

EXPENDITURE 1884-5 AND 1885-6, AND ESTIMATED EXPENDITURE,
1886-7—continued.

Heads of Expenditure.	Net Expenditure.		
	1884-5.	1885-6 (Approximate).	1886-7 (Estimated).
Interest:—	£	£	£
On Loans	1,260,279	1,274,204	1,263,231
On Melbourne and Hobson's Bay Railway Debentures	11,627	11,700	9,360
On Post Office Savings Banks Deposits ...	38,630	43,030	48,000
Public Buildings Protection Act	1,071	2,450
	1,310,536	1,330,005	1,323,041
The Royal Mint	20,000	20,000	20,000
Railway Loan Liquidation and Construction Account	88,690	75,500
Miscellaneous Services:—			
Transport	1,834	4,000	4,000
Advertising	5,487	5,351	5,368
Exhibitions	6,252	13,390	18,000
Imperial Pensions	384	400	400
Commissions of Inquiry	2,495	4,600	2,000
Reward for Apprehension of Offenders ...	50	100	300
Friendly Societies	303	410	420
Powder Magazines	1,067	1,315	...
Unforeseen Expenditure	3,544	5,000	5,000
All other	11,199	11,025	9,376
	32,615	45,591	44,864
Grand Total	6,125,741	6,605,901*	6,797,622

* The actual amount expended in 1885-6 was £6,507,919, exclusive of £5,620 expended on Surveys in the Mallee District, to be recouped by lessees.

APPENDIX C.

THE CENTRAL BOARD OF HEALTH.

(By A. P. AKEHURST, Esq., President of the Board.)

OBJECTS AND OPERATIONS OF THE BOARD.

The first Health Act in force in Victoria was applicable only to "populous places," and was passed in 1855. It was followed by the Act No. 264, of which Parts IV., relating to pollution of the River Yarra, and VI., relating to quarantine, are still in force; No. 310, of which the portion relating to cemeteries remains in force; and Nos. 436 and 524, both of which have been repealed.

The existing Act, which has application to the whole colony, was passed in 1883, and by virtue of its provisions a new Board was constituted, consisting of nine members, and Mr. Akehurst, P.M., was appointed as its president.

For some years the laws relating to public health, vaccination, and quarantine were administered directly from the office of the Chief Secretary, but of late the Central Board has been made a distinct department, its president being the official head.

Hitherto no fees have been paid to members, but Parliament is to be asked to provide funds for the purpose of future allowances to each non-salaried member. The president has a salary of £850 per annum, as also has another member (Dr. Shields) as Government Medical Officer. The business of the Board is conducted under the Ministerial control of the Chief Secretary, who is practically the Minister of Health.

The Quarantine Station is at Point Nepean, and there the Health Officer for Port Phillip Heads (£500 and quarters) is stationed. A steam launch under his care is used by the Health and Defence Departments conjointly, and also to ship and receive mails at the Heads from the steam-ships of the P. and O. and Orient lines. A post and telegraph office, and many other conveniences, are to be found at the Quarantine Station. Five large and a number of smaller buildings are kept in constant readiness for use. An excellent model of the establishment, made by Sergeant-Major Porter, was sent by the Board to the Indian and Colonial Exhibition of this year in London.

In the neighbourhood of Williamstown is the Sanatorium, always ready for the reception of persons suffering from small-pox or other dangerous contagious disease. It was built by seventeen municipalities, with Melbourne as the centre, on land purchased for the purpose by the Crown. A caretaker lives in it, and medical assistance, nurses, and provisions are found by the State; the municipalities concerned being liable for all repairs of buildings and fences. A branch railway line runs through the paddock.

The Calf Lymph Dépôt is in the Royal Park, and lymph is cultivated there for the supply of the colony. Two experienced medical men and a veterinary surgeon are connected with the dépôt, and it is under the constant supervision of the Board.

During 1885 lymph was received and distributed as under:—

		Calf.		Humanized.
Received	...	10,315 points	..	1,881 tubes
Issued...	...	9,729 ,,	...	1,861 ,,

Vaccination receives special attention in Victoria, and a percentage of 73·88 in 1884, and 69·45 in 1885, are known to have been vaccinated in infancy. It is believed that by private practitioners and unauthorized persons a further number are successfully vaccinated, but not so registered. There are 160 public vaccinators under the control of the Central Board, and their remuneration and travelling allowances in 1885 amounted to £4,758.

There are now 184 Local Boards of Health in Victoria, most of them having by-laws and sanitary regulations. Each Local Board has a health officer, except in two instances. These gentlemen have salaries ranging from £10 to £300, but the average remuneration is not more than £15. Many of them have one or more inspectors, and a great deal depends on the courage and efficiency of these officials. Constant communication is maintained between the Local Boards and the Central authorities, and the improvement in sanitary matters generally during the last few years is of a marked kind.

Much attention is now being paid to the suppression of adulteration of food, and 114 districts have appointed analysts, the Government Analytical Chemist being, under the Health Act, a final referee in disputed cases. Many prosecutions have taken place during the year with salutary effect.

The Central Board has direct control of quarantine and vaccination matters, and the opening of churches, halls, and public buildings for amusement, &c., and, through the Local Boards, supervision of questions relating to nuisances, infectious diseases, pollution of streams, noxious trades, and other similar matters. It is usually consulted by the Lands Department with regard to cemeteries, and has (with local boards) large powers as to seizing and destroying unwholesome food.

The office staff of the Central Board consists of secretary (£485), inspector and engineer (£415 and travelling expenses), and four clerks (with salaries from £350 to £140). Two health officers at Williamstown are paid £350 and £250

respectively, and the corresponding officer at Geelong is remunerated by a fee for each ship inspected.

Each Local Board reports annually to the Central Board, and these reports are then tabulated and published with a full report of the proceedings of the Central Board and remarks of a comprehensive kind on all sanitary matters of importance to the colony, together with copies of the reports of inspection by the Central Board's inspector and engineer. These are laid before Parliament and circulated.

It is believed that Victoria is in advance of other colonies of the Australasian Group in sanitary matters generally, though it must be remembered that great attention and a lavish outlay have always been forthcoming in New South Wales to keep out infectious disease.

The following Regulations, Model By-laws, and Circulars have recently been issued by the Central Board:—

REGULATIONS FOR THE PREVENTION OF THE SPREAD OF CONTAGIOUS DISEASES.

Whereas the contagious or infectious diseases known as diphtheria, measles, scarlet fever, typhoid fever, and whooping cough are at present prevalent in several towns and places in the Colony of Victoria, and whereas the provisions contained in section 74 of *The Public Health Amendment Statute 1883* have by Order in Council been directed to be put in force in the said colony, the Central Board of Health doth, by virtue of the powers conferred by the said section, and of every other power enabling the said Central Board in this behalf, make the following Regulations for preventing or mitigating the said diseases, that is to say:—

1. All Regulations hereinbefore made by the said Board for the prevention of the spread of any of the said diseases are hereby revoked, and the present Regulations are substituted in lieu thereof.

