 \\ 2 \\ 1 \\ 1 \\ 3 \\ 2 \\ 1 \\ 1 \\ 3 \\ 2 \\ 1 \\ 1 \\ 3 \\ 2 \\ 1 \\ 1 \\ 3 \\ 2 \\ 1 \\ 1 \\ 3 \\ 2 \\ 1 \\ 1 \\ 3 \\ 2 \\ 1 \\ 1 \\ 3 \\ 2 \\ 1 \\ 1 \\ 3 \\ 2 \\ 1 \\ 1 \\ 3 \\ 2 \\ 1 \\ 1 \\ 3 \\ 2 \\ 1 \\ 1 \\ 3 \\ 2 \\ 1 \\ 1 \\ 3 \\ 1 \\ 1 \\ 3 \\ 2 \\ 1 \\ 1 \\ 3 \\ 1 \\ 1 \\ 3 \\ 1 \\ 1 \\ 3 \\ 1 \\ 1 \\ 3 \\ 1 \\ 1 \\ 1 \\ 3 \\ 1 \\ 1 \\ 1 \\ 3 \\ 1 \\ 1 \\ 1 \\ 3 \\ 1 \\ $	$ \begin{array}{c} 3 \\ 1 \\ $	$ \begin{array}{c} 2 \\ - \\ - \\ - \\ 8 \\ - \\ - \\ 19 \\ 15 \\ 3 \end{array} $	$ \begin{array}{c} 6 \\ - \\ 1 \\ 29 \\ - \\ 3 \\ 3 \\ 12 \\ - \\ 8 \\ 1 \\ 6 \\ - \\ 2 \\ 1 \\ - \\ - \\ 1 \\ - \\ - \\ 1 \\ - \\ - \\ - \\ - \\ - \\ - \\ - \\ - \\ - \\ -$	$ \begin{array}{c c} - & - \\ 7 & - \\ - & 3 & 6 \\ - & 2 & - \\ - & 10 & - \\ 3 & 2 & 5 & - \\ - & - & - & - \\ \end{array} $			$ \begin{array}{c c} -1 \\ 22 \\ -7 \\ 7 \\ 24 \\ 12 \\ 7 \\ -5 \\ 12 \\ 11 \\ 2 \\ -6 \\ 9 \\ 10 \\ 2 \\ 1 \end{array} $	$ \begin{array}{c} 5 \\ -6 \\ -11 \\ 1 \\ 20 \\ 17 \\ 5 \\ -7 \\ 9 \\ 20 \\ 1 \\ 15 \\ 1 \\ 37 \\ 11 \\ - \\ - \\ \end{array} $	$ \begin{array}{c} 51 \\ 6 \\ 5 \\ 7 \\ 33 \\ - \\ 14 \\ 6 \\ 13 \\ - \\ 2 \\ 8 \\ 2 \\ 7 \\ 1 \\ 3 \\ 4 \\ 1 \\ - \\ 3 \\ \end{array} $
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Influenza.

15. In common with the rest of the world, Tasmania was this year subject to a very widespread epidemic of influenza. Though the mortality directly attributed to it in the Registrar-General's returns was only 11, in all probability it greatly affected the general mortality, especially among the aged and feeble, and may be the real cause why, while the deaths for the year of persons between the ages of five and 65 years fell from 891 in 1889 to 795 in 1890, the deaths of persons over 65 rose from 539 to 631. The average yearly mortality from influenza for the ten years ending 1890 was 37; and in no previous year in the decade had the mortality reached 11. At the request of the Secretary of State for the Colonies, we furnished all the information in our power on the facts connected with the epidemic here.

Closing of Schools.

16. The prevalence of diphtheria, scarlet fever, and whooping-cough led to several cases of the closing of schools by Local Boards in accordance with the provisions of the Public Health Act, 1885. This is frequently a very necessary measure, and should always be resorted to when recommended by the Officer of Health of the District. But, as many Local Boards had apparently overlooked the powers conferred by the Act to regulate the attendance of children at school, we issued a circular calling attention to these powers, and advised their being exercised in all cases where they would be equally efficacious in preventing the spread of infection as the closing of a school.

Spread of Infection.

