

(No. 23.)



1878.

TASMANIA.

HOUSE OF ASSEMBLY.

OFFICER OF HEALTH:

REPORT, NEW TOWN, SANDY BAY, AND WELLINGTON.

Laid upon the Table by the Colonial Treasurer, and ordered by the House to be printed, July 16, 1878.



REPORT for 1877 of the Officer of Health for the Townships of New Town, Sandy Bay, and Wellington Hamlets.

Hobart Town, 20th May, 1878.

SIR,

THROUGHOUT Tasmania during the year 1877 the meteorological conditions generally were adverse to health and life. The deaths registered for the whole island were 2038, out of a population estimated to be on the 31st December, 1877, 107,104, of which 56,523 were males, 50,581 females. The death-rate, however, must be calculated on the mean of the year, which was 56,078 males, 50,216 females, total 106,294, and would be about $19\frac{1}{2}$ per 1000 per annum. This is greatly in excess of any year since the census was last taken, except 1875, when the death-rate was about 20 per 1000. The total population on the 7th February, 1870, was 99,328,—males 52,853, females 46,475. In the following Table the deaths and estimated population of each of the 7 years 1870-1876, is given to contrast with the same for 1877 :—

TABLE 1.

<i>Year.</i>	<i>Deaths.</i>	<i>Estimated Population on 31st December.</i>	<i>Males.</i>	<i>Females.</i>
1870.....	1404	100,765	53,464	47,301
1871.....	1355	101,785	53,911	47,874
1872.....	1411	102,925	54,418	48,507
1873.....	1504	104,217	55,368	48,849
1874.....	1689	104,176	55,117	49,059
1875.....	2078	103,663	54,643	49,020
1876.....	1730	105,484	55,633	49,851
1877.....	2038	107,104	56,523	50,581

The accomplished Statistician of the Government (Mr. E. C. Nowell) in his Annual Reports so thoroughly elucidates the vital statistics of the whole island, and the increasing proportion of deaths from those diseases which are admitted to be capable of control by efficient sanitation, that I need not dwell further on this branch of my subject.

As I stated in my Report for 1876, a detailed comparative report of deaths to population for the Townships of New Town, Sandy Bay, and Wellington, apart from those of the Hobart Town Registration District, cannot be given. In the Table (No. 2) following the deaths actually occurring during each month, irrespective of the time when registered, are given :—

TABLE 2.

<i>Month.</i>	<i>Total Deaths Hobart Town Registration District.</i>	<i>Deviation from Average of 20 Years.</i>	<i>City Deaths.</i>	<i>New Town Deaths.</i>	<i>Sandy Bay Deaths.</i>	<i>Wellington Deaths.</i>
January	78	+27 $\frac{1}{2}$	55	5	3	3
February	64	+12 $\frac{1}{2}$	32	7	2	4
March	71	+15 $\frac{1}{2}$	48	10	4	1
April	68	+23 $\frac{1}{2}$	50	7	2	3
May	57	+12 $\frac{1}{2}$	41	8	0	1
June	44	-1 $\frac{1}{2}$	21	11	1	6
July	76	+22 $\frac{1}{2}$	47	13	0	6
August	72	+25 $\frac{1}{2}$	43	12	0	10
September	60	+17	32	6	2	9
October	54	+7 $\frac{1}{2}$	28	12	0	9
November	56	+15 $\frac{1}{2}$	33	6	3	5
December.....	60	+15 $\frac{1}{2}$	33	8	0	3
TOTALS.....	760	—	463	105	17	60

It thus appears that 115 of the deaths registered in the Hobart Town District occurred outside of the city and the three township boundaries, or were from Country Registration Districts, or of visitors to Hobart Town. The 463 deaths of actual citizens, calculated upon a population of about 20,000 persons, is 23 per thousand per annum, being about the death-rate of all England and Wales, and nearly the same as that of the British Metropolis. Due consideration, however, must be given to the differences existing between the members living in the various groups of ages, which tells to the disadvantage of the death-rate for Hobart City. Nevertheless, such a high death-rate in a city so advantageously and admirably located in such a genial climate gives indisputable evidence that nuisances injurious to public health must abound, and could be removed were the old Roman maxim, that "public health should take precedence of all other laws," the ruling motive with the authorities who are responsible for the same. No expenditure required to make this community, in proportion to its elementary constituents of sexes and ages, one of the healthiest in the world would equal in amount the pecuniary loss entailed by its excessive amount of disease and death without regarding the large amount of human suffering entailed by so abnormal a proportion of sickness and mortality, and the impairment of the physical health of the survivors. The large proportion of deaths in the Townships of New Town and Wellington compared with that of Sandy Bay will strike all who examine the figures in the foregoing table; it arises, however, in great part owing to the existence of the male and female Invalid Asylums in New Town, and the male Invalid and Lunatic Asylum in Wellington, the greater proportion of the deaths being in those establishments. In the 3rd Table the number of deaths in each month in the five classes of disease, especially naming those in the "Miasmatic Order" of the Zymotic Class, which are more particularly connected with nuisances capable of abatement by good sanitary laws and management, are given:—

TABLE 3.

