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PUBLIC HEALTH MAGAZINE.

Vol. I.]

MAY, 1876.

[No. 11.

Original Communications.

EXTRACTS from the Joint Report of Wm. Marsden, A.M., M.D. of Quebec; Ed. Playter, M.D., Editor *Sanitary Journal*, Toronto, and Geo. A. Baynes, M.D., &c., Editor *Public Health Magazine*, of Montreal, submitted to the Dominion Government April 10th, 1876:—

HOUSE OF COMMONS,

6th April, 1876.

We, the undersigned, having been summoned to appear before the Select Committee of the Commons of Canada, appointed 20th March, 1876, to enquire into the expediency of legislating on the matter of Sanitary Reform, have the honor to report:

That no safe or effective plan of public hygiene can be carried out without legislative action.

That the true basis of all such legislation is "Sanitary Statistics."

That all civilized countries are in an advanced state in these respects, and especially Great Britain, France, Prussia, and the United States of America.

That, notwithstanding the advancement in Arts and Sciences which has marked the progress of this Dominion, very little has yet been done in this department of Sanitary Science, and that in a very detached, partial and imperfect manner. The Province of Nova Scotia has taken the lead in this matter, and has a system of vital statistics. Ontario has followed and also has a system that requires amendment, and a bill for the same purpose

was introduced into the Parliament of the Province of Quebec at its late session, which, however, has not yet passed into law.

That the public attention which has been aroused abroad by the Government agents and others to the advantages which Canada presents to emigrants and intending settlers, loudly demands information in regard to health, life, salubrity of climate, soil and locality, climatic influences, &c., which accurate sanitary statistics alone can furnish.

The time is opportune for such legislative action, which has the powerful recommendation that it will tend to the protection of society by the preservation of health, the protection of human life, and the saving of the public money.

The Canadian Medical Association of this Dominion, representing the medical profession of the Dominion of Canada, and comprising all the best medical talent, at its annual meeting, held at Niagara on the 5th Aug., 1874, in reference to this subject, reported as follows:—The Committee of Registration, after mature deliberation, recommends, “That this Association take the necessary steps to have carried through the Dominion Legislature an Act similar (in so far as it is adapted to this country) to the Medical Act of Great Britain, passed in 1858, in which sanitary statistics are a most important feature.” The Medical Council of Ontario also, at its annual meeting at Toronto, in August last, adopted views precisely similar to the foregoing, and recommended the memorializing of the Government of Ontario on the same subject.

The value and importance of the information which Sanitary Statistics will furnish, cannot be over-estimated. In 1858, the Privy Council of Great Britain directed its attention to this subject, and the appointment of John Simon, Esquire, one of the most eminent sanitarians in London, to the office of Medical Officer of the Privy Council, was followed by a valuable report on the subject. Since that time, most valuable official documents are annually published; he has been allowed to call in to his aid all the special talent in the kingdom; and investigations, most important not only to the State, but to the cause of Science, are annually published. In one of these reports, Mr.

Simon says that "one-third of the deaths which occur in England are preventable, even with our present knowledge."

The economy as well as the humanity of a system of hygiene, which a sound plan of Sanitary Statistics would develop, must be apparent to the most superficial observer, if we look back to the fearful epidemic visitations of Asiatic cholera, Irish Emigrant or Ship Fever, small-pox, &c., which have repeatedly desolated our shores. These deadly invasions have been far more fatal, and infinitely more costly than any that war has ever produced. The most disastrous of the wars of the Greeks in times past, or of the Turks and Russians in the Crimea more recently, or, still later, of the fratricidal combatants in the neighboring republic, cannot compare with the slaughter and ruin occasioned by the Irish Emigrant or Ship Fever of 1847.

The number of emigrants who arrived in Canada in 1847 was 98,106; of the large number who died at sea we have no available statistics or record. From the best returns attainable, from official and other sources, it would appear that out of these 98,106, upwards of 11,000 persons died at Grosse Isle, Quebec, and Montreal; but the want of reliable information prevents us from saying how many died on their way to their proposed homes. However, it has been closely calculated, and may fairly be concluded, that of those who left the shores of Great Britain and Ireland in 1847, upwards of 60 per cent. perished from the fever.

In 1832, 1834 and 1854, Asiatic Cholera invaded this Dominion from the east by the River St. Lawrence, and in 1849, 1851, and 1852, from the south and west through the United States of America. Had we possessed effective and scientific sanitary laws at the aforementioned period of time, tens of thousands of valuable lives would have been saved to Canada, and millions of dollars to the public chest as well as to benevolent individuals.

The correctness of this statement is confirmed by the report of a commission appointed by the Government of Lower Canada, in response to a memorial from our Chairman, Dr. Marsden, asking for an enquiry into the manner in which Asiatic Cholera was introduced into Canada in 1854, and pledging himself to

prove to the satisfaction of the Commission if appointed, that Asiatic Cholera had been imported into Canada, and had been transmitted throughout the length and breadth of the land, by and through persons infected at the Grosse Isle Quarantine Station.

Three gentlemen were appointed to investigate and report, and were empowered to examine witnesses under oath. The Commission was composed of two medical gentlemen of high professional standing, and an eminent lawyer—since a judge. They entered zealously upon their duties and their report confirmed in every particular the charges brought by Dr. Marsden against the Quarantine authorities. This document, which is now in the possession of the Federal Government, is one of the most able and valuable reports ever composed on this subject; the publication of which, even now, would greatly tend to the advancement of sanitary science."

Then followed a series of suggestions as to the manner of collecting Sanitary Statistics, somewhat similar to those given by Dr. Geo. A. Baynes in his evidence before the Committee of the Local Legislature of Quebec last year, which were adopted.

"The Government should appoint qualified statisticians, whose duty it shall be to receive the monthly returns of the health officers, or other persons appointed to send said returns, and to compare, examine, tabulate, and report on the foregoing returns, and issue them from a central Bureau of Sanitary Statistics at Ottawa; the duties of which shall be the exclusive collection of such statistics as would attain the required object.