17. Our attention having been called to several cases in which it appeared that an outbreak of infectious disease had occurred in connection with families who had received into their houses the bodies of persons who had died of the disease, we have made arrangements with the Hospital authorities to as far as possible prevent such spread of infection in the case of bodies removed from those institutions, and we intend to ask Parliament to grant to Local Boards power to make by-laws to secure the taking of proper precautions with regard to the removal, transport, keeping in houses, and burial of the bodies of persons who have died of infectious diseases.

Funeral Wakes.

18. In connection with this matter, at the request of R. S. Bright, Esq., M.R.C.S., of Hobart, we furnished His Grace the Archbishop of Hobart with reports of cases of the spread of disease—particularly diphtheria—by the "waking" customs prevalent in some districts; and His Grace thereupon issued a circular-letter to all his clergy requesting them to discourage such customs, and at the same time to inculcate the observance of such habits and precautionary measures as are most likely to ward off disease. We feel convinced that such advice coming from such a quarter is more likely to be effectual to secure its object than any attempts to secure it by the enforcement of the law.

AMENDMENT OF THE PUBLIC HEALTH ACTS.

Private Improvement Rate.

19. There are various other matters in connection with which we would recommend further sanitary legislation. We last year expressed our opinion as to the desirability of adopting a modification, suitable to our circumstances, of the English law relative to Private Improvement Rates. The principle is not foreign to Tasmanian law, seeing that it is recognised in the 194th Section of the Police Act, 1865. The clauses we recommend only set forth the practical method of giving effect to this 194th Section with respect to works connected with the sanitation of towns.

Construction of Common Drains.

20. Another matter is in connection with the provisions of the 118th Section of the Public Health Act, 1885, which empowers Local Boards to make orders for the construction of such drains as it may prescribe for the drainage of any house within its district. It often occurs that a greater or less number of houses belonging to different owners might be more efficiently and economically drained by one common drain than by separate drains running from each house to the proper outfall. At present the Local Board can only make order upon each owner to make the drain it specifies for its whole length: it cannot compel joint action. If the owners disagree as to their respective shares, it is desirable to empower the Local Board to do the work and apportion the costs of it to the various owners, and recover such costs in the manner the Act provides in the case of other works.

Inspection of Suburban Dairies.

21. The Launceston Local Board of Health has called our attention to the difficulty it experiences in controlling the purity of the milk supply of the city with regard to dairymen whose establishments are outside its jurisdiction. We recommend that the powers of inspection, &c. described in the 27th Section of the Act of 1885 be given to Local Boards over dairies supplying milk to the inhabitants of their districts, although such dairies may be without such districts.

OFFICERS OF HEALTH.

22. The Hon. the Attorney-General has requested our opinion upon a suggestion made at a Conference of the Municipal Councils of Hobart and Launceston, that in lieu of the present

Officers of Health appointed by the various Local Boards of Health throughout the Colony, two such officers should be appointed by the Government, one for the South, and one for the North, of the island. We have applied to the Governments of the other Colonies for information as to the arrangements in vogue there, and having obtained it, hope in a short time to send you a report thereupon.

Congress of Hygiene in London.

23. Having at your request taken into consideration the papers forwarded by the Right Hon. the Secretary of State on the proposed meeting in London in 1891 of the Seventh International Congress of Hygiene and Demography, with a request that the Colony should take part therein, we recommended to you the desirability of acceding to the request by having Tasmania duly represented thereat.

QUARANTINE ACT.

24. In view of the expected arrival in October at Hobart of the ship *Guiding Star*, with a cargo of sugar from the Mauritius, and as the crew of the ship had suffered severely from "Mauritius fever," we took the necessary preliminary steps to secure that no communication should be held with the shore, nor cargo landed, till the Health Officer had granted pratique. But the vessel was unable to reach Hobart, and was compelled to dispose of her cargo elsewhere. During the year notifications were received of the existence of cholera in the Netherlands East Indies, and of smallpox at Mauritius, and the necessary precautions were taken.

PUBLIC BUILDINGS.

