ON THE VITAL STATISTICS OF TASMANIA, WITH ESPECIAL REFERENCE TO THE MORTALITY OF CHILDREN.

By E. C. Nowell, Government Statistician. [Read 12th October, 1875.]

In most things Tasmania is at a great disadvantage as compared with the neighbour colonies. The larger extent of their territory, the more open nature of the country, their greater, or reputedly greater mineral wealth, the more profitable fields for the employment of capital which they have hitherto offered, have rendered our colony incapable of competing on equal terms with them in all matters relating to production, trade, and commerce. The one advantage which Tasmania does enjoy is her climate; and it seemed to me that in showing in the fullest and most convincing manner her superiority in this respect, especially as regards the health of children, I might be doing some practical service. The mortality in the towns as compared with the country parts, was also one of the questions which I proposed to myself to investigate, and I therefore set about constructing, with the aid of my assistant, Mr. J. J. Barnard, a series of tables, intending to embody the results in my statistical report for last year. But as the subject could be treated only very briefly in such a report, and as the tables, which contained details that seemed to be worth preserving, could not be embodied in it, I resolved to lay them before this Society in the hope that, by drawing public attention to the facts thus brought out, their full significance might be made more widely known. Another inducement to take up the subject was, that my work would fit in with, and supplement, the comparative statistics published last year by the Government of Victoria. Two objects would thus be served—first, attention would be drawn to Tasmania as a desirable place of residence for persons seeking for themselves or their children a healthy climate; secondly, another contribution, however humble, would have been made to that stock of knowledge of man's physical and moral nature, which we have as yet only begun to acquire from the analysis and comparison of statistical facts.

The first set of tables (A to D) shows the mortality of children up to the age of 10 years as between Tasmania and the Continental Colonies. The second (E to N) shows not only that of children at this age, but also that of persons at "all other ages" in Tasmania alone, under the following divisions:—1. The whole Colony. 2. Hobart Registration District. 3. Launceston Registration District. 4. The two

collectively, forming the "Urban Districts." 5. The remainder

of the Colony, forming the "Rural Districts."

Appended to the abstract tables are other tables, giving the data upon which the former are based, so that every one who consults them may be in a position to check the calculations for himself, and detect the errors, if any should have erept in.

The period embraced in the returns is the five years from 1869 to 1873. Where the figures were not to be obtained from the published statistics of the other Colonies, they were procured by direct application to the Registrars-General, whose courtesy in furnishing them I desire to acknowledge.

I shall consider the general tables first; and those relating

specially to Tasmania afterwards.

"Real infant mortality," says the Registrar-General of England (1872), "may be satisfactorily measured by its proportion to births registered." This is shown for the Australian Colonies and Tasmania in table A. The average number of deaths of infants under 1 year to 100 births for each colony, ranged in descending order, was:—

South Australia	14.24
Victoria	11.86
Queensland	11.07
New South Wales	9.57
Tasmania	9.45

Here the superiority of our Colony is at once seen. In England, the proportion was, in 1869, 15.6; in 1870, 16. In Scotland, in 1870 (an average year), it was 12.28. Even Scuth Australia, the Colony least favourable to infant life, was more so than England. The average rate for 10 years (1864-73) in Victoria is said, by the Government Statist in his copious and careful report for the latter year, to be 12.4.

The next test which I shall employ, is a comparison (table B) of the proportions which the deaths of children bore to 100 deaths at all ages. To go through all the ages in a resumé like this, would hardly leave any clear idea of the differences, but would rather tend to confuse the mind, and I shall therefore confine myself to a few particulars, referring those who wish for more information to the tables themselves. The deaths under I year were:—

	Per Cent.
South Australia	39.86
Victoria	30.29
Queensland	30.25
New South Wales	. 27:79
Tasmania	20.29

Here the order is exactly the same as before. Between one

and two years of age there is a change, and the Colonies stand thus:—1. Queensland; 2. Victoria; 3. N. S. Wales; 4. S. Australia; 5. Tasmania: the last still having the lowest rate, which it keeps through all the ages up to 10, except in one, 5-10, in which the rate is the same as in Queensland. Between 0 and 5 years, the proportions and order were:—

	Per Cent.
South Australia	. 54.17
Queensland	. 46.33
Victoria	45.50
New South Wales	. 42.14
Tasmania	. 28.08

In England (1870) the proportions were—Under 1, 24·57; 1 to 2, 8·01; 2 to 3, 3·89; 3 to 4, 2·65; 4 to 5, 1·95; 0 to 5, 41·07; 5 to 10, 4·47; and between 0 and 10, 45·54. The deaths under 1 year were therefore less in proportion than in any of the mainland Colonies, but considerably more than in Tasmania. In Scotland, taking the mean of males and females (the result of which, though not strictly accurate, is sufficiently near the truth for general comparison) the percentages were—0-1, 19·12; 1-2, 7·83; 2-3, 4·05; 3-4, 2·84; 4-5, 2-11; 0-5, 35·96; 5-10, 5·50; 0-10, 41·49. At the age 0-10, in this Colony the percentage was only 30·84.