The result of the establishment of such a bureau would furnish authentic tabulated statements of the health of the Dominion, which would be circulated everywhere, and would be a thorough stimulant to Sanitary Science, educating people in the laws for preserving life.

The mortality of the City of London may be cited as a further proof of the value of sanitary legislation, where the mortality has been reduced from 42 per 1000 when the population was only 530,000, to 22 per 1000, at the present time, with a population of 3,000,000. Moreover, in twenty-five towns in England,

examined by Dr. Buchanan, one of the visiting medical officers a few years since, it was found that "in some of these towns (through sanitary administration), the general death rate had been lowered over 20 per cent; while in nine of them the number of deaths from enteric or typhoid fever was diminished over 10 per cent., and in ten others, from 33 to 50 per cent."

Calcutta also exhibits a remarkable diminution in the rate of mortality in its sanitary returns for 1871-1873. Five years ago the deaths were 20,000 per annum; they are now said to be reduced one-half. This astonishing improvement is attributed to strict attention to sanitary measures which have converted the city from an undrained and pestilential hole into a well-drained place, with a water supply far better than that of London, and as good as that of Glasgow. Strong measures were taken in the city to make the *registration of deaths* compulsory, and the mortuary returns are now properly and regularly supplied.

In the State of Massachusetts there has been a reduction in the death-rate of 15 per cent., attributable to wise legislative enactments. Nor is Massachusetts alone. In Michigan, as far back as ten years ago, the same course of legislation led to the gratifying result of 16 per cent. diminution in the death-rate in those years. Other States are following the same example.

Colorado, for instance, a few years since agitated this subject by addressing circulars to all the leading medical men in the United States and Canada, embodying a set of sanitary queries, and showing the comparative advantages of that territory for healthy settlement. This had the effect of attracting emigrants and settlers from all quarters of the country, including Canada, thus peopling it, greatly to the detriment and cost of Canada. By means such as these, the Government Health Officer or statist would be enabled to tabulate all mortality statistics in such a manner as would show the connection between the death-rate and the sanitary or unsanitary conditions of various parts of the country, the prevalence of any particular diseases in certain areas, and so on,

These data, fragmentary though they be, will suffice to show not only the necessity of constant and systematic attention on

the part of the Government to the vital statistics of the Province, but also the immense assistance which a logical use of them will afford them in estimating rightly the separate or combined influences of avoidable or removable causes of death.

It is impossible to compute the annual loss to Canada through deaths from *preventable* causes, but it may safely be estimated at many millions of dollars. Much money is annually spent in promoting and forwarding immigration to this country, as the Legislature are alive to the necessity of developing the country, which can only be done by increasing the population. Yet, owing to deficient sanitary measures, and want of reliable statistical reports, the advantages gained by immigration are, to a great extent, counterbalanced by our not taking care of the population we already have. Legislation on this subject would be a stimulus to the medical officers of health to show a low death-rate for their district, especially if that death-rate was examined at a Government bureau, and compared with that of other places. If an undue mortality in any place called for an explanation from the medical officer of health as to the cause of the high mortality, and he were required to look into the matter and have the cause remedied, of course the medical officer should have power to summon those who, for their own convenience or gain, are breaking the laws made by the Legislature for the preservation of health.

Had time permitted, your Committee might have extended this Report to any length by citing facts in support of the principles herein laid down. These, however, are unnecessary, and would only have had the effect of exhausting the time and patience of this Honorable House without strengthening the self-evident proposition laid down in a speech delivered at Manchester by the British Premier, Mr. Disraeli, that "*The first consideration of a Ministry should be the health of the people.*"

Sanitary Reports.

MORTALITY OF THE CITY AND SUBURBS OF MONTREAL, FOR MARCH, 1876.

CLASS.	ORDER.	DISEASES.	Total by Sex.		Total both Sexes.		
			Male.	Female.			
I. ZYMOVIC.	I. Miasmatic.	1. Small Pox.....	15	16	31		
		2. Measles.....		2	2		
		3. Scarlatina.....	6	3	9		
		4. Diphtheria.....		2	2		
		5. Quinsy.....					
		6. Croup.....	5	4	9		
		7. Whooping Cough.....	2	6	8		
		8. Typhoid Fever, (Infantile Remittent Fever)	5	2	7		
		9. Typhus, and Infantile Fever.....					
		10. Relapsing Fever.....					
		11. Continued Fever.....	4	3	7		
		12. Erysipelas.....	1	1	2		
		13. Metria, (Puerperal Fever).....		3	3		
		14. Carbuncle.....					
		15. Influenza.....					
		16. Dysentery.....		1	1		
		17. Diarrhoea.....	2	1	3		
		18. Pyæmia.....		2	2		
		19. Cholera Infantum.....	1	1	2		
		20. Cholera.....					
		21. Ague.....					
		22. Remittent Fever.....					
		23. Cerebro-Spinal Meningitis.....					
II. CONSTITUTIONAL.	II. Diabetic. Enthetic	1. Syphilis.....	1		1		
		2. Hydrophobia.....					
		3. Glanders.....					
		4. Intemperance..... } Alcoholism.....					
III. Diabetic.	III. Diabetic.	1. Privation.....					
		2. Purpura and Scurvy.....					
		3. Delirium Tremens.....					
		4. Intemperance..... } Alcoholism.....					
		IV. Parasitic.	IV. Parasitic.	1. Thrush.....			
				2. Worms, &c.....			
		V. Tubercular.	V. Tubercular.	1. Gout.....			
				2. Rheumatism.....		1	1
				3. Dropsy and Anæmia.....	1	7	8
				4. Cancer.....		2	2
5. Noma (or Canker).....							
6. Mortification.....				1	1		
1. Scrofula.....	1			1	2		
2. Tabes Mesenterica.....				1	1		
3. Phthisis (Cons. of Lungs).....	19			16	35		
4. Hydrocephalus.....	3			3	6		
Carried forward.....			66	79	145		

MORTALITY OF THE CITY AND SUBURBS OF MONTREAL.—(Con).

