(No. 29.)



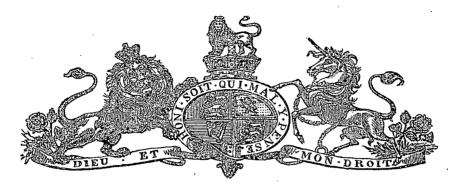
## 1884.

PARLIAMENT OF TASMANIA.

## HEALTH OFFICER:

REPORT FOR 1883.

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



REPORT for 1883 of the Officer of Health for the Towns of New Town, Sandy Bay, and Wellington Hamlets.

Sir,

BEFORE reviewing in detail the number of deaths and their causes which took place in the Hobart Registration District during the year 1883, it is well to arrive at the death-rate of the whole island. In April, 1881, the population of Tasmania was found by Census to be 115,705; this number it is estimated by the Statistician had increased in 1883 to 124,350, showing an increase in two years of 8645, as against the increase of 16,377 in the previous ten years. The total number of deaths registered in Tasmania in 1883 was 2122, or 17.06 per 1000 of the population, a rate which is, for some cause, exceptionally high, being 1.36 per 1000 in excess of that for 1882. Taking now the District of Hobart, which is principally urban and suburban, though extending from Bridgewater to Brown's River, I find that the mean population for the year was estimated at 28,648. The total number of deaths which occurred in 1883 was 782, giving a death-rate of 27.2 per 1000, or 2.8 per 1000 more than in 1882. These are compared in the following Table with the monthly deaths during the previous nineteen years.

TABLE I.

Year.	January.	Pebruary.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total of each Ycar.
1864         1865         1866         1867         1868         1869         1870         1871         1872         1873         1874         1875         1876         1877         1878         1879         1880         1881         1882	$\begin{array}{c} 24\\ 41\\ 31\\ 56\\ 38\\ 41\\ 64\\ 47\\ 51\\ 49\\ 55\\ 48\\ 53\\ 78\\ 61\\ 68\\ 58\\ 66\\ 61\\ 81\\ \end{array}$	$\begin{array}{c} 47\\ 53\\ 54\\ 34\\ 45\\ 40\\ 48\\ 42\\ 40\\ 53\\ 47\\ 49\\ 48\\ 64\\ 62\\ 61\\ 62\\ 58\\ 66\\ 63\\ \end{array}$	73 56 57 54 42 47 51 60 48 49 99 48 71 72 64 81 55 53 49	$\begin{array}{c} 54\\ 38\\ 45\\ 27\\ 34\\ 29\\ 35\\ 50\\ 37\\ 102\\ 32\\ 68\\ 51\\ 53\\ 51\\ 40\\ 63\\ 56\end{array}$	48 43 46 39 38 39 33 53 44 46 77 63 57 55 50 36 66 50 67	$54 \\ 32 \\ 48 \\ 54 \\ 35 \\ 46 \\ 51 \\ 42 \\ 39 \\ 53 \\ 62 \\ 47 \\ 44 \\ 61 \\ 53 \\ 56 \\ 48 \\ 47 \\ 69 \\ 69 \\ 100 \\ $	70 36 54 68 64 47 40 42 39 46 58 55 61 76 51 68 49 67 75	41 42 33 55 42 49 34 49 66 44 72 58 47 58 55 72	$\begin{array}{c} 37\\ 44\\ 28\\ 35\\ 46\\ 22\\ 38\\ 47\\ 39\\ 53\\ 42\\ 51\\ 44\\ 60\\ 40\\ 44\\ 45\\ 46\\ 68\\ \end{array}$	41 40 36 42 49 34 40 51 58 55 63 54 46 51 54 49 44 44 58	43 37 36 48 38 40 25 32 44 34 45 58 44 34 45 56 430 48 47 61	36 30 50 42 54 39 36 46 43 46 47 41 52 60 42 41 47 59 68 63	$\begin{array}{c} 568\\ 492\\ 515\\ 551\\ 579\\ 462\\ 500\\ 507\\ 524\\ 575\\ 575\\ 750\\ 613\\ 760\\ 630\\ 641\\ 647\\ 635\\ 667\\ 782\\ \end{array}$
, 20 years' average	53·55	51.8	59.1	47.65	49.65	49.45	56.7	49	43.65	48·1	42.9	4 <b>7</b> ·1	598·65

TABLE of Deaths in the Hobart Registration District for the 20 years 1864-83, inclusive.