Table C shows the proportions which the deaths of children under 10 bore to 1,000 of the total living population. And here it should be remarked that it has hitherto been our practice in making such calculations, to take the population at the end of each year, while the other Colonies take it at the middle of the year. This, by making the divisor larger, gives us a slight advantage, but the difference is not sufficient materially to interfere with the result. At the age 0-1, the

Colonies stand thus :-

	Per	1,000.
South Australia		5.35
Queensland		4.52
Victoria	•••	4.38
New South Wales		3.70
Tasmania	•••	2.79

The same order is observed at the ages 0-5 and 0-10.

I now come to the series of tables constructed for this Colony alone. But before considering them, it may be well to explain some matters connected with the population as therein stated. The object for which the last census was taken being chiefly political, namely, an alteration in the franchise, the population was enumerated according to Electoral Districts only, and not according to Registration Districts. Since, however, the Registration District of Hobart consists of the Electoral

Districts into which the City of Hobart Town is divided, together with those of Queenborough and Glenorchy, the number of whose inhabitants is known, the population at the date of the census can be computed exactly, and the present population can be easily found by calculation, on the assumption that the increase is proportionate to that of the whole population of the Island. But the population of the Registration District of Launceston cannot be so readily found, the Registration District not being conterminous with any Electoral District. It consists of the Electoral Districts within the boundaries of the town of Launceston, together with a portion of the Electoral District of Selby, the number of whose residents is not known. The town of Launceston, according to the census, contained 10,668 persons, and I have estimated the number residing in the portion of Selby which forms the remainder of the Registration District, at 1,500, making the population of the whole of that district at the date of the census, 12,168; and the increase since 1870 has been calculated on the same assumption as before. For 1869 a slight deduction had to be made for the numbers shown by the census of February 7, 1870: for Hobart, the population has therefore been estimated at 24,921; for Launceston, at 12,100; and for the whole Colony, 99,000.

The first table (designated E) shows that while the average percentage of deaths during the first year of life to births in the year was 9.45 for the whole Colony, in the Hobart Registration District it was 12.93; in the Launceston District, 13.02; in the two together, forming the Urban Districts, 12.89; in the remainder of the Colony, or the Rural Districts, 7.28. The difference in the mortality of the least healthy of the Urban Districts, as compared with the Rural, the most healthy—that is, between the maximum and minimum mortality—was therefore 5.74; while the difference between the rural rate—the minimum—and the general rate, was 2.17.

Table F shows the percentage of deaths at each age to deaths at all ages in the Urban and Rural Districts. Here we see the curious fact that while for infants under 1 year the proportion in the whole colony was 20·25, in Hobart, 18·14, in Launceston, 19·07, and in the two last collectively ("Urban" rate), 18·47, in the Rural Districts it was 22·70. The general rule was in this case reversed, the proportion of deaths being greater in the country. So it was for the ages 2·3, 3·4, 4·5, and 5·10; while for "all other ages" there was a considerable difference in favour of the country districts, the general average being 69·87, the Urban rate 72·36, and the Rural only 64·76 per cent.

A comparison of the number of deaths at each age to 1,000

persons at all ages (table G) shows in every case a considerable advantage on the side of the rural districts, to the extent of 24.73 per cent.* for infants under 1 year; 36.54 per cent. for children up to 10, and 37.25 for all ages above. For all ages, the mortality throughout the colony was 13.78; in Hobart district, 20.49; in Launceston 23.26; in the Urban Districts, 21.39; in the Rural, 9.24. These figures show a considerable excess at Launceston; but it would be wrong to conclude upon this ground alone that the mortality is greater in the town itself For the district of Hobart than in Hobart Town. included (Feby., 1870) a suburban population of 5912, in which the rate of mortality was less than in the city; while, if my estimate be correct, the suburban population in the Launceston district amounted to no more than 1500; so that the proportion of the suburban to the urban population was, in Hobart district, about 24 per cent.; in Launceston about 12. The suburban, or more healthy population being thus smaller in the district of Launceston, the mortality for the whole registration district might naturally be expected to be somewhat greater. In Victoria in 1873 the urban rate was 19.41 per 1,000; the rural 9.14; in N. S. Wales in 1872,—Sydney, 22.69; suburbs, 14.48; rural, 12.32. In England (1871) the general rate being 22.6 per 1000, the minimum of the country rates was 17.3. In Scotland, according to the Registrar-General's reports, the rates in 1870 were:—Principal towns, 27.03; large towns, 25.24; small towns, 22.49; and rural districts, 17.95. The excess in the urban rate as compared with the rural would, therefore, be-in Tasmania, 61.37 per cent.; in Victoria, 52.91; and as between Sydney and the rural districts of New South Wales the excess was 56.23 per cent. Assuming the rate for the larger towns in Scotland about 26 per 1000, the excess in the mortality over the rural districts would be 30.96 per cent. The difference in the rate of mortality between the most and least healthy counties in England in 1871 was 11.2 per 1000, or 30.30 per cent.; the highest rate being 28.5 in Durham; the lowest 17.3 in the extra-metropolitan parts of Surrey and Kent. Between the highest death rate of the large towns in Great Britain in that year (being 36.5 in Sunderland), and the lowest county rate (17.3), the difference was 19.2 per 1000, or 52.60 per cent. An epidemic of small-pox prevailed in Sunderland and several other large towns, increasing the rate of mortality, which in cities so much more populous than our own chief towns, ought always, according to the well-ascertained relation between density of population and disease, to be far greater. Yet, not-* Taking the rate for the whole Colony as the standard of comparison.