CLASS.	ORDER.	DISEASES.	Total by Sex.		Total both Sexes		
			Male.	Female.			
		<i>Brought forward</i>	66	79	145		
III. LOCAL.	II. Or- gans of I. Brain and Nervous System.	1. Cephalitis	1	1	2		
		2. Apoplexy	2		2		
		3. Paralysis	2	4	6		
		4. Insanity					
		5. Chorea					
		6. Epilepsy	2	1	3		
		7. Tetanus					
		8. Convulsions	4	8	12		
		9. Other Brain diseases, &c.	12	5	17		
		III. LOCAL.	III. Respiratory Organs.	1. Carditis, Pericarditis and Endocarditis.	1		1
				2. Aneurism			
				3. Other Heart diseases, &c.	5	5	10
				1. Epistaxis			
				2. Laryngitis and Trachitis			
				3. Bronchitis	4	7	11
4. Pleurisy	1			1	2		
5. Pneumonia	4			7	11		
6. Asthma	1			1	2		
7. Other Lung diseases, &c.	2			2	4		
III. LOCAL.	IV. Organs of Digestion.			1. Gastritis	1		1
				2. Enteritis			
				3. Peritonitis		3	3
				4. Ascites			
				5. Ulceration of Intestines			
		6. Hernia					
		7. Ileus and Intussusception					
		8. Stricture of Intestines					
		9. Fistula					
		10. Diseases of Stomach and Intestines, &c.	1	2	3		
		11. Pancreas Diseases, &c.					
		12. Hepatitis					
		13. Jaundice					
		14. Liver Disease, &c.		1	1		
		15. Spleen Disease, &c.					
III. LOCAL.	V. Urinary Organs.	1. Nephritis					
		2. Ischuria					
		3. Nephria (Bright's Disease)		2	2		
		4. Diabetes					
		5. Calculus, (Gravel, &c)					
		6. Cystitis and Cystorrhœa					
		7. Stricture					
		8. Kidney Disease, &c.					
		VI. Gen- erative Organs	1. Ovarian Disease				
			2. Disease of Uterus, &c.				
		VII. Or- gans of Loco- motion	1. Arthritis				
			2. Joint Disease, &c.				
				<i>Carried over</i>	109	129	238

MORTALITY OF THE CITY AND SUBURBS OF MONTREAL.—(Con).

CLASS.	ORDER.	DISEASE.	Total by Sex.		Total both Sexes.
			Male.	Female.	
		<i>Brought over</i>	109	129	238
V. VIOLENT DEATHS. IV. DEPENDENT DISEASES	VII. Integumentary System.	1 Abscess.....	1	1	2
		2 Ulcer.....	1		1
		3 Skin Diseases, &c.....			
	I. Of Children.	1 Stillborn.....	4	3	7
		2 Premature Birth.....	5	6	11
		3 Infantile Debility.....	34	31	65
		4 Cyanosis.....			
		5 Spina Bifida and other Malformation..			
		6 During Dentition.....	1	3	4
	II. Of Women	1 Paramenia.....		1	1
		2 Childbirth.....			
	III. Old People	1 Old Age.....	5	1	6
		2 Atrophy and Debility.....	9	3	12
	IV. Of Nutrition.	1 Fractures, Contusions, Wounds.....			
		2 Burns and Scalds.....	1		1
		3 Poison.....			
		4 Drowning.....			
		5 Otherwise.....	1	1	2
	I. Accidents or Negligence.	1 Murder, Manslaughter.....			
		2 Execution.....			
1 Wounds.....					
2 Poison.....					
II. Home Accidents.	3 Drowning.....				
	4 Otherwise.....				
	1 Chirurgical.....	1		1	
III. Suburbs.	2 Poison.....				
	3 Drowning.....				
IV. Not know	4 Otherwise.....				
	1 Chirurgical.....	1		1	
		Not know.....	2		2
		Total.....	174	179	353

SYNOPSIS OF METEOROLOGICAL OBSERVATIONS IN MARCH, FROM MCGILL COLLEGE OBSERVATORY.

Barometer readings reduced to sea-level and temperature of 32° Fahr. † Pressure of vapor in inches mercury. ‡ Humidity, relative Saturation, 100. § Observed. Ten inches of snow is taken as equal to one inch of water.

Mean temperature of month, 24.56. Mean of maxima and minima temperature, 24.67. Greatest heat was 52.0 on the 7th; greatest cold was 3.6 below zero on the 19th,—giving a range of temperature for the month of 55.6 degrees. Greatest range of the thermometer in one day was 52.5, on the 16th; least range was 4.9 degrees on the 1st. Mean range for the month was 13.4 degrees. Mean height of the barometer was 29.9611. Highest reading was 30.486 on the 15th. Lowest reading was 29.199, on the 29th, giving a range of 1.278 inches. Mean elastic force of vapor in the atmosphere was equal to .1107 inches of mercury. Mean relative humidity was 76.9. Maximum relative humidity was 100 on the 21st. Minimum relative humidity was 42 on the 3rd. Mean velocity of the wind was 15.46 miles per hour; greatest mileage in one hour was 49 on the 13th. Greatest velocity was 52 m. p. h. on the 13th. Mean direction of the wind, West. Mean of sky clouded was 71 per cent.

Rain fell on 5 days. Snow fell on 17 days. Rain or snow fell on 19 days. Total rainfall, 0.74 inches. Total snowfall, 45.6 inches. Total precipitation in inches of water, 5.30.

MEETING OF THE CITIZENS' PUBLIC HEALTH
ASSOCIATION.

HELD FRIDAY, MARCH 31st.

(Dr. J. Baker Edward in the Chair.)

The Secretary, Dr. Geo. A. Baynes, read the minutes of the last meeting, which were confirmed. He then read several communications, one of which was an official notification from Peter Redpath, Esq., the Treasurer of the Association, to the effect that the funds of the Association were completely exhausted, and if the Society was to continue its useful operations in an effective manner, more funds would be required. Dr. Baynes stated that out of the 500 who had signed their names and signified their intention to support the Association, only a small percentage had paid their annual subscription.