2. These Regulations shall apply to every city, town, borough, shire, or place only in which any of the said diseases shall have occurred within the month immediately preceding the date hereof, or in which any such disease shall occur while these Regulations remain in force.

3. *Cleansing of Streets, Ways, and Places.*—The Local Board of Health in each district is hereby required to take effectual measures for the frequent and regular removal of all refuse matter from all streets, lanes, rights-of-way, and other places; for the regular cleansing of all drains and street channels, and for keeping in an inoffensive condition all manure depôts and places for deposit of night-soil or refuse matter, and shall cause whatever may be deposited thereon or therein to be immediately covered with not less than three inches of dry earth. Every householder shall cause his yard to be at all times kept in a cleanly and inoffensive condition, and shall cause all rubbish and refuse matter produced on his premises either to be consumed or destroyed in some manner not being a nuisance or injurious to health, or to be placed in a box or other portable receptacle, and afterwards removed to the manure depôt or other proper place. No person shall cause or suffer to be placed or thrown upon any street, lane, or right-of-way any rubbish, ashes, dust, or animal or other offensive or dead or decayed matter or substance. No person shall dig at a less depth than two feet or spread into or upon any land, whether in his own occupation or otherwise, any night-soil, or the contents of any earth-closet or night-pan, or other offensive matter without the previous permission in writing of the Local Board of Health.

4. *Removal of Nuisances.*—The occupier of any premises shall not permit any nuisances or matter causing offensive smell to exist or be thereon, and shall cause all stables, outbuildings, and yards to be efficiently paved and drained, and shall cause all drains on or belonging to such premises to be properly cleansed at least once in every twenty-four hours.

5. *Medical Attendances, &c.*—The Local Board of Health in each district is hereby required to provide the necessary medical attendance and medicines for any person in such district who may be suffering from any of the said diseases, and who is unable to pay for medical attendance and medicine. And it shall be the duty of the officer of health or secretary or clerk of each Local Board to give the needful authority and directions for and on behalf of the said Local Board for giving effect to this Regulation immediately on being informed of such case of

disease by any member of the family of the person so attacked, or by any medical practitioner or any member of the police force.

6. *Interment of the Dead.*—The occupier of any house or place, or the person in charge thereof for the time being, in which any person shall die of either of the said diseases, shall cause the body to be buried with the least possible delay, and, if ordered by the health officer, within twenty-four hours. In the event of death from typhoid fever, chloride of lime or other disinfectant powder shall be abundantly dredged into the coffin, and, if possible, the body surrounded with dry pine sawdust. The trustees of any public cemetery are hereby required (notwithstanding the existence of any regulation of such cemetery to the contrary) to afford every possible facility for such speedy interment, and shall provide that there be ready at all times a sufficient number of public graves.

7. *Cleansing and Purifying of Houses.*—The occupier of every house in which there may be any diphtheria or scarlet fever shall cause every room therein (except that in which the patient may be) to be fumigated whenever required by the health officer or medical attendant by effectually closing the doors, windows, chimneys, and other apertures, and burning therein sulphur on an iron dish in the proportion of at least sixteen ounces to a room ten feet each way, or as much more as the atmosphere in the room will consume; or by keeping exposed in the room a sufficient quantity of fresh chloride of lime in an open dish; or by any other effective means or manner as may be prescribed by the health officer. The room occupied by the patient shall be similarly treated as soon as it is vacated; and in all cases, whenever possible, all hangings, clothes, and fabrics shall be removed, together with books, prints, and furniture, so far as may be possible, and sunshine and fresh air in current allowed full play. In cases of typhoid fever, and in all other cases when directed by the officer of health, the occupier or person in charge shall further make provision for the disinfection of the stools and body and bed linen of the patient, and of all drains, closets, and privies attached to such house. A teacupful of solution of sulphate of iron, chloride of lime (one pound to the gallon), or other effective disinfectant shall be placed in the bed-pan or other similar vessel before it is used, and the stools shall be at once transferred to a special pan with well-fitting lid, freely mixed with effective disinfectant solution and quickly buried at least two feet below the surface of the ground, or otherwise disposed of with the approval of the health officer. All soiled linen and bedding shall be removed without delay and thoroughly boiled. No person shall be allowed to eat or drink food, milk, or water which has been in the sick room. All utensils there shall be thoroughly disinfected before being again used. The health officer shall see that all drains connected with any such premises are flushed daily with solution of chloride of lime, sulphate of iron, or carbolic acid.

8. *Disinfection of Clothing, &c.*—The occupier of any house in which there may be any person suffering from either of the said diseases shall cause every article of bedding or clothing used in the sick room, and every textile fabric or other article likely to retain infection, immediately on its removal from the room, to be destroyed if the officer of health shall so order, or disinfected by being placed in water and boiled, or subjected, for at least one hour, to a dry heat of not less than 230 degrees, and shall also cause all such articles of clothing or otherwise used by the nurse or any member of the family to be disinfected in a like manner.

9. *Privies and Closets.*—All earth-closets, water-closets, and privies shall be kept in an inoffensive and cleanly condition, and emptied at least once a week, and a sufficient quantity of dry earth or wood or other ashes shall be always kept ready for use in such closet. All closets attached to any school, railway station, factory, hospital, or place of assembly or entertainment, or any licensed house shall, during the prevalence or on the occurrence of any case of typhoid fever in the vicinity, be disinfected daily by the addition of a sufficient quantity of sulphate of iron, chloride of lime, or other reliable antiseptic powder, to the closet pans or receptacles, whatever they may be. And for the purposes of this regulation the station-master, resident surgeon, master of a school, manager or overseer of a factory, or other person in immediate local charge or having control of the establishment shall be the person responsible for the due execution of this regulation. Every building in which any one shall work, have to be taught, or to live or remain shall have attached to it forthwith (if not already provided) one or more properly constructed earth-closets, and all underground cesspits shall be, as soon as possible, emptied and filled up with dry earth and quicklime.

10. *House to House Visitation.*—The Local Board of any district in which any one of the said diseases shall have occurred, or be reported to have occurred, shall, whenever necessary, cause a house to house visitation to be made in order to ascertain whether any case of the said diseases exists, and in such event the said Local Board shall cause a copy of these and any other Regulations on the same subject which may hereafter be made to be left with the occupier or person in charge of the house or premises in which such case has occurred.

11. *Local Board to enforce Regulations.*—The Local Board of each district is hereby required to superintend and see to the carrying out and execution of these Regulations, and is hereby required to enforce them, and the secretary or clerk of such Local Board shall forthwith prosecute every person offending. Such Board is further required to cause a copy of these Regulations to be posted and kept posted up in some conspicuous place in the town hall or council chamber, State school, railway station, and police station in the neighbourhood of which any case of such diseases may occur, and shall further cause these Regulations to be printed and published in such districts.

12. In the event of typhoid fever occurring, it shall be the duty of the Local Board, and the Local Board is hereby required, to make all necessary by-laws respecting milk, dairy cows, and dairies, under section 24 of the said Statute.