withstanding these disadvantages, the city mortality was not so greatly in excess of the rural as in Tasmania. Nor is this to be wondered at. A filthy open sewer runs through Hobart Town, and after receiving its contributions of excrementitious and other refuse matter from all the smaller sewers, and numberless latrines that skirt its sides, discharges its black and fetid gatherings into the Derwent. When the tide is in, the accumulations at the lower end mix with the waters of the river, and are at once carried off. But when the tide is out, they are not immediately taken away, but form a broad, sluggish stream, poisoning the air with their fever-lader exhalations. If the excreta and other noxious matters which are now thrown into the creek were applied to their proper purpose, namely, the fertilisation of the soil, the health of the city would be improved, the supply of food would be increased, and a number of persons might find a living in collecting the offensive substances, and converting them into manure. The cases of typhoid fever and diphtheria which have from time to time occurred in Hobart Town, especially during the present year [see table O], ought to be a warning of the danger of further delay in setting about improving the sanitary condition of the principal towns. Dr. Hall, in the remarks which he has at various times published, has strongly urged this point; and the figures which I have now produced give additional weight to his warnings.

But while the deaths in the towns are so much more numerous than they ought to be, if all available means were used to preserve the health of the inhabitants, it will be seen that the rural rate is very low, only 9.24 per 1,000. And this is much above the ordinary Tasmanian rate, the general death rate having been unusually high in 1870 and 1873. For each of the five years the rural rate was-1869, 9.16; 1870, 9.98; 1871, 8.63; 1872, 9.17; 1873, 9.25. The mean of the three normal years, 1869, 1871, and 1872, was 8.99. In Victoria, in 1873, the rural rate is stated to have been 9.14. In reference to the higher town rate in Tasmania, it has been alleged that it has been caused by the influx of sick people into the towns for the sake of better medical treatment, and by the pauperism congregating there. What proportion of the excess is due to the first cause, I have no means of ascertaining; but I am willing to admit that the greater age of many of the paupers in Hobart Town and Launceston must operate unfavourably in the comparison. Of the deaths 18 per cent. in Victoria took place in hospitals; in Tasmania, only 10.84 per cent. In the insular districts of Scotland, where the mortality is lowest, the death-rate ranges from about 13 to 18 per 1,000.

A better criterion of the relative healthiness of town and

country is furnished by table H, showing the deaths at each age to 1,000 persons at the corresponding ages, the numbers living being calculated on the supposition that the proportions continued the same as they were at the date of the last census. The result may be most clearly exhibited as follows:—

Ages.	Hobart.	Launceston.	Urban Districts.	Rural Districts.
0-1	133·52	155·37	140·77	70·32
	31·63	39·75	34·42	12·00
	8·14	7·83	8·04	5·34
	38·33	44·12	40·26	19·50
5-10	$2.95 \\ 19.76 \\ 20.78$	3·47	3·12	2·25
0-10		23·39	20·95	10·94
All others		23·20	21·57	8·51

The difference as regards infants under 1 year, between the mortality in Launceston and Hobart Registration Districts was 21.85 per 1,000; between Launceston and the Rural Districts, 85.05; between Hobart and the Rural Districts, 63.20; and between the Urban Districts taken together, and the Rural, 70.45 per 1,000. The rate in the Launceston District was more than double that of the country districts. The mortality at all ages, except 2-5, was greater in the Launceston than in the Hobart District. Between 1 and 2 the Launceston rate was more than treble the country rate. Between 0 and 5 it was more than double. Between 0 and 10 it was also more than double. For all other ages it was nearly treble.

Taking the whole country, at the age 0-1, 95.66 died in every 1,000 at the same age living; at 1-2, 19.70; at 0-5, 26.78; at 5-10, 2.57; at 0-10, 14.56; at all other ages, 13.46. In Victoria, in 1873, the deaths (taking the mean between males and females, with the former reservation) at 0-5 were 39.36, being 12.58 more than in Tasmania. At 5-10 the Victorian rate was about 5.31, against our 2.57. The mean of males and females for 34 years (1838-71) in England was—0-5, 67.6; 5-10, 8.6. The mean of males and females in Scotland for 1870 was—0-1, 140.93; 1-2, 66.96; 0-5, 58.88; 5-10, 10.13. That means that about 45 in every thousand infants are saved in Tasmania, as compared with Scotland, in the first year of life; 47 in the second; 32 children under 5 years; and between 7 and 8 children from 5 to 10; or, to put it in another way, taking Tasmania as the standard, the excess of mortality in Scotland was nearly as follows:—0-1, 47 per cent.; 1-2, 240 per cent.; 0-5, 120 per cent.; 5-10, 294 per cent.