Mr. Springle proposed:—"That a meeting of the council be called to take into consideration the financial state of the Society." This motion was seconded and carried.

Dr. Donald Baynes was then called upon to read his paper—on House Ventilation, etc.

He gave a description of Banners Trap and Cowl as showed at the Social Science Congress at Brighton. The usual discussion then followed. His Worship the Mayor, Dr. Carpenter, Mr. Springle and others taking part in the discussion. The action of the cowl in ventilating houses seemed to be generally approved, in fact. His Worship said he though it was the best appliance that he had seen for ventilating purposes.

The Secretary then read a letter from F. N. Boxer, Esq., making a donation of the "Mechanics Magazine" to the Society's Library.

A vote of thanks was given to the donor of the "Magazine," and to the reader of the paper. The Chairman then closed the meeting.

Correspondence.

To the Editor of the Public Health Magazine :—

DEAR SIR,—I would solicit space in your valuable journal, in reply to a note at the foot of the able paper contributed by Dr. Rourke, in order to correct some statements made in criticising the plan I have proposed for utilizing the rain and snow fall in flushing the sewers and ventilating the same. The learned Doctor has fallen into two errors, and controverts two propositions entirely the reverse of the case in point:—First, the system I propose is nearly identical with that carried out with such beneficial results by Dr. Carpenter at Croydon; and if the learned Doctor will substitute “beneficial” for “baneful,” his statement would be more correct.

My knowledge of this is only due to Dr. Rourke’s remarks, as previously I was not aware of the sameness of the schemes until my attention was called to the subject, and on referring to the *Atlantic Monthly* for October 1875, page 441, after careful perusal, I find the Doctor entirely in error. Therein he will find the principle the same as advocated by Professor Godfrey and myself.

Error second:—The Doctor says I wish to take a disgusting drain pipe up through the centre of his dwellings, he seemingly being oblivious of the fact that one at least of these disgusting soil-pipes is already in his dwelling, and that the termination of the sewer in the street is within a few feet of his sleeping apartments. My plan only proposes to carry this disgusting soil-pipe up through the roof instead of terminating in his bathroom and water closet. Which will he prefer?

Had the Doctor taken the trouble to examine either Professor Godfrey’s or my own plan, (which were on view at the time the Professor read his paper), and attended to the lucid explanation then given, he could not have fallen into such errors.

Referring to the Doctor's remarks anent expense, this item is of the least importance. I will endeavor to show him that he again labors under a misapprehension :

As already stated, I intend continuing the soil-pipe up through the roof instead of terminating it in the closet or bath-room. I suppose that five dollars would in most cases cover all the extra expense on each house. To show that the Doctor does not apprehend the argument, he presumes that all the spouts and gutters now on the house are required in my plan, while the reverse is the case, they are entirely dispensed with, thus saving all the imaginary thousands of feet of piping, gutters, etc., which would be equal to \$50 on each of his twenty houses, or \$1,000 in all, while by the plan proposed, say \$5 on each house—\$100 for twenty houses, there will be a saving of \$900, quite a consideration in these hard times. An eminent architect of this city informs me that there will be no additional expense incurred in building a roof on the plan proposed.

Regarding the effect of frost in winter, there is no proof as yet that any such pipes properly constructed have frozen, although the premises have been unoccupied, on the contrary, I have in my possession assurances from practical men bearing me out in all I claim on this point. Several failures in this respect I know of,—in every case caused by improper construction; also, be it remembered that the houses unoccupied in winter, constructed on the old plan, unless cared for, are liable to bursting of pipes, cisterns, etc., which I have experienced to my cost this winter; therefore this should not be a serious objection, as an empty house is not the normal condition of things, but the reverse in this city. Thanking you for the courtesy extended, I remain

Yours respectfully,

JNO. C. McLAREN

Montreal, March 27th, 1876.

 OBITUARY.

We feel deeply the sad obligation that now devolves on us of having to record the death of that able and much loved scientist, Edmund Alexander Parkes. He was born near Birmingham and received his education at the Bluecoat School, where Coleridge, Charles Lamb and many other famous men received theirs. He was a distinguished student at University College Hospital, and while a student he assisted his uncle, Dr. Anthony Todd Thompson in his laboratory. At a later period he lectured for him on *Materia Medica* and *Medical Jurisprudence*. Honors fell upon him at the London University when he passed his first M. B. examination in 1840; he was exhibitioner and medalist in *Anatomy and Physiology*, the same in *Chemistry*, medalist in *Materia Medica*; he was also medalist in *Physiology and Comparative Anatomy*, and took honors in medicine in 1841, when he took his M.B. degree.

Dr. Parkes entered the army in 1842, as assistant surgeon in the 34th Regt., but resigned in 1845; went to India and there made a series of *Pathological observation on dysentery*. At the time of the Crimean war he was selected by the Government to organize and conduct a hospital which he established at Renkioi on the Asiatic bank of the Dardanelles. Upon the founding of the present Army Medical School, he was appointed to the chair of *Hygiene*, and certainly, as results have shewn, there was no one so well fitted to fill it as Dr. Parkes. It would be impossible to describe this man's indomitable energy and conscientious character better than Dr. Reynolds did on Friday the 24th March, to his class at University. He summed up as follows:

"A man honest, earnest, and ingenious in his work; with love of truth, for its own sake and for the sake of man; untiring in his industry; unsurpassed in skill, whether in diving new, or in utilising and correcting old methods of inquiry; patient in research, and accurate in the statement of its results; with his eyes always open to new light, and a mind richly stored with all the knowledge of past labor in our own and in other lands; he served his profession and his country, and has left behind him works that will be referred to and employed for many years to come.

"But it would be to say little of Dr. Parkes to say but this. His character and conduct were such as to inspire those about him with a contagion of like activity; and though none may have been his equal, many have been stirred by his example to follow in his steps, and go on their ways with a vigour and honesty which carry with them their own reward.

"But still further, there was a beauty in his life which carried even those who knew him but casually and slightly into a new range of feeling, not merely of admiration, but of affection, and which, in all who knew him well, was transformed into a tender and venerating love.