13. *Officer of Health.*—The officer of health in each district is hereby required to afford the inhabitants thereof every assistance and advice in his power with respect to the precautions to be observed against the spread of infectious or contagious disease, and shall see that all necessary destruction, disinfection, or otherwise is duly and effectually performed. On receiving information that any member of the family of any child attending school is ill, he is to personally ascertain from what disease such member is suffering, and, if it be one of the said diseases, he is at once to report the fact to the head or principal teacher of such school.

14. *Penalties.*—Any person who fails to comply with any of the foregoing Regulations, or is guilty of any neglect or disobedience thereof, is by section 168 of the said Statute thereby guilty of an offence against the provisions of Part IV. of that Statute, and is liable to a penalty not exceeding Five pounds nor less than Twenty shillings for each day during which such offence is continued, besides any expenses which may be incurred in remedying his default.

N.B.—Separate sheets as to the above diseases, showing symptoms and giving directions for temporary treatment until medical aid is obtained, are published by the Central Board. A model by-law as to milk and dairies can also be obtained at the office of the Central Board.

For the purposes of the Health Acts only, a chairman or secretary of a Local Board, or any health officer or public vaccinator, can send telegrams, on duty, free of charge.

REGULATIONS RESPECTING PUBLIC BUILDINGS.

(Pursuant to *The Public Health Amendment Statute 1883.*)

Whereas by virtue of the powers conferred by section nine of *The Public Health Amendment Statute 1883*, the Central Board of Health may, from time to time, make, alter, and rescind regulations, directions, orders, and notices in the execution of the said Act: And whereas it is expedient to make Regulations for securing and facilitating the carrying into effect the provisions of section one hundred and ten of the said Act: Now therefore the Central Board of Health, by virtue of the powers contained in the said Act, doth hereby by these Regulations direct and order as follows, that is to say:—

Part I.—Construction and Extension of Public Buildings.

1. In the erection, construction, and extension of any public building within the definition and meaning of section one hundred and ten of the said Act, the following rules shall be observed:—

2. *Doors.*—All outer and escape doors shall open outwards, or both inwards and outwards.

3. *Bolts*.—Monkey-tailed bolts will be considered suitable for escape doors, the tail of each bolt to come within, and not to be more than five feet six inches from the floor. Provided, however, that (where not objected to by a Local Board or its officers) the central-handle bolt recommended by the Inspector and Engineer of the Central Board may be used.

4. *Locks*.—On outer doors only, locks known as dead locks may be used. Provided that whenever such building is being used by the public, or the public is admitted thereto, such locks must be kept unlocked, and the door must be capable of being instantly opened.

5. *Egress space*.—This is to be calculated on an allowance of four square feet of floor space for each person. For a building calculated to hold one hundred persons or less, the egress space must be at least four feet six inches, and for every additional hundred, or part of one hundred persons, an additional egress space of eighteen inches, or a proportionate part thereof, must be provided. The Central Board reserves power to order special and additional egress space for large or complicated buildings when a modification of this general rule may be deemed necessary. In computing egress space, the Board will not include doors opening into any vestry, retiring or dressing room, or any room used as a dwelling room, or for other purposes by caretakers or others.

6. *Gangways, Passages, and Aisles*.—These must be at least as wide as the door to which they lead, and the aggregate width must be at least equal to the aggregate capacity of the door space. No gangway, passage, or aisle shall be less than three feet in width under any circumstances.

7. *Corridors and Stairways*.—No corridor nor stairway shall be less than four feet six inches in breadth, and sufficient stairway from galleries, balconies, &c., must be provided according to the computation prescribed in Regulation No. 5. Stairs must be built of iron, stone, or other approved unflammable material, and must have square landings at intervals of not more than twenty steps, and proper handrails.

8. *Closets, &c.*—Buildings intended to be used as places for the assembling together of children must have privy and urinal accommodation—the former in the proportion of one privy for forty (or any less number) of children of each sex. Buildings intended to be used as theatres, opera houses, or concert rooms, or permanent structures for purposes of public amusement, must have two privies for each sex for each section or division of the house, and urinals sufficient for the use of six persons at one time for each section or division of the house.

9. *Ventilation*.—Churches and buildings of a like character must have inlet openings, amounting in the aggregate to one square inch for every forty cubic feet of space contained in the building, to be computed free of grating bars, and exclusive of doors and windows. Equal provision must be made for outlet openings. Theatres and buildings of a like character must have similar openings, but computed on a basis of one square inch for every thirty-five cubic feet of space.

Part II.—Management and Use of Public Buildings.

1. In the management and use of any public building within the definition and meaning of the said section one hundred and ten, the following precautions shall be observed:—

2. *Gangways, &c., to be kept clear*.—No person shall whilst any public building is open for the admission of the public, or whilst any public performance, play, divine service, or meeting of any kind whatsoever is being held, or about to be held, obstruct any gangway, passage, or aisle therein by placing a chair or other obstruction, or by sitting or standing in any such gangway, passage, or aisle. And every trustee, owner, occupier, lessee, warden, doorkeeper, or other person in charge, or having the control, care, or management of any public building, shall take all necessary steps in his power to prevent any such obstruction in such gangway, passage, or aisle.

3. *Extinction of Fire*.—For the purpose of the extinction of fire, it is hereby directed that in all theatres, opera houses, concert rooms, and other similar public buildings there shall be provided in front of the proscenium, and so placed as to command it, and also on each floor (if more than one) one or more fire-plugs, with hydrants, and properly fitted hose couplings and other appliances, and with water laid on thereto from the street main. There shall be at least one such fire-plug

and hydrant on each floor, gallery; or balcony for every eight hundred persons or any less number. A skilled man, wearing some uniform, badge, or distinguishing mark, shall be kept at each fire-plug and hydrant, ready to use them at once; and the man so employed to attend to such fire-plug and hydrant shall not absent himself or in any manner neglect to attend to such fire-plug and hydrant so long as such public building is open for any play, performance, or for the admission of the public thereto, or their continuance therein.

4. *Escape Doors.*—Every escape door shall have the words “Escape door, not locked” painted permanently thereon, in letters of at least one inch in length, and so as to be easily read from the inside of the hall, room, or building; and every such door during the time such hall, room, or building is being used by the public, or the public admitted thereto, shall be kept unfastened and capable of being instantly opened.

5. *Penalties.*—Any person who fails to comply with any of the foregoing regulations contained in Part II. hereof, or is guilty of any neglect or disobedience thereof, is by section one hundred and sixty-eight of the said Statute thereby guilty of an offence against that Statute, and is liable to a penalty not exceeding Twenty pounds, and to a penalty not exceeding Five pounds nor less than Twenty shillings for each day during which such offence is continued, besides any expenses which may be incurred in remedying his default.

Part III.—Regulations not to be deemed in any way to Release Persons from the Strict Observance of the Provisions of Section 110 of the Act.

It is hereby expressly directed that the Regulations hereby made are not to be deemed or taken as in any degree interfering with or in any way releasing any person from observing and carrying out all the requirements provided in section one hundred and ten of the said Act, or as in any way interfering with the direction and orders which the Central Board of Health or the Local Board may in each case make, or as dispensing with the necessity of obtaining the approval of the Central Board of Health before any public building can be built, opened, or extended, or as in any way interfering with or excusing from the strict compliance with the various requirements contained in the said section, or as in any way releasing persons from the penalties to which they may become liable in the event of any disregard or non-observance of the provisions of the said section.