CLASS.	ORDER.	DISEASE.	JANUARY.	FEBRUARY.	MARCH.	APRIL.	MAY.	JUNE.	JULY.	AUGUST.	SEPTEMBER.	OCTOBER.	NOVEMBER.	DECEMBER.	TOTAL.	
ZYMOTIC.	Miasmatic.	Scarlatina	9	15	13	11	4	1	1	3	2	0	1	0	60	
		Diphtheria.....	3	1	0	2	0	1	1	1	0	1	1	2	1	13
		Quinsy .....	..	..	..	1	..	..	2	..	..	..	..	..	..	3
		Croup.....	3	..	1	..	..	..	..	1	3	..	1	1	..	10
		Whooping Cough..	..	..	..	..	..	..	..	..	..	1	..	2	..	3
		Typhoid Fever	1	1	1	1	4	..	..	2	2	..	..	2	1	15
		Erysipelas	2	1	..	..	..	..	1	2	1	..	..	..	..	7
		Metria	1	..	1	..	..	..	..	..	..	..	..	..	..	2
		Catarrh, &c. ....	..	..	..	2	..	..	1	..	..	..	..	..	..	3
		Dysentery	1	..	..	..	..	..	..	..	..	..	..	..	..	1
		Diarrhoea	4	7	4	6	2	..	..	..	2	1	..	..	..	26
		Cholera .....	..	2	..	..	..	..	..	..	..	..	..	..	..	2
		Other Zymotic ....	..	..	..	..	2	1	1	..	..	..	..	..	..	4
		Enthetic .....	..	..	..	..	..	..	..	..	..	..	1	1	1	3
		Dietic .....	..	..	..	..	..	..	..	2	..	..	2	1	1	6
TOTALS			24	27	20	23	12	7	10	11	5	5	10	4	158	
Constitutional			13	4	10	10	9	6	5	13	8	4	6	9	97	
Local.....			27	23	30	22	20	15	38	31	28	27	26	35	322	
Developmental			12	10	8	12	15	14	20	15	13	16	9	11	155	
Violent.....			2	0	3	1	1	2	3	2	6	2	5	1	28	
TOTALS.....			78	64	71	68	57	44	76	72	60	54	56	60	760	

In Table 4 the number of deaths in each month in eight groups of ages are given:—

TABLE 4.

Months.	Under 1.	1 to 5.	5 to 10.	10 to 15.	15 to 20.	Total under 20.	20 to 60.	60 and above.	Total at all Ages.
January.....	20	11	3	2	5	41	24	13	78
February.....	13	7	9	3	4	36	12	16	64
March.....	18	10	6	2	1	37	17	17	71
April.....	11	11	8	2	2	34	16	18	68
May.....	11	2	2	4	1	20	15	22	57
June.....	6	2	2	0	0	10	9	25	44
July.....	10	3	3	0	5	21	17	38	76
August.....	6	6	2	3	4	21	21	30	72
September.....	11	4	2	0	1	18	14	28	60
October.....	6	3	2	0	2	13	16	25	54
November.....	8	5	1	0	4	18	18	20	56
December.....	11	2	0	1	2	16	18	26	60
TOTALS 1877....	131	66	40	17	31	285	197	278	760
TOTALS 1876....	98	48	26	11	20	203	183	227	613

Every month in the year, except June, is thus shown to have exceeded the 20 years' average; and every group of ages had a greater number of deaths than in 1876. The increase in deaths at all ages above 60 after April shows the effect of the removal from Tasman's Peninsula of the invalids, lunatics, and prisoners on the death-rate of the Hobart Town Registration District. Table 3 shows that, out of a total of 760 deaths from all causes, 158 were from diseases of the Zymotic Class, being the enormous proportion of about 21 per cent. of the whole, while the average rate of eighteen large English towns is only about 4½. Moreover in the English towns there are deaths from diseases in the Zymotic Class which hitherto have not afflicted Tasmania, to wit, small-pox, ague, and, I think I may say, typhus fever, since its last importation by an emigrant ship many years ago. Nevertheless it must be noted that the epidemic of scarlet fever caused 60 out of the 158 deaths, and that dysentery, diarrhoea, and cholera only caused 29 deaths. Before the improved water supply of the city and its suburbs took place those three bowel affections had a much larger share of the total deaths, *i.e.*, 8 per cent. of the total deaths, while last year they were only about half that rate. Fortunately the greater part of the population do not obtain their potable water from wells, which in a soil so saturated with excrementitious matters would inevitably be polluted to a dangerous extent. Still, where water is in the habit of being stored in tanks, casks, &c., whether from the rain water falling on roofs or the Corporation supply, great negligence very generally exists in cleansing the receptacles, as I have often had occasion to demonstrate,—and notably at the public Hospital, which ought to be, but never so far has been, a model of sanitary management, though now giving promise that so desirable a result will ere long be achieved.