"A former colleague of his said to me many years ago, 'Parkes has but one fault—if fault it may be called—that he cannot believe that there is anyone in this world not as good as himself.' Another early friend and colleague said to me quite recently, 'He was nearer to perfection than any man I ever met with.' A pupil of his, and one of my present colleagues, said to me some years ago, 'I never went round the wards of the hospital with Dr. Parkes without wishing to be a better man, and not only so, but I felt that I might become such.'

"No nobler testimonies than these can be borne to any teacher, any man. To create the desire for goodness, and to inspire the hope and belief that it may be approximated, even if not attained to the degree that he had reached, is that beyond which human character can scarcely pass. Not many hours before his death I told him of what my colleague had said, and his reply was, 'Thank you, very much, I cannot tell you how it cheers me.' And then he closed his eyes, and lay back upon his pillow, and said 'Farewell.' His face was calm and peaceful, and he said, 'I shall sleep.' I watched him for a few moments as he lay, with closed eyes and tranquil look, and thought that nothing so beautiful I had ever seen. White as the pillow on which his head was resting, there was more than ideal beauty in his face, for it was the real and still living clothing of the heart and mind of one whose memories of past and blameless life had given him perfect peace, and whose faultless heart was strengthened by, as he told me, his confident belief in the Eternal Life. In the combination of moral, mental, and physical beauty, Dr. Parkes was to my knowledge never equalled, to my belief cannot be surpassed. Pure as a sunbeam, strong as a man, tender as a woman, keen as any scientist to unravel the hidden mysteries of life in its minutest detail of chemical and physiological research, yet practical in the application of his knowledge to the cleansing of a drain or the lightening of a knapsack, he made the world much richer by his life, much poorer by his death. I can wish for you nothing better in this world than to live as he has lived, honoured and beloved by all who knew him, and to die as he has died, to the sorrow of those whom he and you may leave behind, but yet a sorrow tempered and softened by the gratitude we ought to feel that "such as these have lived and died."

PUBLIC HEALTH MAGAZINE,

MAY, 1876.

SANITARY STATISTICS.

We are very glad that so much discussion has been held, and that the press, both secular and professional, in the Dominion, have used their columns in the free criticism of Dr. Brouse's endeavor to obtain legislative action in the all important matter of Sanitary Statistics. We are convinced that the more it is discussed and criticised the more the result must end in obtaining the acquiescence of all thinking men on this subject, and therefore tend more than anything else to bring about its consummation. Meanwhile it is certainly the duty of all who wish well to the manly effort lately made to extract from the Commons of the Dominion legislative power to procure reliable statistics on this subject, to use their best endeavors to support the arguments so ably set before the House, and to seek to refute those criticisms which have been liberally poured against them. We suppose that all will agree that by some means or other the end sought is desirable, viz., to arrive at reliable statistics about the health of the country, and therefore the only question that arises is the best mode of attaining them. We are free to confess that we consider Dr. Brouse's speech before the Commons of Canada, when demanding an enquiry by Committee into the advisability and feasibility of establishing a Bureau of Sanitary Statistics and Hygiene Science, to have been a most able and deeply interesting one, and its weight and influence were felt; it was a carefully digested exposition of his views, and contained matter of vital importance for this or any other country that is seeking sanitary reform. As to the examples instanced, and the manner our

own City of Montreal came in for its share of stigma, before we denounce the assertions of Dr. Brouse, let us ingenuously and candidly examine his statements. Dr. Brouse says.—“He would next turn to the Dominion of Canada and take first the City of Montreal. . . . the death-rate in Montreal was 38, but he was inclined to think that it exceeded 40 per 1,000. Montreal was most favorably situated; but, notwithstanding this fact, its death-rate was 20 per cent. greater than that of the crowded City of London.”

Now, though one of our contemporary editors denies this, yet we must say that what Dr. Brouse stated is perfectly correct, and is “borne out by facts.” We need not go back so far as 1871, but we will take last year alone, and we will give every advantage to our contemporary by placing the population at a figure we are sure we have not yet attained, viz., 150,000. We had last year 6,311 deaths from all causes, which will give the enormous percentage per 1,000 of 42 and a fraction. The average death-rate of London is 22 per 1,000, so that Dr. Brouse was perfectly correct in stating that the death-rate of Montreal was “20 per mil. greater than the crowded city of London.” We feel ashamed to have to acknowledge this fact in regard to our fair city; but, in justice to Dr. Brouse, we cannot deny it.

The *Canada Medical and Surgical Journal*, feeling that even the percentage at which it places the death-rate of Montreal needs some apology, says:—

“It must be stated that we in this city suffer from a plethora of charitable institutions. The citizens are wealthy and liberal, and we see on all sides rising heavenward the minarets of good substantial churches, hospitals, homes, and poorhouses—what more natural than that these institutions should attract the sick and destitute of other parts of the country, a certain proportion of whom die and are buried in one or other of our cemeteries. The actual and positive death rate of the City of Montreal is not really attainable, from the defective character of our returns.”

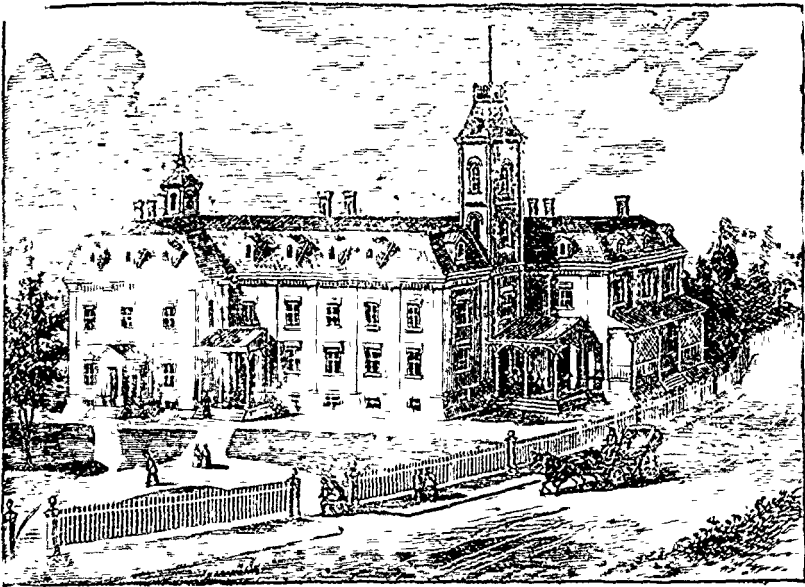
But let us ask ourselves, cannot the same thing be stated, and in a very much larger degree of London, with which our city is relatively compared, that it also “suffers from a plethora of charitable institutions.” We quite agree with our contemporary that sanitary science is all very well, but sanitary facts will be