To make the returns as complete as possible, I have constructed a table (L) showing the percentage of the population at certain ages in Tasmania, Victoria, New South Wales, South Australia, Queensland, England and Wales, and Scotland. This table should be read in connection with some of the other comparative tables. From it we find that at the age 0-1, the proportion was smallest in Tasmania (2.91),largest in Queensland (3.86). It was larger in Scotland than in England, and in the four mainland colonies than in Scotland. At 1-2, Scotland had the smallest proportion (2.60), Tasmania next (2.64), then England (2.71), then the continental colonies. At 2-3, 3-4, and 4-5, Scotland had more than England, the Colonies more than the former. the Tasmanian census those ages were not given separately. At 0-5 England had the fewest children; Scotland came next; then Tasmania; then the other members of the group. 5-10, England had the fewest; then came Scotland, Queensland, New South Wales, Victoria, Tasmania, South Australia. Children of all ages up to 10 were least numerous in England, then in ascending order came Scotland, Tasmania, Queensland, New South Wales, Victoria, South Australia. At all other ages, the order was-South Australia, Victoria, New South Wales, Queensland, Tasmania, Scotland, England. In these persons of 60 and upwards are shown separately; the proportions being as follows:—Queensland, 1.63; Victoria, 2.75; South Australia, 3.48; New South Wales, 3.97; Tasmania, 6.64; England and Wales, 7.44; Scotland, 8.11. In the Colonies the preponderance of old people is therefore in Tasmania; but still the proportion is less than in England or Scotland. figures relating to England and Wales in this table are taken from the census of 1861, that for 1871 in its complete state not having reached me. There may have been some variations in the proportions during the ten years, but probably not to any considerable extent.

A large number of visitors resort to this colony every summer to recruit their health, allured partly by the coolness of its temperature, partly by the beauty of the scenery, and partly, also, by the reputation for salubrity which Tasmania has justly acquired. To preserve the latter is, therefore, a matter not merely of sentiment, in order to gratify our national pride, but of material importance, affecting our pockets; and I shall be glad if the facts which are here presented shall contribute in any degree to the adoption of efficient means of removing all those causes of disease which are under our

control.

I am sorry that I have not been able to include New Zealand in these tables. Having the smallest general death

rate of all the colonies, it would have been interesting to compare the mortality at different ages with that of the other colonies; but the practice which prevailed there until very lately of adding the still-births to the births and deaths, would have vitiated any comparison. The ratio of deaths of infants under 1 year to births in 1873 is stated to have been 10.81 per cent. The per centage of deaths for that year was:

Under	1 year	.33:31
	1-Ž	
	0-5	48.42
	5-10	. 4.69
	0-10	.53.11
All oth	er ages	.46.89

It will be observed that the proportions for children are very much higher than in Tasmania. The Registrar-General says: "Of the total deaths in 1873, 48:42 per cent. were of children under 5 years of age. This rate at first appears exceedingly high when compared with the English rate, which was, in 1871, 41.1 per cent. of the deaths; but in making the comparison it must not be overlooked that there is in England a very much larger proportion of the population over 55 years of age than there is in New Zealand, and that the deaths of persons above that age were, in England, in 1870, 27.3 per cent. of the total deaths; whereas in New Zealand such deaths only comprised 11:41 per cent. of the whole number;" and he goes on to show that if the deaths of persons over 55 years had been in the same proportion as in England, namely, 27.3 per cent., the deaths of children under 5 would have been at the rate of 39.74 per cent, only. This quotation suggests the question, whether the smaller proportion of children's deaths in Tasmania may not be caused by a deficiency in the number of children living in proportion to persons of other ages, as compared with other countries; and this supposition seems to gain probability from the fact that in Tasmania the birth-rate is lower than in any of the Colonies, in England, or Scotland, the average rate (1869-73) being— Queensland (1869-72), 42.5 per 1,000; New Zealand, 40.67;* New South Wales, 39.45; South Australia, 37.65; Victoria, 36.93; Tasmania, 29.52; England, 35.2; Scotland, 35.10—the last two rates being for the 10 years, 1860-9. But the figures already given, showing the death-rate in relation to the numbers living at each age, prove that such a supposition will not account for the lower mortality among children which prevails in this island; and table L also shows that the proportion of children living in Tasmania does not differ materially from that which is found to exist in the other countries with which

^{*} Including still-births until 1873, in which year the rate was 38.99.

I have compared it. After a careful consideration of objections such as we might expect one who was arguing on the opposite side to urge, I can come to no other conclusion than that the advantage which our Colony possesses in regard to the rate of mortality, especially that of infants and children, is chiefly due to the remarkable salubrity of its climate; and if the large amount of labour which has been expended on the construction of these tables has the effect of bringing this fact into greater prominence, I shall feel that it has not been bestowed in vain.