An examination of this Table shows that never before in the district have so many deaths taken place in one year as in 1883, not even including 1875 and 1877, two years with an abnormally high rate, owing to the prevalence of measles during the former and scarlatina during the latter. The total of 782 is 115 more than occurred in 1882, and 183.35 more than the average for the past twenty years, which is 598.65. Of course allowance must be made for the increase of population during that time, but even then the number is high. Comparing the averages of the various months, March and July are seen to be the months least favourable to life, while November and September have the lowest rate.

				TADU						
Months of Year 1883.	Deaths in Hobart Registration District.	Above or below 1882.		Above 20 Y Mean Mo	of the	City share of Deaths.	New Town share of Deaths.	Sandy Bay share of Deaths.	Wellington share of Deaths.	Invalid Depôts at New Town.
January February March A pril June July August September October November December	81 63 49 56 67 69 75 72 68 58 61 63	$\begin{array}{c} + 20 \\ \vdots \\ + 17 \\ + 22 \\ + 8 \\ + 17 \\ + 22 \\ + 8 \\ + 17 \\ + 24 \\ + 14 \\ + 14 \\ \vdots \end{array}$		27.45 11.2  8.35 17.35 19.55 18.3 23. 24.35 9.9 18.1 15.9	···· 10·1 ···· ··· ···	55 44 33 42 44 44 44 42 42 42 42 42 44 39 42 43 38	14 13 7 8 18 17 12 21 16 11 11 11	 1 3  2 2 1  1 1	3 1  2 1 2 1 1  2 2	9 11 5 7 16 13 8 16 15 11 11 8 12
	782 697	+134	- 19			507	164	11 97	15	131
	85	+	115							

TABLE II.

In this table the deaths during each month of 1883 are given in contrast with those of 1882 and also with the average of the past twenty years; whilst the numbers occurring each month in the city and suburban towns are also tabulated. In eight out of the twelve months more deaths occurred in 1883 than in 1882, while in February, March, April, and December the deaths in 1882 were very slightly in excess. Comparing 1883 with the 20 years' average, every month is found to be in excess except March. It is difficult to explain why the increase should have been so general, though, as will be seen in another table, the prevalence of Whooping Cough and other Zymotic diseases during the year contributed materially to the result. The City share of deaths was 507, which is 94 more than in 1882. It is probable that fewer deaths than this should be credited to the city, for many cases of sickness terminating fatally are brought to town for treatment from country districts, registration taking place where the death occurs in favour of the rural and against the urban rate. For this reason, and also as it is impossible to estimate accurately the population of the city proper, I have refrained from giving what would probably be an erroneous death-rate. In New Town 164 deaths occurred, but this number includes 131 which took place at the Invalid Asylums, male and female. This leaves 33 deaths for New Town proper, which is 9 more than in 1882. In the town of Sandy Bay 11 deaths occurred, two less than in 1882, and in that of Wellington 15 deaths, equalling those in 1882. The sum of these city and suburban deaths, 697, subtracted from the total number, gives 85, which represents deaths occurring in the Glenorchy and Queenborough parts of the district, those occurring at sea and registered here as the first port of call, and those at the Hospital of patients admitted from country districts.