far more useful ; and if the Bureau of Statistics can, with a proper and rigid Registration Act, draw, year by year, a comparison between the mortality of any two places throughout the Dominion of Canada, much good will result, and we will then be in a position to seek out the causes of an increased death rate in any particular section of the country with a view to its removal. The concluding remarks of Dr. Brouse, regarding the subject from a financial standpoint, are exceedingly telling, and prove that a nation loses in wealth as she suffers in health,—an argument demonstrated as true individually, and therefore collectively. He says :—

“There were three considerations involved in the question before the House. They were life, health and money. With regard to the first, Dr. Simon said in his valuable life report, ‘That one-third of the deaths in England could be prevented.’ There was a population of 4,000,000 in Canada, and taking the death rate as 30 in 1,000 there would be 120,000 deaths, one-third of which, 40,000, would be preventable deaths. He was willing to take 15,000 as the number of preventable deaths, and he was satisfied that that estimate could not be questioned. They were very anxious to attract emigration to our Canadian shores and spent a good deal for that purpose ; but they had a preventable death rate greater than the entire emigration remaining in Canada. When so much money was spent in attracting strangers to Canada, should they not be as anxious to protect the lives of those near and dear to them, and be equally ready to enter upon a similar expenditure for that purpose? With regard to the second point, health, it had been shown that for every death there were 20 cases of severe sickness. That gave, with 15,000 deaths, 300,000 severe cases of sickness which might have been avoided if sanitary measures had been properly understood and carried into effect in the Dominion. Each death, according to English statistics, implied an average of 20 days of sickness, which, taking the number of preventable deaths in the Dominion as 15,000, gave 11,000,000 days of preventable sickness. The returns published in Europe showed about 8 days’ sickness yearly to each individual, one-third of which was preventable. That would be 6 days to each person, but taking as the lowest estimate, 3 days, that would give 12,000,000 days of sickness that could be prevented. The two methods came within a fraction of each other. Now, there was also a money consideration in this matter. It had been shown that the average cost of each case of sickness was \$40, and they had 15,000 preventable deaths in this country. Twenty-seven cases of sickness to each death gave 300,000 severe cases

of sickness, which, at \$40 each, would give the sum of \$12,000,000 expended yearly, which might be prevented if proper sanitary precautions were taken. Again, it was allowed that funerals cost generally \$20 each. That would give another preventable expenditure of \$6,000,000. It had been estimated that each individual life was worth \$50 per year, making the value of each adult life to be \$1,000. The total loss to the Dominion by these preventable deaths was \$750,000. There was also a large amount of suffering which could have been prevented; and crime being the result of poverty, which was bred by sickness, it was necessary to take these circumstances into consideration in order to come at a proper estimate of the value of health. He knew that it was a difficult matter to approach the Government on these questions. The loss of an individual was simply regarded as such, and he appealed to the House and Government to take this matter into serious consideration and to legislate for the general good of the country. He knew that some would say that it should be left to the physician; but this he denied. It was not his duty to prevent, but to heal diseases, sacrificing at times his health and life for the benefit of his fellow-creatures; but it was the duty of the statesman and philanthropist to initiate sanitary measures in this relation. It could not be said that our climate was not favorable to longevity, for the Blue Book just placed in his hands had convinced him, as he thought it would every hon. member, that no country in the world occupied a better position in this respect. The returns showed that 3,000 veterans of 78 years of age were now living, though at the time of the war of 1812, the population of Ontario only numbered 82,000; and this circumstance could not be paralleled.

“He did not wish to prevent Local Governments from taking action as well, but with this he did not think that a bureau of sanitary science would interfere. They simply asked for some central point, where they might receive all information relating to diseases peculiar to our climate and soil, and everything in this regard concerning the children on the streets, the artisans in their workshops, the thieves in their prisons, the insane in their asylums, etc. The Government should legislate if possible to protect the health of the people, and to preserve human life.”



WE visited, at the invitation of Rev. R. P. Duclos, and thoroughly examined the French Protestant Ladies' College at St. Hyacinthe, Province of Quebec, of which the above picture is a very fair representation. It is a large and commodious building, three stories high, built of brick eighteen inches thick. It is in two parts; one the main building, facing the south on Montdor street. This part is used by the Principal and family as a dwelling house, and, when required, there are vacant rooms that can be made use of for pupils. Adjoining this is the new wing, which is the College proper; its size is 88 x 140, and it is approached by Laframboise street, the main street of the town. It is bounded on the north by Prete street, on the south by the older building and Montdor street, on the east by a large garden and playground and William street, and on the west by Gerourd street. The situation is airy and convenient to the railway station, and, being in the centre of the town, is quite accessible for day pupils. Opposite and just across Gerourd street, in a sou'-westerly direc-