25. Very general ignorance seems to still prevail with respect to the obligation imposed by the 114th Section of the Act of 1885 on all about to build or enlarge any "Public Building"—which is interpreted to include churches, hospitals, theatres, concert rooms, and other places occasionally used for the purpose of public amusement—to submit plans to the Central and Local Boards, and to obtain the written approval of the former before opening. The result of this ignorance is that when the written approval is applied for the building is often nearly or quite completed, and the requirements of the Central Board with regard to ventilation, means of egress, safety from fire, etc., necessitate structural alterations that are then costly to make, but which might have been originally made part of the plan without additional cost. All this was illustrated during the year in the case of the Hobart Theatre. The other public buildings dealt with were the Lansdowne Institute, Brighton Grand Stand, New Norfolk Oddfellows' Hall, and Wirth's Circus; and improvements in the means of egress of others have been effected.

ENGINEERING INSPECTOR'S WORK.

26. During the year the Engineering Inspector has paid thirty-seven visits of inspection to the districts of varicus Local Boards of Health. The more important of his reports, including those on the water supply of Triabunna and Swansea, and on the sanitary condition of Strahan and Zeehan, have already been presented to Parliament. At the request of the Hon, the Minister of Lands he has reported on the suitability for the purpose of various sites that have been asked for by local authorities for use as burial-grounds. On the application of the Health Authorities of Queensland he prepared a paper on the qualifications and duties of a Government Sanitary Engineer. He is also still acting as our Secretary—an additional duty which it would be impossible for him to fulfil but for the efficient aid of Mr. T. R. Atkinson, the Clerk to the Board.

BOARDS OF HEALTH OF OTHER COLONIES.

27. During the year there has been the usual interchange of reports and other information with the Boards of Health of the other Colonies. Specially valuable information was obtained from Adelaide on the subject of lead-smelting; and from Sydney a very interesting report by Dr. Ashburton Thompson on Influenza.

LOCAL BOARDS OF HEALTH.

28. The various Local Boards have heartily co-operated with us in the carrying out of the provisions of the Health Acts. Many of the Boards appointed by the Governor in Council in comparatively populous places, having no rating powers, are greatly hampered in their work; yet in nearly all such places there appears to be a great disinclination to come under the Town Boards Act, which would secure municipal institutions, established and controlled by the ratepayers.

Beaconsfield.

29. The outbreak of diphtheria at the end of 1889, referred to in our report for that year, proved to be a very serious one in the earlier months of 1890, no less than 48 cases being reported to us. Dr. Champ was appointed by the Local Board, with our approval, to be its Officer of Health. Our Engineering Inspector paid a visit to the town at the request of the Local Board, and advised with its Officers—especially in relation to the sanitary condition of the licensed houses. A preceding table gives the number of cases of infectious disease notified.

Boobyalla.

30. During the year the Local Board made By-laws, which have been duly confirmed; and appointed, with our approval, Dr. Gormley to be its Officer of Health. The occurrence of the

cases of diphtheria—some of them fatal—shewn in the table of cases before given, was met by the Local Board with very prompt action. The houses in which the cases occurred were isolated, and other precautions taken. Samples of the water in the wells used were forwarded to us for analysis, and the Government analyst condemned the water as very impure, so we suggested that the well should be closed. At the request of the Board supplies of disinfectants were sent. There is a comparatively large Chinese population in the district, and proceedings have had to be taken under the by-laws of the Board against some of them in connexion with nuisances and water pollution caused by the keeping of pigs.

Both well.

31. The Local Board, with our sanction, appointed Dr. Gormley to be its Officer of Health in succession to Dr. Meyer, who had resigned. On the occurrence of typhoid fever in the schoolmaster's house, the school was closed on the recommendation of the Officer of Health, and the matter was referred to us for advice by both the Education Department and the Local Board. After consultation with the Government Health Officer, we forwarded his opinion that in ordinary cases if proper precautions were taken in the houses of typhoid patients there is no necessity to close public schools on the occurrence of that fever in their neighbourhood, as the contagion seems not to be communicable in the same manner as that of diphtheria, scarlet fever, etc. But as the closing of public schools is an attribute of Local Boards, we expressed this opinion by way of advice and not of direction. At the same time we strongly urged the Local Board to carry out the advice given by its Officer of Health on the subject of sanitation, water supply, etc., and offered all assistance in our power.

Brighton.

32. Special inquiries and reports were made with respect to the five cases of typhoid fever notified.

Burnie.