[A.]

TABLE SHOWING THE PERCENTAGE IN THE DIFFERENT AUSTRALIAN COLONIES WHICH THE DEATHS OF INFANTS UNDER ONE YEAR OF AGE BORE TO THE TOTAL NUMBER OF BIRTHS DURING THE YEARS 1869-73; ALSO, THE BIRTH-RATE PER 1,000 OF POPULATION.

NAME OF COLONY.	1869.	1870.	1871.	1872.	1873.	AVERAGE FOR THE FIVE YRS.
Victoria	12.61	11.80	11.37	12.18	11.32	11.86
New South Wales	9.65	9.50	8.99	10.45	9.26	9.57
South Australia	13.06	14.52	13.57	16.11	13.93	14.24
Queensland	11:34	10.72	9.91	10.98	12.25	11.07
Tasmania	10.11	9.76	8.51	10.14	8.73	9.45

Ŧ	RETE	H-R	ATE DED	1.000	OF P	OPULATION.	

Year.	Tas- mania.	Victoria	N. S. Wales.	South Austral.	Queens- land.	New Zealand	Eng- land.	Scot- land.
1869	28.78	37.36	40.46	38.60	42.8	41.90		_
1870	30.31	38:25	39.80	38.64	43.5	42.32	_	_
1871	29.99	37.07	39.57	38.15	43.2	40.64	_	
1872	29.27	35.95	38:37	36.96	40.7	39.50	-	_
1873	29.24	36.01	39.04	35.88		38-99*	_	_
1860-9	_	_	_	. —	_	_	35.2	35.10
Sum	147:59	184.64	197:24	188.23	170.2	203:35		
Mean	29.52	36.93	39.45	37.65	42.5	40.67	35.2	35.10

^{*} Previous to 1873 still-births were included.

118

[B.]

TABLE

SHOWING THE PERCENTAGE, IN THE DIFFERENT AUSTRALIAN COLONIES, WHICH THE DEATHS OF CHILDREN UNDER 10 YEARS OF AGE BORE TO THE TOTAL NUMBER OF DEATHS, DURING THE 5 YEARS, 1869-73.

			1869	0.					1870	0.					18	871.					187	2.					1878	3.			Ave	erage	for	the 5	5 Yea	ars.	Tot Aver	
Name of Colony.	Under 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 10	Under 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 10	Under 1	1 to 2	2 to 3	3 to 4	4 to 5		Under 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 10	Under 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 10	Under 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 10	Under 5	Under10
Victoria	30.89	9.71	13.20	2.25	1.56	5.25	30.74	7.95	2.73	1.84	1.43	4.68	31.40	8.83	2.73	1.74	1.46	4.08	30.78	3 8 8 5	2.86	2.09	1.81	4.61	27.66	7.67	3.01	2.42	1.88	5.25	30.28	8.60	2.91	2.07	1.63	4.77	45.50	50°27
N.S.W	27.77	9.40	3.94	1.78	1.54	3.60	28.47	8.55	2.85	1.80	1.06	3.54	28.28	8.00	3.15	1.65	1.12	2 3.15	28.33	3 8.52	3.25	1.66	1.12	3.32	26.08	7.15	2.50	1.59	1.09	3.68	27.79	8.32	3 14	1.70	1.19	3.46	42.14	45.60
S. Australia																																						
Queensland.	29.37	11.07	2.95	1.83	0.78	2.17	31.96	7.84	3.83	1.82	1.09	2.49	28.90	7.68	3.75	2.58	1.46	2.63	. 29.8€	9.19	3.46	2.43	1.14	2.79	31.16	9.29	4.18	2.44	1.64	3.73	30.25	9.01	3.63	2.22	1.22	2.76	46.33	49.09
Tasmania	21.65	3.44	1.95	0.97	1.05	3.30	21.22	3.28	1.85	1.42	1.35	3.21	19.19	3.32	1.55	1.33	0.59	2.07	21.69	4.32	2.19	0.99	0.71	2.34	17.69	4.46	1.53	1.40	1.26	2.86	20.29	3.76	1.81	1.23	0.99	12 76	28.08	30.84

[C.]

TABLE

SHOWING THE RATIO IN THE DIFFERENT AUSTRALIAN COLONIES WHICH THE DEATHS OF CHILDREN UNDER 10 YEARS OF AGE BORE TO EACH 1,000 OF THE TOTAL POPULATION DURING THE 5 YEARS, 1869-73.