MODEL BY-LAW.

(Suggested for adoption by Local Boards of Health.)

For keeping free from noisome matter, yards, stables, and places used for noxious trades, slaughter yards, &c., and for regulating management of earth-closets, privies, &c., disinfecting and deodorizing night-soil and other offensive matter, and for regulating its removal and final deposit.

The Local Board of Health in and for the City (Town, &c., as the case may be) of _____, in the colony of Victoria, being the Municipal Council thereof, by virtue of the powers contained in *The Public Health Amendment Statute 1883*, and every other power enabling the said Local Board in this behalf, and for the purpose of carrying the said Act into execution within the jurisdiction of the said Local Board, doth hereby make the following by-law, being By-law No. _____ of the said Local Board of Health, that is to say:—

1. All former by-laws on the matters and things hereinafter provided for are hereby repealed excepting as to acts done, penalties incurred, and proceedings at law pending at the time of this by-law coming into operation.

2. This by-law shall come into full force and operation on its confirmation by the Central Board of Health, and immediately after its publication in the *Government Gazette*.

3. This by-law shall apply to and have operation in the whole of the said [city, town, &c.,] (or if for a less portion describe that portion exactly.)

4. The occupier of every house and premises within the said [city, &c.,] shall cause the yard and ground belonging thereto or occupied in connexion therewith to be kept so as not to be a nuisance or injurious to health, and shall cause all filth, rubbish, and refuse matter to be from time to time removed from such yard and ground, and if at any time the occupier of any premises shall neglect or fail to have such filth, rubbish, or refuse matter so removed as aforesaid, the Local Board may cause the same to be removed at the expense of such occupier.

5. The occupier of any land in the said city [town, &c.,] on which there shall be erected any stable, cow-yard, cattle-shed, or pig-sty, shall cause such premises to be kept in such a state in respect of cleanliness as not to be a nuisance or injurious to health, and shall cause all soil, dung, or other manure produced or accumulated therein to be from time to time removed from such premises as often as the quantity of the same so produced or accumulated shall amount to [one cubic yard]; and if at any time the occupier of such premises shall neglect or fail to have such dung, soil, or other manure removed therefrom as aforesaid the same shall be removed by the said Local Board at the expense of such occupier.

6. The occupier of every house, building, or tenement within the said [city] shall cause every cesspool already in existence, and until its abolition, to be emptied and cleansed from time to time as soon as any portion of the contents of such cesspool shall have so accumulated therein as to be within a distance of [one foot] from the top of the sides, walls, or lining of such cesspool. Provided that the contents of any cesspool shall not be removed or discharged therefrom except between the hours eleven p.m. and five a.m. And provided also that the contents of any cesspool shall not be removed or discharged therefrom until such contents shall have had mixed therewith carbolic acid or some other efficient deodorizer sufficient in quality and quantity to effectually deodorize and disinfect the same.

7. Every occupier and every person having the management and control of any premises shall once at least in every week empty and cleanse, or cause to be emptied and cleansed, every earth-closet, privy, and place in the nature of an earth-closet for the reception of night-soil on or belonging to such premises.

8. No person shall empty any earth-closet, privy, cesspool, or place for the reception of night-soil except by means of a cart, carriage, or means of conveyance properly constructed and furnished with a sufficient covering so as to prevent the escape of the contents or any portion thereof or of effluvia therefrom.

[In any city, town, or borough in which nightmen are licensed by the municipal authorities the following may be introduced:—In the said (city, town, or borough as the case may be) a nightman, licensed by the municipal authorities, shall be employed by the occupier of the premises for such removal of night-soil.]

9. All night-soil, blood, offal, or other offensive matter or thing shall be removed to and deposited in such place or places only as may be appointed by the Local Board from time to time for the final reception of the same.

10. Every person placing or depositing, or causing or suffering to be placed, or deposited, or spread, or assisting in placing, or depositing, or spreading on any land, whether by way of manure or otherwise, any night-soil, offal, blood, or other refuse matter removed from any earth-closet, privy, cesspool, or other place, shall immediately on the deposit or spreading thereof cover the same or cause the same to be covered, and shall keep the same covered with a layer of earth not less than six inches in thickness.

11. The occupier of any premises within the [city] used for the purpose of any noxious or offensive trade, business, process, or manufacture whatever, or used for the purpose of slaughtering, whether it be an abattoir or otherwise, shall cause any rubbish, blood, offal, bones, water, liquid, soil, or other offensive matter produced or accumulated thereon to be removed therefrom [once in every twenty-four hours], and to be in the meantime kept so as not to be a nuisance, or injurious to health, or to exhale any offensive effluvia; and if such occupier shall neglect or fail to have removed therefrom any offensive matter whatever, it may be removed by the said Local Board at the expense of such occupier.

12. Every closet pan shall be constructed of galvanized iron properly riveted and soldered so as to be watertight and with handles thereto, and of a capacity not exceeding [three cubic feet].

13. No closet door or trap shall abut or open on a street, lane, or right-of-way exceeding [ten] feet in width.

14. Every person who shall by any act or default be guilty of any breach of this by-law shall be liable to a penalty of (Ten) pounds for every such breach, or of (Five) pounds for each day during which such breach shall be committed or continued, unless the justices before whom the penalty is sought to be recovered shall order any portion only of either of the said penalties—such portion not being less than Five shillings—to be paid. And any person committing any such breach as aforesaid shall be liable to the penalty notwithstanding that the Local Board of Health may be empowered by this by-law or otherwise to remedy such breach, and whether such Local Board has or has not taken advantage of such powers.

MODEL BY-LAW.

(Suggested or adoption by Local Boards of Health.)

As to Dairies, Dairy Cattle, and Milk.

The Local Board of Health in and for the _____ in the colony of Victoria, being the Municipal Council thereof, by virtue of the powers contained in *The Public Health Amendment Statute 1883*, and every other power enabling the said Local Board in this behalf, and for the purpose of carrying the said Act into execution within the jurisdiction of the said Local Board, doth hereby make the following by-law, being By-law No. _____ of the said Local Board of Health, that is to say:—

1. All former by-laws on the matters and things hereinafter provided for are hereby repealed.

2. This by-law shall come into full force and operation on its confirmation by the Central Board of Health, and immediately after its publication in the *Government Gazette*.

3. This by-law shall apply to and have operation in*

Registration of Cowkeepers, Dairymen, and Purveyors of Milk.

4. Every person carrying on the trade of cowkeeper, dairyman, or purveyor of milk shall, on or before the first day of _____ in every year, register himself with the Local Board of Health in manner following, that is to say, by signing and forwarding to the secretary of the Local Board of Health an application in the form made and provided therefor, and every such person shall with every such application pay a fee of†

5. Upon receipt of every such application and fee, the secretary for the Local Board of Health shall endorse the same with a memorandum of the date on which it is received, and of the payment of the fee, and shall file the same, and shall enter the particulars in the schedule to such application in a book to be kept for that purpose, and cause the same to be properly indexed.