33. The Local Board made, and we approved of, the appointment of Dr. Armitage as Officer of Health. The Stipendiary Magistrate and others having called the attention of the Local Board to the nuisances caused by the drainage from various premises, and the local Inspector having reported the unsatisfactory condition of the slaughter-houses, we were asked to advise upon the matters, and instructed our Engineering Inspector to visit Burnie. His report has already been forwarded to you and presented to Parliament. This place is evidently one that ought to have a municipal authority, but the inhabitants are very unwilling to adopt the Town Boards Act. After two years' exemption from infectious disease the occurrence of five cases of typhoid gave warning that insanitary conditions are sure to affect the public health. At the end of the year the Board was taking steps to make by-laws.

Campbell Town.

34. You have already received and printed as a Parliamentary paper a full report upon the remarkable outbreak of diphtheria at this town. The Local Board appointed Dr. Bryne as its Officer of Health, with our approval.

Carnarvon.

35. The town of Carnarvon has had a clean bill of health for the year.

Clarence.

36. The Local Board made by-laws, which have been duly confirmed. The district has had a clean bill of health for the year. The Local Board having received a petition from 24 ratepayers resident within half a mile of the two burial-grounds at Bellerive, praying the Board to close the grounds in accordance with the 29th Section of "The Public Health Act, 1889," acceded to the prayer, and gave the requisite notices to close the burial-grounds at the expiration of six months.

Deloraine.

37. A large number of cases of typhoid fever again occurred in the municipality and town. A supply of disinfectants was sent to the Local Board.

Derby.

38. At the request of the Local Board of the Health District of Brothers' Home, the name of the district was changed to that of the chief town in it. The number of cases of infectious disease notified fell from 17 in the previous year to six. In all the cases proper precautionary measures were taken, and supplies of disinfectants sent.

Devonport.

39. The Local Board has during the year passed by-laws, which have been duly confirmed. It appointed, with our approval, Dr. Fulton as its Officer of Health, but that gentleman has since resigned the appointment. At the request of the Local Board the Engineering Inspector has twice visited the township, and reported on matters brought under his consideration with respect to the establishment of a hospital and the sanitary service of the town. In the case of two patients suffering from typhoid fever who were landed at the port without means of procuring medical help, the cost of their care and treatment in a temporary hospital was, at our request, borne by the Government. We have been greatly pleased with the zeal and intelligence displayed by the Sub-Inspector of the Local Board, whose periodical reports have been received with much interest. The Board obtained an amended Act of Parliament with respect to the proposed waterworks, but no definite action has yet been taken under it.

Ellesmerc.

40. The only case of infectious disease reported hence was that of a patient suffering from diphtheria, who was brought from Beaconsfield. All proper precautions were taken. Our Engineering Inspector paid the town a visit.

Evandale.

41. The Engineering Inspector paid a visit to Evandale, and advised with Local Board on sanitary matters, especially in connexion with the burial-ground in the town.

Fingal.

42. Diphtheria was again prevalent at Avoca, where no permanent sanitary work has been done after three inspections and reports by officers of this department.

Franklin.

43. A large number of cases of diphtheria and whooping-cough occurred in this district, and a school had to be temporarily closed. The Local Board lost its Officer of Health, Dr. Elliott, by death, on the 1st of May.

George Town.

44. A serious outbreak of diphtheria occurred in the early part of the year. Every precaution was taken by the Local Board to prevent the spread of the disease; a supply of disinfectants was sent. The difficulties of the Local Board were increased by the departure from the Colony of the only medical man in the district in the midst of the outbreak.

Glamorgan.

45. At the request of the Local Board, conveyed through the Hon. the Minister of Lands and Works, we instructed our Engineering Inspector to visit and report upon the best means of supplying Swansea with water. His report was printed and presented to Parliament.

Glebe Town.

46. At the re-opening of the Conferences on the subject of Metropolitan Drainage, the Local Board of the town was again invited, and again declined to take part. Its due representation on the proposed Metropolitan Board was nevertheless provided for in the Bill submitted to Parliament.

Glenorchy.

47. The health of the district, so far as infectious diseases are concerned, was much better in 1890, when only four cases were notified, than in 1889, when 37 cases were reported. The Local Board took part in the Metropolitan Drainage Conferences. It obtained an Act of Parliament for the establishment of waterworks to supply part of its district.

Gordon.

48. Only one case of infectious disease was notified from this district, as compared with eleven in 1889.

Gould's Country.