			1869).					1870						18	71.					1872						1873	•			Aver	age	for t	he 5	Yea	rs.	Tot. Avera	
Name of Colony.	Under 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 10	Under 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 10	Under 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 10	Under 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 10	Under 1	1 to 2	2 to 3		4 to 5	5 to 10	Under 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 10	Under 5	Under10
												-						.55					.00	.05	4.00	7.70		.00	.00	.77	4.20	1.94	.40	.20	-9.4	•60	R-50	7-97
Victoria	4.71	1.48	49	.34	.24	.80	4.21	1.17	'40	.27	21	-69	4.51	1.18	.37	*23	•20		1	. (- 1		- 1			1				1	- 6		- 1				- (
N.S.W	3.83	1.30	·54	.24	·21	•50	3.71	1.11	.37	.23	14	*46	3.49	.99	.39	-20	.14	•39																				
S. Australia							5.61											*43																				
Queensland.		1.81	-48	30	.13	.35	4.55	1.12	•55	-26	.16	*35	4.12	1.10	•54	*37	.21	-38							4.78													
Tasmania		•46	26	•13	.14	•44	2.96	.46	-26	.20	19	•45	2:55	-44	-21	18	.08	-27	2.97	•59	.30	•14	.10	-32	2.55	•64	.22	·21	•18	*41	2.79	•52	•25	•17	•14	.38	3.87	4.25

[D.] NUMBER OF DEATHS IN AUSTRALIAN COLONIES.

VICTORIA. AGE AT DEATH.														
				AG	E AT	DEAT	н.							
YEARS.	0-1	1-2	2-3	3-4	4-5	0—5	510	0—10	All Ages.	Population				
1869	3284	1032	340	239	166	5061	558	5619	10,630	696,942				
1870	3203	829	285	192	149	4658	488	5146	10,420	709,839				
1871	3114	876	271	173	145	4579	405	4984	9,918	738,725				
1872	3334	959	310	226	196	5025	499	5524	10,831	760,991				
1873	3181	883	346	278	216	4904	604	5508	11,501	780,362				
				NEW	SO	UTH	WAL	ES.						
1869	1858	629	264	119	103	2973	241	3214	6691	485,356				
1870	1867	561	187	118	70	2803	232	3035	6558	502,861				
1871	1812	513	202	106	72	2705	202	2907	6407	519,182				
1872	2116	636	243	124	84	3203	248	3451	7468	539,190				
1873	1985	544	191	121	83	2924	280	3204	7611	560,275				
		1	1	SOU	TH.	AUSI	RALI	A.						
1869	911	127	61	38	58	1195	80	1275	2211	181,146				
1870	1031	223	74	39	58	1425	93	1518	2544	183,797				
1871	961	165	62	31	59	1278	81	1358	2378	185,626				
1872	1145	258	100	43	75	1621	121	1742	2896	192,223				
1873	990	185	70	45	53	1343	89	1432	2631	198,075				
				(QUEF	ENSL	AND.							
1869	528	199	53	33	14	827	39	866	1761	109,897				
1870	526	129	63	30	18	766	41	807	1645	115,567				
1871	516	137	67	46	26	792	47	839	1785	125,146				
1872	578	178	67	47	22	892	54	946	1936	133,553				
1873	701	209	94	55	37	1096	84	1180	2250	146,690				

[E.] TASMANIA.

PÉRCENTAGE OF DEATHS OF INFANTS under one year to Births in the Registration Districts of Hobart and Launceston, as distinguished from the Rural Districts, in the five years 1869-73.

LOCALITY.	1869.	1870.	1871.	1872.	1873.	Average for the 5 years.
The whole Colony	10.11	9.76	8.51	10.14	8.73	9.45
Hobart Registration District	13.00	12.71	11.46	15.60	11.86	12.93
Launceston ditto	14.81	10.99	11.62	12.75	14.94	13.02
Urban Districts	13.63	12.02	11:30	14.56	12.95	12.89
Extra-urban or Rural ditto	7.65	8.28	6.69	7.52	6:28	7.28

[F.]
PERCENTAGE OF DEATHS at each age to 100 Deaths at all ages : average of five
years, 1869-73.

				AGE	AT I	EATI				ij
LOCALITY.	0-1	1-3	2—3	3-4	4-5	0-2	5-10	0-10	All other Ages.	TOTAL.
The whole Colony	20.25	3.78	1.81	1.24	1.00	28.08	2.75	30.13	69.87	100.00
Hobart Registration District	18.14	3.66	1.33	1.03	0.92	25.08	2.13	29.21	72.79	100.00
Launceston ditto	19:07	4.37	1.18	0.69	0.97	26.28	2.15	28.43	71.57	100.00
Urban Districts	18.47	3.91	1.28	0.91	0.93	25.20	2.14	27.64	72:36	100.00
Extra-urban or Rural ditto	22.70	3.60	2.55	1.70	1.09	31.64	3.60	35.24	64.76	100.00

PROPORTION OF DEATHS at each age to 1000 persons living at all ages: average of five years, 1869-73.

				AGE	AT I	EATU	ι.			ıi.
LOCALITY.	0-1	1-2	2-3	3.4	4-5	0-5	5—10	0-10	All other Ages.	TOTAL.
The whole Colony	2.79	0.52	0.25	0.17	0.14	3.87	0.38	4.25	9.53	13.78
Hobart Registration District	3.72	0.75	0.27	0.21	0.19	5.14	0.43	5.28	14.92	20.49
Launceston ditto	4.43	1.02	0.27	0.16	0.53	6.11	0.50	6.61	16.64	23.26
Urban Districts	3.95	0.84	0.27	0.19	0.50	5.45	0.46	5.91	15.48	21:39
Extra-urban or Rural ditto	2.10	0.33	0.23	0.16	0.10	2.92	0.33	3.25	5.88	9.24

[H.]