The relative registered proportion of deaths for Hobart Town, Launceston, and the country districts for last year and the two previous years is as follows:—

	1877.	1876.	1875.
Hobart Town Registration District.....	759	605	753
Launceston ditto.....	356	337	336
Country ditto.....	923	788	989
	<u>2038</u>	<u>1730</u>	<u>2078</u>

It is believed that the population of the Launceston Registration District has increased in a very much greater proportion than that of Hobart Town, yet the mortality has increased to a comparatively trifling extent, varying but little during the three years. The Launceston water supply is on a par with that of Hobart Town, though its local and climatic advantages are not so great. To improvements in sewerage this happy result alluded to has been, I doubt not with justice, mainly attributed, and deserves the strictest consideration by the Hobart Town authorities.

On the unsanitary conditions existing throughout the Hobart Town Registration District the observations I made in my Report for 1876 are nearly as applicable for the year 1877. No general measures of improvement have been adopted. By private remonstrances and persuasions I have succeeded in abating many local nuisances. The adoption of the dry-ash system of dealing with human excrement is slowly progressing; but on the other hand the water-closet system is being more extended, while efficient sewers are not more provided. Daily proofs come to my knowledge of the evils arising from the water-closet system in disseminating sewer gases in households. I

examined the trap of one removed a few days ago from one of the principal dwellings of the city, where offensive odours had permeated several rooms. The trap was of metal (which is condemned by the highest sanitary authorities), and was corroded to such an extent as to allow the free escape of the poisonous gases under the rooms of the house. Many water-closets are only connected with covered drains for short distances and then empty into sluggish open ditch drains, nay, even into street gutters, having a long course before they reach the city rivulet or harbour. In ordinary weather even the greater part of the fluids of the sewage evaporates and pollutes the atmosphere, while the solid contents are deposited and undergo putrefaction, still further augmenting the impurity of the air to be breathed. I am also frequently finding privy pits flowing into ditch drains, in defiance of Clause 227 of the Police Act of 1865. Ditch drains are rarely cleaned out, and even when they are, the common practice is to heap the contents by the side, and there leave the filthy mud to fester and evaporate. It is only a heavy flood of rain, indeed, that ever flushes them effectually. It appears to me that by Clause 227 of the Police Act of 1865, that provides "that a privy shall be so constructed as to effectually prevent the escape of the contents thereof," that water-closets are illegal, as well as privy-pits flowing into open ditches or closed sewers. The suffering that has arisen from the water-closet system in the highest families in England ought to warn us against perpetuating a process so replete with danger to health and life. No sewer ought to have an unbroken communication with the inside of any human dwelling through baths, lavatories, kitchen, and other sinks and water-closets, but should be efficiently trapped and ventilated outside. It is, however, quite exceptional to find this sanitary axiom enforced. The longer a thoroughly comprehensive system of sewerage is deferred in Hobart city and its suburban townships the greater will be the difficulty and cost of carrying it out, and in the meantime an unnecessary waste of human life and suffering.

Great complaints have been made of the pollution of the New Town rivulet, notwithstanding the Act of 1841 to prevent it. The bone-mill is the worst offender, and the main road for some distance on both sides of the stream drains into it. It was with great regret I found that my suggestion to convey the house sewage of one of the lodges of the Queen's Asylum south instead of north was disregarded. The wide paving of a portion of the road gutter has made no abatement of the nuisance, for the greater part of the sewage is either absorbed or evaporated, and the road-side thereabouts is still offensive to both sight and smell. Should even a heavy downpour of rain make the sewage and the road-washings of horse dung, &c. flow, they will reach and pollute the water of the rivulet above many of the houses on its banks that are dependent upon the stream for their water supply.

The sanitary clauses of the Police Act of 1865 are very defective in many respects; but such as they are, they are habitually violated most extensively. By Clause 226 offensive matters are not to be allowed to be removed except during certain hours of the night, and then only in "cart or carriage having a covering proper for preventing the escape of the contents of such cart, or of the stench thereof;" and yet any day numerous violations of this very proper law can be seen occurring in the streets and roads. Visitors in search of health or pleasure complain bitterly of the many unwholesome sights and smells which meet them in the city and its suburbs.