49. This district had a clean bill of health for the year.

Green Ponds.

50. Dr. Gormley was appointed by the Local Board, and approved by us as Officer of Health. The district had a clean bill of health for the year.

Hamilton.

51. Two typhoid fever cases occurred in a small house occupied by thirteen persons, and steps were taken to deal with the overcrowding.

Hamilton-on-Forth and Don.

52. At the request of the Local Board our Engineering Inspector visited this district and advised upon sanitary matters. His report has been presented to Parliament.

Hobart.

53. The health of the city with respect to infectious diseases showed a great improvement, the number of cases notified falling from 212 in 1889 to 93 in 1890. Under the provisions of the 140th Section of the Act of 1885, we sanctioned the use by the Local Board of a depositing place for nightsoil outside the city boundaries. In connexion with the arrival in the port on board the steam-

ship Aorangi of a passenger suffering from scarlet fever, we took occasion to call the attention of the Local Board to the desirability of making the arrangements provided for in the 86th and 93rd Sections of the same Act for the removal to hospital of all infected persons brought in by ships, and offered all the assistance in our power. We regret that no action was taken in the matter. A rumour of the existence of a case of leprosy among the Chinese in the city was shown by the Officer of Health to be unfounded. The Local Board took part in the Conferences on the subject of Metropolitan Drainage.

Invermay.

54. This is one of the districts in which the Central Board is acting as Local Board, under the provisions of the 6th Section of the Act of 1887. The portion of it which is urban and immediately adjoins Launceston should be either under the jurisdiction of a Town Board or form part of the city. The health of the district with regard to infectious diseases showed an improvement, 18 cases being notified in 1890 against 28 in 1889. Our Engineering Inspector paid several visits to the district, and the local Inspector has satisfied us with his zeal and ability. We authorised the establishment of a skin store, after all the requirements of the Acts on that behalf had been complied with; but we refused a further application from the Tasmanian Soap and Candle Company (formerly Messrs. Upton and Son) to sanction and register their works.

Kentishbury.

55. The Local Board here having lost most of its members by death or removal, new members were nominated by the Governor in Council. In consequence of the occurrence of diphtheria at Railton, the public school there was closed for a time. Our Engineering Inspector paid the place a visit, and reported on a proposed new cemetery.

Kingston.

56. An outbreak of diphtheria in the district of this Local Board was distinctly traced to infection from the dead body of a child which was left in a house for a night on its way from Hobart for burial in the Gordon District. The patients thus infected were members of the postmaster's family, and by the precautions taken the disease was confined to the one household.

Latrobe.

57. The town of Latrobe, the chief place in this Health District, obtained an Act of Parliament during the year for the establishment of waterworks. When these are completed the proper drainage of the town will be more than ever necessary. It is consequently to be regretted that there is not here a properly constituted Municipal authority or Town Board. Our Engineering Inspector visited the district, and also reported on a proposed cemetery site at Sassafras.

Launceston.

58. The health of the city as regards infectious diseases shewed a marked improvement, 146 cases being notified in 1890, against 381 in 1889. During the year the necessary fences, roads, sites for buildings, and works for water supply at the site at Verulam set apart for special infectious diseases hospital have been completed, so that in case of necessity accommodation for patients might be almost immediately obtained. As Launceston is greatly interested in the establishment of a noxious trade area, we have requested the city authorities to give us the advantage of their local knowledge in the selection of a suitable site. The Local Board has expressed the opinion that the noxious trades specified in the Act of 1885 might be divided into two categories, one of which —comprising boiling-down works, manure works, fellmongeries, glue factories, and piggeries—should be excluded from the towns, while the other, comprising the rest of the specified trades, should be allowed; and, subject to their being carried on without causing a nuisance, and for the purpose of encouraging the use of the best appliances, that Local Board that we were not opposed to their adoption, but that their adoption did not get rid of the urgent necessity of providing a place for the excluded trades. We are afraid that great difficulty would be encountered in satisfactorily providing for the giving of the guarantee mentioned. The Local Board passed an important by-law under the Street and Building sections of the Act of 1889, which was duly confirmed. Land has been purchased by Government for the purpose of a general cemetery for the city.

Lefroy.

59. There were two cases of diphtheria here, one of which was fatal. The other case, which was taken to Launceston, was ultimately received into the hospital there.