tion, the ground is to be laid out in a fine Park by the Town Council, who have also provided for cleanliness by constructing a fine water supply to the town. It has also been lately supplied with sewers in the main streets. The Council have given leave to the Canadian Gas Lighting Company to lay pipes for the supply of gas, and are improving the already beautiful little town by the introduction of all the late Scientific Sanitary appliances. The town is admirably situated for the support of an institution such as this, from its centralization, affording easy access to all parts of the Dominion, and its elevated and necessarily healthy situation, having the beautiful river Yamaska flowing past its western border, secures its salubrity. Much more might be added in praise of the town itself, but enough has been said to guarantee the healthiness of the locality to students attending the College. We will now pass to the description of the College wing, where all the class rooms are, and in which the students live. Upon entering by the main door from Gerourd street, we find ourselves in a large hall, to the right of which are two commodious reception rooms, each 18 x 20, well furnished, bright and airy. From the hall you ascend a broad staircase to the second flat, which has a passage running the whole length of the building, 140 feet. On each side of this passage are doors to the sleeping apartments (seventeen in number)—these are all warmed and well lighted, and from the windows on the east side you obtain a very extended and beautiful view of the surrounding country across the river. The story above this is divided in the same way with equally good sleeping apartments and sitting rooms. The end of each passage leads to the closets, which are separately built from the main building and are fitted up with double doors of exit and entrance (this is especially a very valuable precaution, as much disease and sickness might ensue if these preventative measures were absent). Returning to the main hall, and passing along the passage, we enter to the right a class room for the senior students, furnished with suitable desks and chairs of the proper height and inclination—this room is also well lighted. Passing through this class room we enter a second for junior girls, and further on a third for those in the

preparatory class—both of which are fitted up to suit the size and ages of the pupils. From the senior class room you enter the chapel house, well suited for the purpose for which it was intended. Descending into the basement by a stair beneath the main staircase, we enter through an ante-room or pantry, the dining room, 30 x 40. This has three long dining-tables in it, which, when we examined the room, were laid for tea; everything looked clean, and the food substantial and good. Leaving this room we passed through the ante-room, or pantry, to the kitchen, which was clean and appeared to be well conducted. From this we looked into the cellars, for coal, wood, vegetables, &c.,—all of which were admirably fitted for the storeroom of kitchen necessaries.

We understand the following improvements are to be made this coming summer, as recommended by Dr. Geo. A. Baynes:—

A ventilating shaft is to be erected from the basement up through the tower, and surmounted by one of Banner's ventilation cowls. Into this vertical shaft, horizontal shafts are to be run on each flat from end to end of the building, with valves, at convenient distances, that can be opened or closed at will, (for the escape of the noxious gases generated) without draught or inconvenience to the occupants. In short, Banner's complete system of school ventilation is to be applied.

The heating is to be done by steam radiators, distributed through the house in proper positions. Water, both hot and cold, is also to be carried into every flat by iron pipes, together with plunge baths, and all modern conveniences. Good tile drains are to be laid in connection with the town sewers, and petroleum gas is to be introduced by the Canadian Gas Lighting Company to the whole town as well as to this school. In short this College is destined to be one of the best equipped in the Dominion, and should be well supported.

PHYSICAL EDUCATION OF GIRLS.

Let those mothers who are afraid to trust to Nature for the strengthening and development of the limbs and spines of their daughters, attend to facts, and their fears will vanish. It is notorious that most of the girls who, in opposition to the laws of nature, are encased in stays and get insufficient exercise, become deformed—while among boys, who are left to acquire strength and symmetry from unrestrained muscular action, deformity is extremely rare. In the girls the pressure of stays impedes the flow of blood to the muscles, which, being therefore imperfectly nourished, waste away. They become pale and flabby, and suffer a diminution of their contractile power. They are no longer able to hold the trunk erect, and spinal deformity necessarily ensues. To produce this result, a degree of pressure is sufficient, far below what is requisite to cause distortion of the chest and compression of the respiratory and digestive organs.

In a school of young ladies, containing forty pupils, it was discovered, on an examination by Sir John Forbes, that *only two* of those who had been resident in it for two years had straight spines; while out of an equal number of boys, imperfect as their exercise often is, it would be difficult to discover as many whose spines are crooked. Here, then, is ample proof that stays and want of exercise, so far from contributing to an elegant carriage, are directly opposed to its acquisition; and that disuse of stays and indulgence in exercise, (even when not carried so far as the wants of the system require), instead of being hurtful to the spine, are largely conducive to its strength and security. Yet such is the dominion of prejudice and habit, that, with these results meeting our observation in every quarter, we continue to make as great a distinction between the physical education of boys and girls as if they belonged to different orders of beings!

Spinal deformity may arise either from habitual indulgence in a faulty posture, (as in writing or drawing), or from muscular weakness, caused by deficient exercise, the use of stays, &c. In the former case, the spinal column being bent to one side, retains,

for hours at a time, in a state of tension, the muscles of the opposite side, which thus seems to become elongated, and they are unable to contract with sufficient power to hold the spinal column straight when an exact posture is attempted to be resumed. When the cause of the deformity is general weakness of the muscles, the determination of the leaning to one side or the other is usually dependent on the habitual employment of the girl. In both cases the result is equally to be deplored; and we make this earnest appeal to mothers because in truth *it is they who are responsible* to God and man for the suffering thus entailed upon their children. Let them listen to the expostulation of one of their own sex, whose worth and talents entitle her to be heard with respect: "We are now so much accustomed to see delicate women," says Madame Necker de Saussure, "that from want of good models, the ideal of a good figure has altogether disappeared from the imagination of many. What features do we boast of in romance? Is it dazzling freshness, or the graceful elasticity and vivacity of youth? No, it is a fragile airy form, a sylph-like figure, an interesting paleness occasionally relieved by a tinge of carnation. Is it an expressive look, softly shaded by melancholy? *But the most of these indications are precisely those of feeble health.* Extreme delicacy of form, a color which comes and goes, and a languor of expression forbode nothing good for the future mother or wife, called upon perhaps to aid her husband in adversity. And yet, in the meantime, pictures of this kind fascinate the imagination of a young girl, and even of a mother, and make them afraid of injuring charms so seductive. One girl will not eat for fear of becoming too stout; another will not walk lest her foot should become too large. What miserable folly!"

Miscellaneous Selections.

USES AND ABUSES OF LIFE INSURANCE.

BY A. H. DANA, ESQ.

(Continued from page 317.)