6. All paddocks, grounds, lands, and enclosures used as grazing ground for dairy cattle shall, whenever necessary, be inspected by any member or officer of the said Local Board, or by any person authorized in writing by the chairman or secretary of the said Local Board; and if on inspection such paddocks, grounds, or enclosures, or any one of them, are or is likely in the opinion of the officer or person so inspecting to be prejudicial to health, by affecting the milk or otherwise, the said Local Board may, by an order in writing, signed by the secretary and served personally or left at the dwelling-house of the registered person, or, in the case of an unregistered person, served personally or left at his dwelling-place, or posted upon the land, prohibit the use of the same for the purpose of feeding dairy cattle either absolutely or for any time named in such order. All cattle in dairies shall also be similarly inspected by a veterinary surgeon or other competent person, and any cows found to be diseased, or which from poverty or weakness are, in the opinion of the inspector, likely to be unfit for use for dairy purposes, shall be forthwith removed from such dairy if ordered by such inspector or other officer as

* Here insert whether the by-law is intended to apply to the whole or only a part of the Local Board's district, and, if only a part, describe that part exactly.

† The amount of the fee must not exceed £1.

aforesaid. And any such order as aforesaid the Local Board may revoke, but upon every fresh inspection a similar order may from time to time be made.

7. All houses, dairies, cow-sheds, milk stores, milk shops, or other buildings or structures in the occupation of any person following the trade of cowkeeper or dairyman, whether registered or not, shall be kept in such a state in respect of cleanliness as not to be a nuisance or injurious to health, and shall be thoroughly and effectively lighted and ventilated, and the drainage of all such buildings shall be so arranged that no stagnant water or refuse matter of any kind shall remain or lie in any way whatever in or upon or contiguous to any premises of such person following the trade of a cowkeeper or dairyman whether registered or not.

8. All yards, sheds, or other places used for keeping or holding dairy cows shall be regularly swept, and be kept perfectly clean, and shall, within twenty-four hours of any order to such effect from the health officer or inspector of nuisances, be fumigated, disinfected, or lime-washed, as may be in any such order so directed.

9. All vessels used for containing milk shall be thoroughly scalded and scoured daily.

10. If any person, or any member of the family of any person, registered as aforesaid or not so registered, but employed as a cowkeeper, dairyman, or purveyor of milk, or any visitor or member of the family of any visitor to any such person shall be attacked by typhoid fever or any dangerous infectious disease, the occupier of the house in which such person shall be, or (if he be the person attacked) his wife or other person in charge, shall immediately give notice thereof to the Local Board or officer of health, or to the nearest member of the police force, who shall immediately inform the Local Board of Health, and thereupon it shall and may be lawful for the said Local Board or the officer of health, by order served as aforesaid, to prohibit absolutely the sale and vending and forwarding of milk for sale from any premises in the use and occupation of any such cowkeeper, dairyman, or purveyor of milk, until danger, in the opinion of such Local Board or officer of health, no longer exists. And in any such case it shall not be lawful to allow any person so suffering, or having recently been in contact with a person so suffering, to milk cows or to handle vessels used for containing milk for sale, or in any way to take part or assist in the conduct of such trade or business. Nor if the person registered or conducting such business be himself the person suffering, shall he take any part whatever in the conduct of such trade or business until, in either case, all danger therefrom of the communication of infection to the milk or of its contamination has ceased.

11. If at any time disease exists in the dairy or among the cows or cattle in any cow-shed or dairy or in the herds of any cowkeeper, dairyman, vendor or purveyor of milk, the registered person, owner, occupier, or other person in charge, as the case may be, shall immediately give notice to the Local Board, officer of health, or nearest member of the police force, and the milk of a diseased cow shall not be used in any way whatsoever.

12. No cowkeeper, dairyman, or purveyor of milk shall keep, or permit or suffer to be kept, any pigs in the sheds, buildings, or milking yards in which any dairy cows may be kept or sheltered.

13. In the interpretation of this by-law words imputing the masculine gender shall be deemed and taken to include females, and the singular the plural and the plural the singular, and the word "person" shall include a corporation.

14. Every person guilty of any breach of this by-law or of any of its provisions shall be liable, in the discretion of the convicting justices, to a penalty not exceeding Ten pounds nor less than Five shillings, or in the like discretion to a penalty not exceeding Five pounds nor less than Five shillings for each day during which such breach shall be committed or continued.

SMALL-POX.

ITS PREVENTION, AND HOW TO STOP IT FROM SPREADING.

1. Small-pox attacks those that are not vaccinated, and those that are imperfectly or inefficiently vaccinated.

2. Perfect vaccination is shown by the presence of four well-marked vaccine scars.

3. Vaccination with lymph from a healthy child, or from a healthy calf, is equally safe and effective.

4. Re-vaccination is recommended at intervals of eight to ten years, or when there is danger of exposure to Small-pox contagion.

5. Small-pox is rarely met with after successful vaccination or re-vaccination; when it does occur, the disease is so mild, that it is not attended with pitting, and is not dangerous to life.

6. Small-pox can only arise from the seeds of the disease coming from the body of an infected person. These may be conveyed through the medium of the air in approaching near to the sick, or by clothing, bedding, towels, or anything which may have been in contact with the sick.

7. Small-pox requires about 14 days for its development. Just as seeds remain in the ground many days before germinating, the seeds of Small-pox remain in the system about 14 days before the disease shows itself.

HOW TO PREVENT SMALL-POX FROM SPREADING.

1. When Small-pox is prevalent, every suspected case should be at once isolated, *i.e.*, placed in a room apart from other members of the household along with a nurse, no other person being allowed to enter.

2. Immediately on the discovery of the disease, it is desirable that the Small-pox patient should be removed to the Sanatorium or special Hospital, and that all his or her wearing apparel, bedding, towels, handkerchiefs, and other articles in use should be washed and disinfected, by being subjected to boiling for an hour, while the house should be fumigated by burning sulphur.

3. It is important that every case should be removed to the Sanatorium without delay, when a separate room is not available for the isolation of the patient.

4. A sick room should be large and airy, free ventilation being secured by opening the windows to some extent, if not otherwise provided for.

5. The sick room should have no hangings, curtains, carpets, or mats, and only such articles of furniture as are absolutely necessary for the use of the patient.

6. Scrupulous cleanliness should be observed; all discharges being disinfected with solution of chloride of lime or carbolic acid, and removed without delay.

7. Bed and body linen should be changed daily, and immediately plunged into boiling water containing solution of carbolic acid, and removed from the room.

8. The nurse in charge should wear a dress made of some washing material, and should not mix with other members of the household. She should wash her hands in water containing some disinfectant, such as Condy's fluid, or carbolic acid, and afterwards in hot water with soap.

9. All cups, glasses, and other dishes used by the patient should be placed in boiling water before washing.

10. The subject of Small-pox continues a source of infection until all scabs have fallen from the body, and the body has been thoroughly and repeatedly washed from head to foot with hot water and carbolic soap.