Leven.

60. This district had a clean bill of health for the year as far as regards infectious diseases.

Longford.

61. The health of the district was in a more satisfactory condition in 1890 than 1889, as there were only 14 cases reported, as against 106. An Act for the establishment of waterworks was passed during the year.

Mersey.

62. This district has to be administered by us under the 6th section of the Act of 1887. It had a clean bill of health for the year.

New Norfolk.

63. A large number of cases of typhoid fever were reported from this district during the year. The Engineering Inspector made a special report on the subject of water supply; and, at the request of the Official Visitors of the Hospital for the Insane, he visited that institution and made you a report thereupon.

New Town.

64. There was a great improvement in the health of this district, only five cases of infectious disease being reported, against 18 in 1889 and 26 in 1888. The Local Board took part in the conferences on the question of Metropolitan Drainage.

Oatlands.

65. Four cases of typhoid fever occurred in the district, and one of diphtheria, as compared with one case of typhoid fever in 1889.

Penguin.

66. The district had a clean bill of health for the year. Our Engineering Inspector paid it a visit in connection with the sanitary certificates required by the Licensing Act.

Port Cygnet.

67. Thirteen cases of infectious disease were reported in 1890, against only one in 1889. Our Engineering Inspector paid the district a visit and reported on the condition of the Agnes Rivulet, which runs through the town, and also reported to the Minister of Lands on the site proposed for a cemetery.

Queenborough.

68. The returns of infectious diseases from this district showed a very satisfactory diminution, only six cases being reported, against 22 in 1889. The Local Board took an active part in the conferences relative to metropolitan drainage.

Richmond.

69. The sanitary condition of the municipality showed great improvement as far as infectious diseases are concerned, only two cases being reported. A supply of disinfectants was sent.

Ringarooma.

70. The Local Board, with our approval, appointed Dr. Granville-Jackson to be its Officer of Health. There was a severe outbreak of diphtheria, with some fatal cases; and the Local Board recommended the temporary closing of the public school and a private one.

.Ross.

71. This municipality had a clean bill of health with respect to infectious diseases, except one case of typhoid fever treated at Campbell Town Hospital.

Russell.

72. We have to administer the Health Acts in this immense district. Our Engineering Inspector paid it a visit, but was unsuccessful in his endeavour to get a Local Board of Health chosen by the inhabitants. As it is, the smallest matters have to be referred to us for decision instead of being promptly dealt with on the spot. The town of Stanley, at Circular Head, should be under the jurisdiction of a Town Board.

St. Helen's.

73. The number of cases of typhoid fever occurring in this district, though much less than in the preceding year, were still exceptionally high. We referred in our Report last year to the water supply of the town. Early this year we consented to the closing by the Local Board of six polluted wells on private premises. The Local Board also temporarily closed the public school. It applied, under a misapprehension of the scope of the 132nd, 133rd, 134th, and 135th Sections, that we should recommend that the Governor in Council should direct that these Sections should apply to its district. It was informed that the Sections were already in force in the town of St. Helen's; and that, the outlying district not being part of a Rural Municipality, the Governor in Council could not make the desired direction. During the year the Officer of Health resigned his appointment. The question of the water supply of St. Helen's has occupied a great deal of attention, especially as its best source, the George River, was threatened with pollution by tailings from the tin mines. But all attempts during the year to form a Water Trust or a Town Board in the district have unfortunately failed.

St. Leonard's.

74. There was a marked improvement in the health of this district during the year, the number of cases of infectious disease reported falling from 62 in 1889 to 12 in 1890. Circumstances

connected with a burial in a grave-yard at Hadspen were reported to us, and we sent our Engineering Inspector to examine the condition of things, and he reported on the proper method of preventing the recurrence of a dangerous nuisance.

Scottsdale.

75. At the beginning of the year the members of the Local Board of Health, with one exception, resigned; and, as other gentlemen are unwilling to act on the Board, we have had to administer the Public Health Acts in the district. The Engineering Inspector visited the locality in connection with the requirements of the Licensing Act.

Sheffield.

76. This town had a clean bill of health with respect to infectious diseases for the year.

Sorell.

77. The health of the municipality was fairly satisfactory, only two cases of infectious disease being reported.

Spring Bay.