Class.	Order.	Disease.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total, 1883.	Total, 1882.	Total, 1881.	Total, 1880.	Total, 1879.
1. Zymotic.	Enthetic Dietic Parasitic	Scarlatina Diphtheria Quinsy Croup Whooping Cough Typhoid Fever. Erysipelas Metria Catarrh, &c Dysentery Diarrhœa Cholera Other Zymotic.	··· ··· ··· 1 1	··· ·· ·· ·· ·· ·· ·· ·· ·· ··	··· ·· ·· ·· ·· ·· ·· ·· ·· ··	··· ··· ··· ··· ··· ··· ···	··· ··· ··· ··· ··· ··· ··· ··· ··· ··	$     \begin{array}{c}             1 \\                       $	··· 2 6 ··· 1 ··· ··· ···	··· ··· ··· ··· ··· ··· ··· ···	$ \begin{array}{c} 3 \\ \\ 1 \\ 3 \\ 1 \\ \\ 2 \\ \\ 1 \\ \\ 1 \end{array} $	3  2       1	··· ·· ·· ·· ·· ·· ·· ·· ·· ··		7 3 7 20 10 6 5 1  38 4 2 6 3	$ \begin{array}{c} 4 \\ 4 \\ .5 \\ .5 \\ 3 \\ .2 \\ 32 \\ 1 \\ 6 \\ 4 \\ 9 \\ 4 \end{array} $	··· ··· ··· ··· ··· ··· ··· ···	$ \begin{array}{c} 3\\12\\.5\\7\\9\\.1\\.\\51\\.\\8\\2\\.\\3\end{array} $	9 7 12 8 7   35 7 8 2 3
3. L 4. D 5. V	ONSTITUTI OCAL EVELOPM IOLENT NCLASSIFI	IC TOTALS IONAL ENTAL IED FALS	18 12 32 15 3 1 81	12 9 26 16 0 	7 9 16 15 2  49	6 5 34 10 1  56	12 8 30 16 1  67	10 7 36 13 3 	9 13 40 10 1 2 75	6 14 32 17 3  72	14 13 22 18 1  68	6 9 28 13 2  58	4 10 41 5 1  61	8 9 22 20 4  63	168 22 3	196 17 	70 82 278 180 25  635	147 20 	98 93 282 148 20  641

TABLE III.

This table shows the total deaths for each month of 1883, subdivided into the five classes; while those of the first class, which are Zymotic, and more or less preventible by sanitary precautions, are subdivided into orders and diseases. The totals of each year since 1879 are then given in contrast. The number of Zymotic deaths during the year has been 112, which is unusually large, being 33 more than in 1882. Diarrhœa, as usual, claimed the largest number of victims, no less than 38, mostly infants. Twenty deaths occurred from Whooping Cough, which was prevalent during the winter months, but has since died out. Typhoid Fever shows an increase, 10 deaths having occurred, as against 5 in 1882—March, April, and May being the most fatal months. This disease, it is to be feared, will continue to increase both in the city and suburbs until the new system of sewage removal is thoroughly adopted. Scarlatina was prevalent during the latter part of the year, 7 deaths being registered from this cause. Metria or Puerperal Fever has the abnormally high number of 5 deaths. Owing to its occurrence the maternity department of the Nurses' Home was promptly and wisely closed. There were 7 deaths from Croup, and 6 from Erysipelas, but only 3 from Diphtheria, and none from Measles. In the other orders the deaths this year have been fewer, two of these in the Parasitic order being from Hydatid disease. In the Constitutional and Local classes the deaths were more numerous than previously, while those in the Developmental class were fewer than in 1881 or 1882. Three deaths, owing to the inefficiency of the Acts under which registration takes place, were registered without any cause being assigned, and so cannot be classified. It is fitting to remark here that some consolidation and improvement is needed in this respect, as the Acts date back as far as 1838. Registration following burial at an interval varying with the convenience of the undertaker, who, in nine cases out of ten, adds registration of deaths to his other duties. Some