PROPORTION OF DEATHS at each Age to 1,000 persons at each age living at the end of the year: average of 5 years, 1869-73.

					AGE	AT D	EATH.			
LOCALITY.	0—1	1-2	2—5	3-4	4-5	0-2	5—10	0-10	All other Ages.	All ages.
The whole Colony	95.66	19.70	6.28	_		26.78	2.57	14.56	13:46	13.78
Hobart Regis. District	133.52	31.63	8.14	=	_	38.33	2.95	19.76	20.78	20.49
Launceston ditto	155.37	39.75	7.83	_	_	44.12	3.47	23.30	23.20	23.26
Urban Districts	140 77	34.42	8.04	_	_	40.56	3.15	20.95	21.57	21.39
Extra-urban or rural ditto	70.32	12.00	5'34	-	-	19.50	2.25	10.94	8.21	9.24

[I.]

POPULATION AT EACH AGE, according to the proportions obtaining at the last Census: average of 5 years, 1869-73.

				J		,,				
					AGE	AT DE	EATH.			
LOCALITY.	0—1	1-2	2-2	3-4	4—5	0-5	5—10	0-10	All other Ages.	All ages
The whole Colony	2957	2681	9010	_	_	14,649	14,946	29,595	72,143	101,738
Hobart Regis. District	713	607	2113	=	_	3,433	3,792	7,225	18,385	25,610
Launceston ditto	354	317	1047	-		1,718	1,788	3,506	8,895	12,401
Urban Districts	1067	924	3160	_	_	5,151	5,580	10,731	27,280	38,011
Extra-urban or rural ditto	1890	1757	5850	-	-	9,498	9,366	18,864	44,863	63,727

[K.)

PROPORTION OF PERSONS AT EACH AGE to 100 persons at all ages, as above.

					Age	AT D	EATH.			
Locality.	0—1	1-2	25	3-4	4-5	05	5—10	0—10	All other Ages.	All ages
The whole Colony	2.91	2.63	8.86	_	_	14.40	14.69	29.09	70.91	100.00
Hobart Regis. District	2.78	2:37	8.25	_	_	13.40	14.81	28.21	71.79	100.00
Launceston ditto	2.85	2.56	8.44	-	_	13.85	14.42	28.27	71.73	100.00
Urban Districts	2.81	1.46	8.34	-	_	13.62	14.61	28:24	71.76	100.CO
Extra-urban or rural ditto	2.96	2.76	9.18	-	-	14.90	14.70	29.60	70.40	100.00

PROPORTION OF POPULATION AT EACH AGE, PER CENT. TO TOTAL POPULATION, ACCORDING TO CENSUS OF 1871.

						AGE						
Countries.	0—1	1-2	2-3	2—5	3-4	4—5	0—5	5—10	0-10	All	60 and upwards.	
Tasmania (February, 1870)	2.91	2.63	_	8.86		_	14.40	14.69	29:09	70.91	6.64	
Victoria	3.34	3.02	3.28	—	3.25	3.05	15.94	14.55	30.39	69.61	2.75	COL
New South Wales	3.59	3.16	3.25	:	3.27	2.99	16.26	13.99	30.25	69.75	3.97	
South Australia	3.38	3.31	3.52		3.52	3.21	16.94	15:37	32:31	67.69	3.48	
Queensland	3.86	3.45	3.60	_	3.40	3.32	17:63	12.16	29.79	70.21	1.63	
England and Wales (1861)	2.96	2.71	2.67	_	2.57	2.55	13.46	11.68	25.14	74.86	7.44	
Scotland	3.00	2.60	2.70		2.66	2.58	13.54	12.05	25.59	74.41	8.11	

Note.—The calculations have been made on the whole population, including those persons whose ages were "unspecified."

128

NUMBER OF BIRTHS AND DEATHS OF INFANTS UNDER ONE YEAR IN TASMANIA.

		В	IRTH	S.			D	EATH	S.	
LOCALITY.	1869	0281	1871	1872	1873	1869	1870	1871	1872	1873
The whole Colony	2859	3054	3053	3013	3048	289	298	260	306	266
Hobart Regis. District	769	724	773	718	725	100	92	86	112	86
Launceston ditto	405	482	439	408	395	60	53	51	52	59
Urban Districts	1174	1206	1212	1126	1120	160	145	137	164	145
Extra-urban or Rural ditto	1685	1848	1841	1887	1928	129	153	123	142	121

[N.] NUMBER OF DEATHS.—THE WHOLE COLONY.