11. On the recovery of the patient, all clothes that can be washed should be boiled for an hour in water containing soda; all other articles such as wearing apparel, bed, mattress, &c., should be subjected to a temperature of 230° Fahrenheit in a disinfecting chamber, or, if thought necessary, burned.

12. The room and house should be disinfected by burning sulphur, the doors, windows, and chimneys being closely shut. The woodwork and floor should be washed with hot water and soft soap, or with a solution of carbolic acid, one part of acid to thirty or forty of water.

CHOLERA.

In view of the possibility of Cholera being brought to Australia, the Central Board desires to draw special attention to the following facts and recommendations:—

1. Experience in England justifies a belief that the presence of imported cases of the disease will not be capable of causing much injury *if the places receiving the infection have had the advantage of proper sanitary administration.*

2. Cholera in England shows itself so little contagious in the sense in which Small-pox and Scarlatina are commonly called contagious that, *if reasonable care be taken where it is present*, there is little risk that the disease will spread to persons who nurse and otherwise attend upon the sick. But Cholera has a certain peculiar infectiousness of its own which, *when local conditions assist*, can operate with terrible force, and at considerable distances from the sick. It is characteristic of Cholera (and as much so of the slight cases where diarrhœa is the only symptom, as of the disease in its more developed and alarming forms,) that all matters which the patient discharges from his stomach and bowels are infectious.

3. Unless there exist facilities for spreading Cholera by direct infection, it is not likely to spread. The following conditions have to be borne in mind:—1st. Any choleraic discharge cast without previous thorough disinfection into any cesspool or drain infects the matters with which it then mingles, and probably more or less the effluvia which these matters evolve. 2nd. The effective power of choleraic discharges attaches to whatever bedding, clothing, towels, and like things have been imbued with them, and renders these things, if not thoroughly disinfected, as capable of spreading the disease in places to which they are sent (for washing or other purposes) as, in like circumstances, the patient himself would be. 3rd. That if, by leakage or soakage from cesspools, or drains, or through reckless casting out of slops and wash-water, any taint (however small) of the infective material gets access to wells or other sources of drinking water, it imparts to enormous volumes of water the power of propagating the disease.

4. The dangers to be guarded against are particularly two. First, and above all, there is the danger of *water supplies* being tainted by house refuse or other kinds of filth—a danger which may exist on a small scale (but perhaps often repeated) at a private house, or, on a large and even vast scale, in the source of public waterworks. And, secondly, there is the danger of breathing air which is foul with effluvia from the same impurities.

5. The Central Board begs to recommend in very similar terms to those of a Circular issued by the Local Government Board in England:—1st. Immediate and searching examination of both public and private sources of water supply in all cases where the source is in any degree open to suspicion. 2nd. There should be immediate thorough removal of every sort of house refuse and other filth which has accumulated in neglected places; future accumulations of the same sort should be prevented; attention should be given to all defects of house drains and sinks, and thorough cleaning and lime-washing of uncleanly premises should be practised again and again.

6. The Central Board earnestly hopes that local sanitary authorities will at once do everything that can be done to put their districts into a wholesome state. Measures of cleanliness, taken beforehand, are of far more importance for the protection of a district against Cholera than removal or disinfection of filth after the disease has actually made its appearance. And it is important to remember that pains taken and costs incurred for these purposes cannot be regarded as wasted, as the conditions which would enable Cholera, if imported, to spread its infection in this colony are conditions which, day by day, in the absence of Cholera, create and spread other diseases.

7. In conclusion, a few important points may be briefly noted in the event of Cholera making its appearance:—

- (a) All drinking water and milk should be boiled before being used.
- (b) The infection is communicated principally by the evacuations to air, water, linen, &c.
- (c) By such means it is carried to other persons and to other localities.
- (d) All filth and decomposing animal or vegetable matter should be most carefully removed from the vicinity of dwellings, and from the neighbourhood of water supplies.
- (e) Houses should be well ventilated, kept thoroughly clean, and out-buildings should be lime-washed frequently.
- (f) Cesspools should be abolished, filled up with lime and dry earth, and closets should be lime-washed and disinfected.
- (g) Unripe fruit and indigestible food should be carefully avoided.
- (h) The source and character of water supplies should be carefully looked to.

HYDATIDS.

The question of impure water supplies has been latterly, on more than one occasion, carefully considered by this Board, and it is believed that a large quantity of water in daily use is unfit for human consumption unless precautions are taken.

It is known that hydatid disease is on the increase in Victoria, and that many valuable lives are annually lost from want of a little knowledge and care.

In Quain's Dictionary of Medicine, it is stated that in Iceland, which is more infected with hydatid disease than any other country in the world, 28 per cent. of the dogs are affected by it, and of the human subject one-sixth of the annual deaths are from hydatids. It is further stated that probably Victoria is already the second most infected territory.

The Central Board desires to point out that in drinking open natural waters or eating vegetables to which dogs have access, all persons—but especially children—run a great risk of incurring hydatid disease, with all its consequent dangers.

The Board strongly recommends that all such water be first thoroughly *boiled*; and persons living in the country, or travellers, should avoid drinking from water-holes or swampy water of any kind without such precaution, and in all cases the water supply for domestic use should be guarded against the invasion of dogs. Dogs should not be allowed to swim in reservoirs, or, where possible to prevent it, to drink from the same supply as man, sheep, cattle, or pigs.

It is highly important to remember that the purest-looking water may contain numerous hydatid germs; hence the importance of boiling the water where there is any risk.

It is desirable to bury or throw boiling water over the exposed fæces of dogs, and chained dogs should have their kennels and the ground for some distance round purified frequently with boiling water. Dogs should never be fed with, or allowed the opportunity of eating, the offal of slaughter-houses, nor should pigs be kept there. The laws against unregistered dogs should be strictly enforced.

It should be known that hydatid disease can be communicated to the human subject by impure salads or vegetables (uncooked), and care should be taken to wash and thoroughly cleanse everything of the kind before it is eaten. Water-cress from drains should never be eaten. Fluke in sheep is another source of danger, and such mutton should be carefully avoided.

Further, it should be known that there is risk of contracting the disease in allowing dogs to lick the hands or faces of children or adults, and in permitting them to lick plates and dishes.

In all this, as in many other cases, "cleanliness is one of the most important preventives against infection."

N.B.—Plans and description of a cheap filtering apparatus can be had by application to the Secretary, Central Board of Health.

TYPHOID FEVER: ITS CAUSE AND PREVENTION, WITH INSTRUCTIONS FOR ITS MANAGEMENT IN THE ABSENCE OF MEDICAL AID.

"The grand fact is clear that the occurrence of typhoid fever points unequivocally to defective removal of excreta, and that it is a disease altogether and easily preventible."
—Dr. Parkes.