Months of 1883.	Under 1.	1 to 5.	5 to 10.	10 to 15.	15 to 20.	Total under 20.	20 <i>to</i> 60.	60 and above.	Total at all Ages.
January February March April May June July August September October November December	19 16 7 12 16 16 15 6	9 4 2 1 4 9 8 7 10 6 6 4	1 1 0 2 2 2 2 0 1 2 3 1	$     \begin{array}{c}       1 \\       0 \\       3 \\       2 \\       3 \\       1 \\       1 \\       0 \\       0 \\       1 \\       2 \\       \end{array} $	$     \begin{array}{c}       1 \\       0 \\       2 \\       2 \\       2 \\       2 \\       1 \\       1 \\       3 \\       2 \\     $	37 24 23 12 23 29 28 29 28 20 17 21 21 24	21 19 11 17 16 14 23 15 15 15 15 15 15	23 20 15 27 28 26 24 34 33 26 25 24	81 63 49 56 67 69 75 72 68 58 61 63
TOTALS, 1883	163	70	15	14	19	281	196	305	782
TOTALS, 1882	129	33	14	6	19	201	162	304	667
TOTALS, 1881	144	37	7	14	13	215	159	261	635
TOTALS, 1880	118	46	15	9	21	209	154	284	647
Totals, 1879	127	43	16	8	23	217	148	276	641

TABLE IV.

In this table the deaths in each month of 1883 are classified according to the age at which they occurred, and the totals contrasted with those of the previous quinquennial period. The first point here is the abnormally large number of deaths under one year old, styled "Infantile Mortality." The true infantile mortality rate is obtained by contrasting these deaths with the births during the same period. The deaths under one year old were 163, and the births registered in the district for 1883 were 949, a proportion of 17.17 per cent. This rate is excessive, and especially when we remember that last year it was for the same district 14.2 per cent., for the Launceston District 17.18 per cent., and for the whole Colony only 10.3 per cent. As I remarked in 1881, when the per-centage was also large, 16.2, this high rate so rapidly increasing in our district cannot but be considered a bad sign, and must if possible be checked, whether it be due to local causes, hereditary debility, ignorance in feeding, or culpable neglect on the part of unmotherly mothers. In the period from 1 to 5 the deaths were also numerous, being 37 more than in 1882. While the more healthy sign of a large proportion of deaths at ages above sixty which occurred in 1882 is again manifest in 1883.

Year.	Births.	Deaths.	Births in excess of Deaths
1873	725	584	141
1874	783	586	197
1875	755	753	2
1876	761	605	156
1877	809	759	50
1878	844	639	205
1879	858	648	210
1880	900	647	253
1881	887	638	249
1882	917	683	234
1883	949	785	164
Totals	9188	7327	1861
Mean	835.3	666.1	169.2

TABLE V.HOBART Registration District.

This table gives us the births and deaths registered in the Hobart District during the year 1883; also a comparison of the same for the 10 previous years. It will be seen that both births and deaths have been more than ever previously, while the excess of births over deaths is, notwithstanding the large number of deaths, only 5.2 below the average.

It will be well here to note what progress has been made during the year in sanitary matters, and to suggest as far as possible remedial measures for some of the defects in our arrangements. During the year the substantial and handsome additions to the Hospital have been almost completed, and some of the wards have been opened for the reception of patients with infectious diseases. Several cases of scarlatina were admitted from the immigrant ships *Cape Clear* and *Gulf of Carpentaria*, while a large number of typhoid fever patients have since been under treatment here. When the proposed scheme for the erection of the administrative departments is completed, the whole will form an establishment highly creditable to the community, and a lasting proof of the zeal, energy, and ability of the present Chairman of the Board.

It has been my custom in my last two reports, as it was that of my predecessor, to point out how defective has been the drainage system, or rather want of system, throughout city and suburbs, and how urgently some reforms in this direction were needed, and it is now gratifying to record that the improvements in the creek have during the year been extended as far as Argyle-street. Certainly no one who visits this main sewer of the City, and compares the portion above Argyle-street bridge, where the bed of the creek is formed of large boulders, its banks reeking with filth from the adjacent houses, with that portion below, where the banks are cemented and a central channel carries off with little friction all but flood waters, could regret the expenditure which the improvement has necessitated—an improvement which ought to be speedily continued, at least as far as Molle-street. During the summer one of the worst localities for typhoid fever was the district adjacent to the creek above the Harrington-street bridge.