77				1	AGE 2	ΔT DI	EATH.				Population
Year.	0-1	1-2	2-3	3-4	4-5	05	5—10	0-10	All other Ages.	All Ages.	at all Ages.
			-								
1869	289	46	26	13	14	388	44	432	903	1335	99,000*
1870	298	46	26	20	19	409	45	454	950	1404	100,765
1871	260	45	21	18	8	352	28	380	975	1355	101,785
1872	306	61	31	14	10	422	33	455	956	1411	102,925
1873	266	67	23	22	19	397	43	440	1064	1504	104,217
Sum	1419	265	127	87	70	1968	193	2161	4848	7009	508,692
Mean.	283.8	53.0	25.4	17.4	14.0	393.6	38.6	$432^{\circ}2$	969.6	1401.8	101,738

URBAN DISTRICTS (HOBART AND LAUNCESTON).

	010	DALLY .	213116	1015	(IIOD2	IIII ZINI	11210.	WCESTOI.	1.							
37		AGE AT DEATH.														
Year.	7	-2	-3	4	, č	10	-10	-10	All other Ages.	All Ages.						
	0	=	.2	က်	4	0	7.0	0	754	A S.						
1869	160	27	14	5	4	210	20	230	537	767						
1870	145	24	8	9	10	196	11	207	567	774						
1871	137	28	10	6	7	188	13	201	604	805						
1872	164	44	9	9	5	231	13	244	576	820						
1873	145	36	11	8	12	212	30	242	658	900						
Sum	751	159	52	37	38	1037	87	1124	2942	4066						
Mean	150.2	31.8	10.4	7.4	7.6	207.4	17:4	224.8	588.4	813.2						

^{*} Assumed as the population on 31st December, 1869, the number by census on 7th February, 1870, being 99,328.

125

HOBART REGISTRATION DISTRICT.

Years.				A G	E AT	DEAT	H.				Population.
2 CHILD.	0-1	1-2	2-3	3-4	4-5	0-5	5-10	0-10	All other Ages.	All Ages	
1869	100	15	8	3	2	128	14	142	335	477	24,921
1870	92	14	5	7	6	124	8	132	372	504	25,365
1871	86	19	6	4	4	119	7	126	388	514	25,622.
1872	112	25	8	8	4	157	8	165	380	545	25,909
1873	86	23	8	5	8	130	19	149	435	584	26,234
Sum	476	96	35	27	24	658	56	714	1910	2624	128,051
Mean.	95.2	19.2	7.0	5.4	4.8	131.6	11.2	142.8	382.0	524.8	25.610

LAUNCESTON REGISTRATION DISTRICT.

77				Population.							
Years.	0-1	1-2	2-3	3-4	4-5	0-5	5-10	0-10	All other Ages,	All Ages	T opulation.
1869	60	12	6	2	2	82	6	88	202	290	12,100
1870 1871	53 51	10 9	3 4	$\frac{2}{2}$	4 3	72 69	3 6	75 75	195 216	270 291	12,275 12,399
1872 1873	52 59	19 13	1 3	3	1 4	74 82	5 11	79 93	196 223	316	12,538 12,695
Sum	275	63	17	10	14	379	31	410	1032	1442	62,007
Mean.	55.0	12.6	3.4	3.4	2.8	75.8	6.2	82.0	206.4	288.4	12,401

EXTRA-URBAN OR RURAL DISTRICTS.

Years.		Population.									
	0-1	1-2	2-3	3-4	4-5	0-5	5-10	0-10	All other Ages.	All Ages	- 1
1869	129	19	12	8	10	178	24	202	366	568	61,979
1870	153	22	18	11	9	213	34	247	383	630	63,125
1871	123	17	11	12	1	164	15	179	371	550	63,764
1872	142	17	22	5	5	191	20	211	380	591	64,478
1873	121	31	12	14	7	185	13	198	406	604	65,288
Sum	668	106	75	50	32	931	106	1037	1906	2943	318,634
Mean.	133.6	21.2	15.0	10.0	6.4	186.2	21.2	207.4	381.2	588.6	63,727

[0.]
DEATHS IN TASMANIA FROM TYPHOID AND TYPHUS
FEVER AND DIPHTHERIA.

TYPHOID AND TYPHUS FEVE	DIPHTHERIA.			
	1874.	1875.*	1874.	1875.*
Bothwell				
		2		6
BrightonCampbell Town		3		Ĭ
Clarence				_
Deloraine			ï	2
Emu Bay	1	3		-
Esperance	-			
Fingal	1	i		
Franklin	1	1		4
	_	1	• • • •	1
George Town			• • • •	1
GlamorganGordon			• • • •	T
			•••	1
Green Ponds	• • • •			
Hamilton	•••	7.0	9 8	-
Hobart	4	13	8	17
Horton				
Kingston			1	
Launceston	3	1	12	5
Longford	***		3	1
Morven				
New Norfolk	1		1	1
Oatlands			2	3
Port Cygnet				
Port Sorell		1		
Ralph's Bay				
Richmond	4			1
Ringarooma				
Sorell	4	3		6
Spring Bay				
Tasman's Peninsula		1	l	
Ulverstone (forming part of Port Sorell)				1
Victoria				
Westbury	1			
	20	28	37	51

^{*} Hobart to date: Launceston to 30th June: other Districts to 30th September.