78. The health of this Municipality was also good, only one case of infectious disease being reported. At the request of the Local Board of Health, the Engineering Inspector furnished it with a report, with plans and estimates, upon the best means of supplying Triabunna with water.

Strahan.

79. At the request of the Hon. the Minister of Lands and Works, our Engineering Inspector was sent to this place to report upon its sanitary condition. His report has been presented to Parliament. Subsequently the Town was proclaimed under the Town Boards Act, and a Town Board elected, so the place has now a properly constituted sanitary authority.

Straits Islands.

80. No cases of infectious disease have been reported from the Islands in Bass' Straits, where we are acting under the 6th Section of the Act of 1887.

Tasman's Peninsula.

81. We are also administering the Health Acts in this district, which had a clean bill of health for the year. Our Engineering Inspector visited it in connection with the requirements of the Licensing Act.

Trevallyn.

82. There was a little improvement in the health of this town during the year, only three cases of infectious disease being reported.

Ulverstone.

83. The Local Board of this town appointed Dr. McCall to be Officer of Health, and the appointment was confirmed. A sample of water from the River Gawler, a suggested source of supply for the town, was forwarded to us and analysed by the Government Analyst, who found it of a quality undesirable for the proposed purpose. In addition to the cases of infectious disease given in a preceding table, a large number of cases of whooping-cough occurred here.

Upper Piper.

84. There was a great improvement in the health of this district as shown by the infectious disease returns relative to typhoid and scarlet fevers, and diphtheria; but there were a large number of cases of whooping-cough, and the public school at Karoola was closed in consequence.

Waratah.

85. Dr. Brewis was appointed Officer of Health by the Local Board with our approval. As far as infectious disease returns show it, the health of the district was satisfactory. At the request of the Local Board our Engineering Inspector paid a visit to Waratah, and advised with respect to licensed houses, and the sanitary state of the town generally, and his report has been presented to Parliament.

Weldborough.

86. Only one case of infectious disease was reported from this district, and it was treated in Launceston Hospital.

Westbury.

87. There was an outbreak of diphtheria here, and the Local Board closed for a while the public school. During the year the Officer of Health resigned his appointment.

West Tamar.

88. In addition to the returns of infectious disease given in a preceding table, a very large

number of cases of whooping-cough occurred. The Engineering Inspector assisted the Local Board in connection with the certificates required under the Licensing Act.

Wynyard.

89. There was a very serious outbreak of typhoid fever at this place. The report of our Engineering Inspector, which was presented to Parliament, contains a description of the condition of the town that quite accounts for the prevalence of the disease. In one case, where there was great overcrowding and insufficiency of means to secure proper nursing, we authorised removal to Ulverstone Hospital for treatment.

Zeehan.

90. At the request of the Hon. the Minister of Lands and Works, we instructed our Engineering Inspector to visit and report upon the sanitary condition of Zeehan. His report was printed and presented to Parliament. He arranged for the formation of a Health District with a Local Board, which was duly proclaimed by the Governor in Council. The Local Board, with our approval, appointed Dr. Cookson to be its Officer of Health, and made by-laws, which have been confirmed, The district had a clean bill of health as far as infectious diseases are concerned.

By-Laws.

91. During the year we have confirmed thirteen sets of by-laws passed by Local Boards, and certified by the Attorney-General. Thirty-three Local Boards out of sixty-two have now more or less complete codes of by-laws.

CHINESE IMMIGRATION ACT.

92. During the year twelve Chinese arrived in Tasmania, and were duly examined before landing. Nine of them carried Tasmanian, and three Victorian naturalization papers.

VACCINATION ACT.

Proceedings in Parliament.

93. The Bill for amending the Vaccination Act by rescinding the penalty clauses, noticed in our last year's Report, was again introduced and passed in the House of Assembly, and was again rejected by the Legislative Council. But it has been arranged that no proceedings shall be taken under the Act until the Royal Commission on Vaccination in England shall have reported.

Vaccination in 1890.

94. The effect of the suspension of all enforcement of the Act was very marked upon the work of the public vaccinators, only 137 vaccinations having been reported by them during the year. There were 2808 reported in 1888, and 1081 in 1889. Probably work done by private vaccinators carried the total number of vaccinations in 1890 to 180.