During the year the question of the removal of nightsoil has engaged the attention of the City Council, and, upon my representation, they have made arrangements for the weekly emptying of pails, with a view to the gradual closure of all cesspits throughout the city. Such a work, if thoroughly carried out, cannot but have a very beneficial effect upon the health of the citizens; instead of noisome and leaking cesspits, whose contents saturate the subsoil in close proximity to the dwellings, causing endless diarrhœa and typhoid fever, the pail emptied weekly, and its contents in the interval deodorised by the simple sprinkling of fine house ashes, is an improvement only to be tried to be appreciated. Still I fear that many will prefer the old system, the change involving some slight preliminary trouble and expense, unless they are compelled to take action. As a step in the right direction, an Act should be passed forbidding the construction of any more cesspits throughout the city and suburban towns, while a limit should be fixed,—say January 1st, 1887,—before which time all the present pits are to be closed. Only by some such arrangement as this can the change be effected without becoming too expensive to small property holders.

Connected with this subject is one which might be remedied in the same Public Health Act,— I mean the keeping of pigs. According to the Police Act, 1865, pigs may be kept anywhere, provided the sty is 25 feet from a street. The stench arising from pigs, especially kept in the filthy way they are here, is very prejudicial to health; and either pigs should not be allowed within certain fixed limits in the city (in Melbourne and Geelong they are not allowed to be kept at all), or no pig-sty should be permitted within twenty yards of a street or dwelling.

The subject of Hydatid disease is one which I think should have serious consideration; it is undoubtedly increasing, and bids fair to cause annually a large number of deaths. It depends, as is well known, on the introduction into the human stomach of the larva of the *Tænia echinococcus*, a small tapeworm which inhabits the intestinal canal of the dog. Such introduction may take place in many ways,—water, uncooked vegetables, watercress, even dust acting as a vehicle. Sheep, like man, are subject to Hydatids, and it is from feeding on the livers and offal of such sheep that the dogs develop their peculiar tapeworm. Now it is manifest that without dogs we should have no Hydatid disease, and as there is a surplus canine population this surplus should be destroyed; a heavier dog tax should be imposed, and rigidly collected; the uncooked livers and offal of sheep should never be given to dogs for food; and in country places where men and dogs and sheep frequently drink out of the same water-hole, greater care should be exercised by the former in boiling or filtering the water. In Iceland, where the conditions for the spread of this disease are more favourable than in Tasmania, owing to the uncleanly habits of the people and the larger number of dogs, it is said that from one-fifth to one-seventh of the entire population suffer from Hydatid disease. In the Hobart Hospital, during the four years 1878 to 1881 inclusive, there were thirteen cases treated suffering from Hydatids, while in the one year 1883, in the same hospital, there were no less than nine under treatment suffering from the same disease; and in private practice it is much more commonly met with than formerly.

The situation of Tasmania has hitherto been her great safeguard against the approach of Small-pox. The long sea voyage of sailing ships, and the precautions taken in the neighbouring Colonies, have stood us in good stead. Now, however, that steamships making rapid passages visit us direct from London, where small-pox is always present, too careful a scrutiny cannot take place; and any passengers arriving with the least suspicion of the disease should be at once quarantined for the usual period. Should an emigrant vessel unfortunately reach us with small-pox on board, the want of a proper Quarantine Station would be sorely felt. However well adapted the Sanatorium at Lindisferne may be for isolating cases occurring in the town itself, it is not a true Quarantine Station; and it is satisfactory to learn that some steps have been taken with the view of procuring a suitable site. The expense attached to such a course is small compared with what must be incurred in stamping out the disease should it be admitted. The recent outbreak in Sydney, with the enormous expenditure necessary for its suppression, is a warning that should not be neglected.

> I have the honor to be, Sir,

Your obedient Servant, EDWARD O. GIBLIN, M.D. Hobart, 10th June, 1884.

The Hon. WILLIAM MOORE, Chief Secretary.

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WILLIAM THOMAS STRUTT, GOVERNMENT PRINTER, TASMANIA.