TYPHOID FEVER is called by various names, such as Enteric Fever, Gastric Fever, Low Fever, Colonial Fever, Infantile Remittent Fever, &c., but the disease is one and the same. A misleading name is a grave mistake, as it puts people off their guard, and often leads to fatal results. When a person is sick with what is called Colonial or Gastric Fever, danger is perhaps scarcely apprehended, whereas, if the friends really knew that these were merely other names for Typhoid—a most deceptive, infectious, and frequently fatal fever—they would be alive to the risk both to the patient and to others. The great mortality from Typhoid Fever in this colony shows there is urgent need to lessen the ignorance and consequent neglect of sanitary laws which prevail on this subject. Returns to the Government Statist give an average of 456 deaths in Victoria every year from Typhoid Fever. If the

same number of deaths took place from some other avoidable cause (like the falling of an insecure building every year), the whole community would cry out against such a sacrifice of human life. Typhoid Fever is a preventible disease, and if proper measures were taken to keep it from spreading by infection, it would soon disappear. But because it carries off its victims one by one, scattered over the colony, it is allowed to pursue its course comparatively unchecked. The sacredness of human life demands that every one should do his utmost to stamp out such a scourge.

Cause and Prevention.—The chief source of infection is the discharges from the bowels of patients. Some eminent authorities are of opinion that such discharges are the only source, while others think that it may also arise from decaying or putrid animal matter, especially night-soil. All are agreed, however, that preventive measures are of the first importance, that cleanliness should be insisted on, and that animal filth of every kind, but particularly bowel discharges, should be effectually prevented from contaminating air and water. The poison-germs which pass with the motions should not “be let loose upon society into the cesspool or sewer, or on the dung-heaps, in full possession of all their deadly power.” Still less should these contagious germs be allowed to find their way into milk or drinking water. There are various ways by which the poison spreads, such as drains laden with typhoid infection emptying themselves into a creek or reservoir which supplies drinking water; wells and tanks contaminated with poisonous filth washed into them from the surface on the occasion of rainfall, or soaking through gravelly, porous ground, when the well or tank is not far enough removed from the cesspit or on a lower level than the source of infection; leaking water-pipes through which contagious sewage finds its way into water used for household purposes; foul air from drains or sewers, conveying fever-germs along empty outlet pipes used for waste water; milk infected by contaminated water being added to it, or by typhoid-germs in the air coming in direct contact with the milk itself. Hundreds of cases have been known to occur from a single case at a dairy. As, therefore, this disease spreads in so many ways, it is evident that the best method of dealing with the poison is to check or destroy it at its source. This is effected by promptly burying all discharges a foot at least in depth. The bed-pan should have some good disinfectant put into it, just before and immediately after use, and the contents at once put under-ground. A good and cheap disinfectant is *Sulphate of Iron* in solution (2 ounces to each pint of water). *Chloride of Lime* may be used, if more convenient (4 ounces to a pint of water). A very small piece of ground is sufficient, but where none is available the motions should be burnt, and on no account thrown into a closet or drain, on the ground or dung-heap. Soiled bed or body clothing ought, immediately on removal, be put in boiling water to destroy infection. These details should be carefully carried out, as nothing is of small importance when it is a question of life or death to others.

Symptoms.—The onset of the disease is often very deceptive. In many cases it comes on slowly, and without any well-marked signs. The patient feels languid and out of sorts, gradually gets worse, and complains of headache, chilliness, loss of appetite, thirst, and sense of weakness. The skin gets hot and dry, the tongue furred in the centre, but red at the tip and edges. The face pale with a bright patch on each cheek. The bowels may occasionally be constipated, but are generally loose, with offensive yellowish or drab-coloured motions, often excessive, and greatly exhausting the patient. About the beginning of the second week, a few small round spots, the size of a pin’s head, and of pink or rose colour, generally appear on the chest and abdomen, but sometimes the spots are not present. These are the most common symptoms, but, in some instances, after only slight indisposition, the patient is rather suddenly overtaken with vomiting, purging, pain in the bowels, shivering, and severe headache. He soon becomes delirious, and sinks in a few days. Young persons are more liable to the disease than those in advanced life.

Treatment.—Exhaustion and ulceration of the bowels are the two subjects that claim special consideration. Hence the regulation of the diet is the most important part of treatment. The strength must be kept up, while the tender inflamed state of the bowel renders it necessary that no solid food be taken till the patient has fully recovered. Vegetables, fruit, fish, oatmeal, and everything except liquids, must be carefully avoided till convalescence has been fully established. The juice

of grapes or oranges is much relished, and may be given in small quantities at a time, to relieve the parched mouth, but the seeds, skins, and crude pulp must not be swallowed. Children should not be trusted with such fruit by themselves. A single grape seed, taken by mistake, may cause death by bringing on bleeding, or perforation of the ulcerated bowel. New milk is the chief article of diet in Typhoid Fever. It is both food and drink. If, however, too much is taken or in too large a quantity at a time, undigested curds pass over the tender surfaces of the diseased bowel with injurious effect, and appear in the motions. This should be watched by inspecting the stools. The careful management of the diet is almost everything, and of far more value than drugs. When curds are thus seen, either less milk should be given, or lime-water added to it, viz., a wine-glassful to each half-pint of milk. Sodawater, or a small pinch of baking-soda, can be used instead of lime-water. Chicken-broth or calves-foot jelly may be given time about with the milk; also beef-tea, if it does not cause diarrhoea. Raw eggs are suitable. The best stimulant is good brandy, but this should, if possible, be under medical direction. Simple drinks may be freely allowed from the first, such as cold water, rice or toast water. No opening medicine should be given, only an enema if required. Frequent sponging of the body with tepid water cools, soothes, and cleanses the patient. When there is much weakness, sitting up in bed may prove fatal. Remember this when giving food or attending to the bowels. Avoid travelling or exertion for a fortnight after recovery—to prevent relapse.

SCARLET FEVER AND MEASLES.

Symptoms and Directions for Treatment in the Absence of Medical Aid.

SCARLET FEVER.—Ordinary symptoms: More or less fever, with vomiting and headache. Also soreness of the throat, which, on examination inside, will be found of a very bright red colour. As the disease advances there is much swelling about the tonsils. The eruption generally commences about the face, neck, and chest, but sometimes on other parts of the body. The rash is of a scarlet colour, and the skin very hot.

Treatment.—An emetic should be given when there is nausea, or the tongue much coated. The best is a teaspoonful of ipecacuanha wine in tepid water, every ten minutes till free vomiting comes on. When the wine is not at hand, half a teaspoonful of powdered alum mixed with wet sugar, and repeated every ten minutes, if required, will answer. Give plenty of tepid water as drinks to aid the emetic.

Keep the room cool and well ventilated. Doors and fireplaces open; and, if necessary, the window may be kept partially open, especially in warm weather. At the same time, the utmost care ought to be taken to prevent draughts coming directly on the patient, as nothing is so dangerous as getting cold or a chill. The greatest risk of getting cold is when the skin begins to peel off. The window should then be closed, but the room still kept fresh by good ventilation.

In all cases, even the mildest, the patient should be kept in bed or in a comfortable warm room two or three weeks, and when allowed to go out the clothing should be warm.

Diet.—Should be light and spare at first; plenty of liquids, little at a time and frequently. Plain water, milk, or barley-water drinks may be taken cold, or even iced. When more nourishment can be taken, chicken or beef-tea is suitable, also mutton-broth, and eggs beaten up as thin custard, or lightly cooked.