Children born in year ending 30th June, 1890.

95. We explained in last year's Report the reason that compels us to close our vaccination table as regards infants on the 30th June. During the year in question we received returns of the births of 4678 children. Of these probably 698 died or removed from the Colony during the year, leaving 3980 who ought to have been vaccinated if in fit condition. Only 32 of them were certified to be vaccinated by all the medical men of the Colony. The only places in the Colony where medical men appear to take any interest in the matter are Emu Bay, Waratah, and Fingal, where from five to twelve per cent. of the "remaining" children born in the year were vaccinated. At Hobart, out of about 900 "remaining" children only one was certified as vaccinated, and at Launceston only seven out of 615. In 32 out of 44 of the Registration Districts not a single vaccination was registered. Surely the exercise of the natural influence of medical men ought to secure a better condition of things. We shall always be glad to supply pure calf lymph to all who need it. need it.

We have the honor to be,

Sir,

Your obedient Servants,

P. O. FYSH, President. C. E. BARNARD, M.D. CHARLES HARBOTTLE. J. OBERLIN-HARRIS, M.A.

PETER BARRETT, M.H.A.

A. MAULT, Secretary. Hobart, 20th June, 1891.

	. E	stimate, 1891.		
,	Officer of Health.	Inspector.	TOTAL.	
-	£ s. d.	\pounds s. d.	\pounds s. d.	
Beaconsfield	$10 \ 0 \ 0$	$10 \ 0 \ 0$	$20 \ 0 \ 0$	
Boobyalla	$20 \ 0 \ 0$	$5 \ 0 \ 0$	$25 \ 0 \ 0$	
Brothers' Home	$5 \ 0 \ 0$	$5 \ 0 \ 0$	$10 \ 0 \ 0$	
Burnie	$10 \ 0 \ 0$	5 0 0	$15 \ 0 \ 0$	
Franklin (Secretary, 71. 10s.)		7 10 0	$15 \ 0 \ 0$	· .
George Town		$5 \ 0 \ 0$	$5 \ 0 \ 0$	
Gordon	.5 0 0	5 0 0	$10 \ 0 \ 0$	
Gould's Country	•••	$5 \ 0 \ 0$	$5 \ 0 \ 0$	
Hamilton - on - Forth and				•
Don	` 	$5 \ 0 \ 0$	$5 \ 0 \ 0$	
Invermay	•••	$10 \ 0 \ 0$	$10 \ 0 \ 0$	Central Board acting.
Kingston	•••	$5 \ 0 \ 0$	5 0 0	
Latrobe	• •••	$10 \ 0 \ 0$	$10 \ 0 \ 0$	
Lefroy	•••	5 0 0	5 0 0	
Leven	•••	5 0 0	5 0 0	
New Town	•••	10 0 0	,10 0 0	
Penguin	•••	5 0 0	5 0 0	
Port Cygnet	•••	5 0 0	5 0 0	
Queenborough	•••	5 0 0	5 0 0	
Ringarooma	•••	5 0 0	5 0 0	
Russell		3 10 0	$3\ 10\ 0$	Central Board acting.
St. Helen's	10 0 0	$15 \ 0 \ 0$	25 0 0	£15 Inspector and Secretary.
St. Leonard's	$20 \ 0 \ 0$	25 0 0	45 0 0	
Scottsdale	••••	5 0 0	500	
Kentishbury	$5 \ 0 \ 0$	5 0 0	10 0 0	
Straits Islands	•••	$3\ 10\ 0$	$\frac{3}{2}$ 10 0	· ·
Mersey	•••	5 0 0	5 0 0	
Waratah	•••	5 0 0	5 0 0	
Upper Piper	•••	5 0 0	5 0 0	
Weldborough	•••	5 0 0	5 0 0	
West Tamar	•••	500°	5 0 0	
Wynyard	•••	$5 \ 0 \ 0$	5 , 0 0 .	
			207 0 0	
Provision for another	al madian	ico and non	297 0 0	
Provision for speci Local Boards for			113 0 0	
Local Boards, &c		•••••	110 0 0	

£410 0

0

EXPENSES for Public Health purposes in Districts in which the Local Boards of Health have no Rating Powers.

WILLIAM THOMAS STRUTT, GOVERNMENT PRINTER, TASMANIA.