For more than twenty years I have almost annually warned the Legislature, the Government, and the people of the unprotected state of the great majority of the inhabitants of Tasmania against the possible invasion of small-pox; owing to the neglect of vaccination. The Compulsory Vaccination Act has always been a dead letter, incapable of being enforced, and habitually disregarded by at least nine-tenths of the community. Panics arising from the outbreak of small-pox elsewhere have frequently arisen, and then there has been an outcry for vaccination, and some oft-tried but inefficient measures adopted to meet the demand. The last scare of this kind occurred about the beginning of last year, and public vaccinators were appointed throughout the island to vaccinate gratuitously all applicants. For a short time, as of old, people availed themselves of the opportunity. The alarm, however, soon ceased, and for a long time past so few children have been brought to the vaccinators that practically arm to arm vaccination weekly has been impossible, though there ought to be sufficient children under six months old, as the Tasmanian law requires to be vaccinated, to keep up a regular supply of cases, and provide a stock of good vaccine-lymph from selected vaccinifers to meet any sudden emergency. The English law fixes the age at three months, before the expiry of which children must be vaccinated. The average annual registered births in all Tasmania is about 3000; and the unregistered ones will amount to as many, at least, as the deaths that take place before attaining the age of six months. I understand that about 10,000 vaccinations have been returned by the public vaccinators, but almost without exception of persons above six months old to adults of advanced age. Thus only about one-fifth or one-sixth of the arrears of unvaccinated persons have been presented for the operation. I warned your predecessor that without an amended and workable compulsory Act such would be the case, as it had been under similar circumstances previously, wherever the voluntary action of parents and others had been relied upon. I have watched over the results in this city and its suburban townships carefully, and I think that you will find, on examination of the returns of the Public Vaccinator, that not one child under six months old was brought to him for vaccination; that two only of the age of six months were vaccinated, and that the majority of his cases were above the age of three years, and that the average age of the whole would be about five years.

In Scotland the Compulsory Vaccination Act has been so successfully worked that in the last official report to hand, that for 1875, it is stated that "out of 112,325 children born in 1875, and alive at the age of six months, it appears that 108,096, or 96·235 per cent., were successfully vaccinated as the Act directs; but if account be taken of the 252 insusceptibles known to have been irregularly, but successfully, vaccinated, it seems that 108,348 of those believed to be alive at the age of six months, or 96·459 per cent. of all such children, have received the protection which vaccination confers. In 1211 cases, or in 1·078 per cent. of all children alive at the age of six months, the performance of vaccination had been, on medical authority, postponed. The expediency of a postponement is, for the most part, determined by the presence of some appearance of ill-health on the part of the child submitted for vaccination; and in the great majority of cases such ill-health is connected with the approach of the period of teething, or with some of the skin eruptions which frequently occur during that period. There can be no doubt then that all such postponements might be saved as arise from too long refraining from applying to the vaccinator. Every month (after the third month of life) during which a child is permitted to remain unvaccinated, it probably runs increasing danger from possible exposure to the contagion of small-pox, and until the process of dentition is completed, is less likely to be a fit subject for satisfactory vaccination than if vaccinated at an earlier age. * * * * It would be a great matter to be able to enforce the provisions of the Act at an earlier period than six months, were it merely for the sake of the poor children of these nomads (2575, or 2·293 per cent., of tramps and people constantly removing from place); but it should likewise be remembered that this class constitutes a fruitful source of danger during an epidemy of small-pox to the whole community. We repeat then our opinion, already often expressed in these Reports, that vaccination should in Scotland be made compulsory before the termination of the fourth month of life." * * * The average deaths from small-pox in Scotland for the 10 years—1855-64—preceding the Compulsory Vaccination Act was 541·5; reduced in the ten succeeding years to 365·7, but in 1875 to 15! Of these only 7 were under 5 years of age; none between 5 and 20; but 8 between 20 and 60; all significant facts of the influence of the Compulsory Vaccination Act. The Registrar-General of Scotland concludes his prefatory remarks by saying:—"In this country the Vaccination Act has hitherto been administered without encountering any opposition from the efforts either of associations or of individuals to discredit Jenner's great discovery, and the efforts of the Legislature to make it readily available for the public good."

In the *Lancet* of March 2nd, it is stated that "the weekly returns of the Metropolitan Asylum Hospitals continue to afford evidence of the rapidly increasing prevalence of small-pox in London."

Often before have I urged the example of Scotland on the Government and Legislature of Tasmania, and I conclude my Report with repeating it. The good legislation, effectively administered, which has produced such beneficial results is well worthy of imitation.

I have the honor to be,

Sir,

Your obedient Servant,

E. SWARBRECK HALL.

To the Honorable WILLIAM MOORE, Esq., M.L.C.,
Colonial Secretary of Tasmania.