To relieve the hot skin, the whole body (taking one part at a time) should be sponged over with tepid water twice or thrice in the twenty-four hours. If the patient is able to bear it, a warm bath, once or twice a day, may be given to cool the body. After the sponging or bath, when the skin has been dried, the whole surface may be rubbed over with oil, lard, or cold cream. This is very cooling and agreeable, and may be repeated as often as convenient.

The throat requires special attention. When there is much swelling, ice is very useful. Young children can take it as iced water, in teaspoonfuls, given

frequently. When ice cannot be obtained, steam may be inhaled from a narrow-mouthed jug or other vessel, but not from the spout of a teapot, which is most unsafe. Warm linseed poultices, round the front of the neck and reaching up to the ears, give much relief; the poultices should be well covered up with flannel to retain the heat.

MEASLES.—In this disease the characteristic spotted rash appears about the fourth day on the forehead and face, and gradually spreads downwards. At first the spots are small and round, not unlike flea-bites, but soon run into blotches, which present a horse-shoe or crescent-like shape. The rash is of a dull dingy red colour.

The first symptoms in measles are those of a severe cold. The eyes get red and watery, and are unable to bear the light. Sneezing is very common, with a dry short cough.

Treatment.—In general, this is much the same as in Scarlet Fever. The chief point being a fresh well-ventilated room, exposure to cold or draughts being carefully avoided. In Measles, however, the room should be kept rather dark or shaded, as light is very annoying to the tender eyes. It should be borne in mind that inflammation of the lungs and bronchitis are very liable to occur, and this complication often makes Measles a dangerous and fatal disease. Hence the importance of avoiding chills, and preventing children getting uncovered in bed during the night. Linseed poultices, moist and warm, are useful when the lungs are affected. Strong purgative medicines should be avoided. For drinks and diet, see under Scarlet Fever.

N.B.—In all serious cases, and especially in cases of Measles in adults, no time should be lost in sending for a medical practitioner.

DIPHTHERIA AND CROUP.

Symptoms and Management in the absence of Medical Aid.

[**N.B.**—In all diseases of the air-passages, it is specially desirable that the services of a medical man be obtained without delay.]

DIPHTHERIA.—Prostration of strength and soreness of throat are the two most marked symptoms, and, as a rule, come on gradually, and often with little warning, so that the disease is sometimes well established before the patient or friends are aware of its true nature. In some cases, the patient sinks rapidly almost from the commencement, from great exhaustion or suffocation.

General Symptoms.—Mental depression, headache, drowsiness, weakness of the limbs, and chilliness. In children, convulsions may occur.

Local Symptoms.—Stiffness of neck, sore throat, and, at times, difficulty in swallowing. On examining the throat, it is found swollen and inflamed, and, sooner or later, a smooth, tough, thickish layer or deposit of yellowish-white matter appears on or about the tonsils, and quickly spreads to the neighbouring parts. This false membrane resembles wetted felt, or damp, dirty wash-leather. The breath becomes offensive; there is generally some discharge from the mouth, and the voice is often changed. External swelling takes place about the angle or corner of the jaw. It is important to distinguish between this state of the throat in diphtheria and that of the ordinary sore throat inflamed from cold—commonly called quinsy. In the latter there is also redness, swelling, and some yellowish matter about the tonsils, but it is thin, semi-transparent, and limited in extent, thus differing from the tough, thick, spreading membrane of diphtheria.

Prevention.—Good drainage, dry houses (especially with regard to the foundations and under the floors), cleanliness, ventilation, and sunshine. A case should be isolated at once. Toys and all articles used by patient, whether child or adult, should be kept from other members of the family. Children and young persons are more likely to be attacked than elderly people. Diphtheria is contagious, and the younger the patient the less is the chance of recovery.

Management.—The patient should be kept in bed in a moderately warm and well-ventilated room, and carefully guarded from draughts of cold air. The air in the room should be kept moist by a steaming kettle on the fire, lengthening the spout by a tin tube, roll of paper, or other contrivance, to cause the vapour to

spread. A teaspoonful of eucalyptus oil put into the kettle every two or three hours is very beneficial. Frequent inhalation of steam from a narrow-mouthed jug (but not from the spout of a tea-pot, which is dangerous) does much good, and half a spoonful of eucalyptus oil should be put into the jug occasionally. Keep the air in the room at the same temperature.

Diet.—Strength should be kept up in every possible way by nourishing food, such as milk, strong mutton, veal, or chicken broth, or beef tea. The juice of raw meat, and coffee with milk, are useful stimulants when strength is failing. In cases of extreme exhaustion, if the patient shows signs of sinking, a teaspoonful of brandy to four of water, spread over three hours, may be given to children.

Medicine.—If the patient be old enough to use a gargle, the mouth and throat may be frequently washed out with a mild lotion, such as 20 drops of Condy's fluid in a cup of tepid water, or a teaspoonful of borax and glycerine (as sold by chemists) in a wine-glass of water. Tonics are necessary. If the breathing be oppressed or suffocation appears imminent, an emetic should be given. A teaspoonful of ipecacuanha wine, in tepid water, may be given every ten minutes, till vomiting comes on. A teaspoonful of powdered alum mixed with damp sugar also acts well as an emetic, and may be repeated in a few minutes; if necessary, assist the emetic by giving tepid drinks freely.

CROUP.—This is an inflammation of the wind-pipe, but has a close resemblance to diphtheria, and many cases called croup are really diphtheria. Croup is generally caused by exposure to chilly winds and cold damp air. The first symptoms are those of a common cold, but very soon there is a hard, ringing, brassy cough, with difficult, hurried breathing, and a peculiar crowing noise. These symptoms are distinct and well marked, and if once observed cannot be mistaken. The attack generally comes on or gets worse at night.

Management.—There is no disease in which early and active treatment is more required than in croup, as it is only at the commencement that much good can be done. Give a warm bath at once, for twenty minutes. Keep the child in bed in a warm, moist room, as recommended for diphtheria, and let it inhale steam from a jug. A sponge or piece of flannel wrung out of water as hot as the hand can bear should be applied over the throat, and repeated every two minutes for half-an-hour or so, till the skin gets red. Give emetics freely from the first, and repeat them and the warm bath, if required. Ten drops of ipecacuanha wine in cold water, sweetened to taste, should be given after the vomiting has ceased, every hour at first, and after improvement every three hours, till the child is out of danger. Keep up the strength as mentioned in diphtheria.

APPENDIX D.

LABOUR REPORTS.

(Supplied by the Municipal Authorities in July and August, 1886.)

TOWN DISTRICTS.*

ARARAT.—The supply is equal to the demand, except in the case of domestic servants.

BALLARAT.—Good workmen, who are here, are generally very well employed; but it is doubtful if any increased demand for artisans will set in, because the place supplies itself. All good workshops are full of capable apprentices, who, on completion of their terms, maintain the supply of labour. The demand for miners and common labourers always depends very much on the fluctuation of the mining industry—just now very dull.

* Cities, Towns, and Boroughs.—The officer supplying the information was the Town Clerk in every instance.