III. WORKING OF THE SYSTEM AS AFFECTING INSURERS AND INSURED.—It is quite apparent that business done in this country upon the English graduation of premiums, must tend to a largely disproportionate profit of insurance companies. Accordingly it will be found that there has been a swift accumulation of capital or reserved fund by companies that have been well managed, to an enormous amount. So it was in England while the higher rates of premium tabulated by Dr. Price were received, and so far as those rates are still demanded, there must be the same continuing result.

It might be inferred from this that the English companies, which became very numerous in consequence of the success of the Equitable Insurance Company, for which Dr. Price prepared the tables, must have prospered, whereas it was stated in 1867 that within twenty-three years prior thereto 240 companies had gone out of existence, there being at that time only 117 extant.* But it has been shown that the cause of failures was not in any instance the want of profit, but reckless extravagance in the management of business. Herein is the chief objection to profit beyond what is required to meet payment of death claims. The accumulation is regarded, not as it would be if it belonged to a man's private fortune, but being a trust fund and belonging to others, it is less likely to be guarded from diversion to collateral purposes. Practically such funds, when there is no individual responsibility, are dealt with like public moneys, from which it is deemed fair to get large emoluments. Hence, being in the hands of officers who can protect themselves by a corporate vote, the assets are in the first place subjected to the tax of large salaries, next there is danger of favoritism in investments—officers

*Walford's Insurance Hand-Book.

or friends are too apt to get the use of them for their own private speculations.

Observe now the extent of accumulations and the method of investments in this country. In December, 1872, it appeared that the aggregate of assets controlled by New York companies was \$350,000,000, and the yearly income above \$100,000,000.* It was also a subject of comment in the newspapers at that time that great fortunes had been acquired by those holding official positions, and that even agents realized large incomes—from \$10,000 to \$20,000 not being rare; that within five years (1867-1871) such agents had received in New York, for commissions alone, an aggregate of \$40,000,000, while during the same period the companies paid only \$75,000,000 for losses. Another statement was made about the same time, that the receipts of the Mutual Life Insurance Company, of New York, had, up to January, 1872, been upwards of \$100,000,000, and that the disbursements for death claims had been only \$16,954,557, leaving \$83,358,000 for profits. How much of this was expended for salaries was not stated—nor how much for dividend to policy holders. The practice of that company has been arbitrary, for a long time they paid no dividend at all till the policy fell due, and if, in the mean time, there had been a failure to pay a single premium, there was a forfeiture not only of the policy, but of all dividends which had accrued prior thereto. Afterwards they adopted the practice which had been introduced by other mutual companies, of paying a certain proportion of dividends, but the amount has never been according to a settled rule, or at least none known to policy holders. In the meantime salaries have been augmented, and yet, notwithstanding these, and the enormous amount of commissions paid to agents, the assets of that company, as last reported (1875), had reached the almost incredible sum of \$72,130,493.†

*This statement is taken from the Reports of the Companies to the Insurance Department, published in 1873.

†The assets of some other prominent companies appear by Reports of 1875 to be as follows:

Equitable Life Assurance Company, New York.	
Paid capital, \$100,000.....	Assets, \$25,606,847
New York Life Insurance Company, New York.	
Assets, \$27,249,476	
Mutual Benefit Insurance Company,	
(Of New Jersey, but the larger proportion of its business done in New York,)	
Assets, \$30,625,125	
Manhattan Life Insurance Company, New York.	
Paid capital, \$100,000.....	Assets, \$9,587,052

It is worthy of notice that of the assets of the Mutual Life Insurance Company,

Other companies have been equally arbitrary in respect to dividend. It is with all of them simply what is voted to be paid. It might be thought that policy holders would be ready to vote themselves liberal dividends. But here comes in a mode of managing such institutions that neutralizes the action of policy holders in their own behalf, viz., that the managing officers hold the proxies of most of the insured and are sufficiently skilled in this vital part of their business to keep the control, and defy any danger of adverse combination. But again, a certain proportion of stockholders have taken policies merely as an investment, and it is their interest that dividends should not be largely made. What is saved will be added to the final dividends of the great policy holders.

Whence has come this vast accumulation of assets? The public do not discriminate between assets thus held by insurance companies, and the capital of banks and other institutions actually paid in by the stockholders. Who reflects that the former are made up largely from the contributions of a class who have derived no pecuniary benefit from their policies, those who have been unable to continue the payment of premiums, and have had to submit to forfeiture, and those who have held policies for a limited term which has expired?

No equitable arrangement has ever been prescribed (I mean under any legal sanction) for the surrender of policies when the occasion for continuing them has ceased, or the holder has become unable to pay the premium. The companies do, indeed, profess a very kind regard for the policy holder, and to be willing at any time to receive a surrender upon a valuation of the policy.

Let a man ask what is the value—he will be referred to the actuary, who will go into profound mathematical calculations incomprehensible to the policy holder, but the result of which

there is an item of real estate, \$2,767,273, which is independent of mortgage securities, which amounted to.....\$56,519,056

The income of the company the preceeding year was...\$19,857,153

Paid for losses, annuities, etc..... 8,477,298

Leaving the net amount for one year.....\$11,374,855

So in the assets of the Equitable Assurance Company is an item of real estate of \$3,931,451, independent of mortgage securities.

Both of these companies must now have a still larger amount in value of real estate, if we may judge from the expensive buildings recently constructed in Boston and other cities for their agencies. The building of the Mutual Life Insurance Company, in Boston, it is estimated, will have cost a million and a half when finished. The adjacent building of the Equitable was not as large a cost, but still a great outlay. Neither of these buildings is likely to yield much return in rent for offices not occupied by the agencies.

will be about as satisfactory as the cash valuation by a Jew pawnbroker of old clothes offered by a needy vender. Some of the companies go beyond this, by a benevolent offer to allow something upon a forfeited policy. Mark this, however, that no such obligation is assumed in the policy itself, and if any unfortunate policy holder shall come after the day when his premium has been left unpaid, he will find a still more meagre amount of value than in the case of a subsisting policy, even if a company should keep up any pretense of paying a value which it is not obliged to pay.

IV. REMEDIAL MEASURES.—By a law of the State of Massachusetts, passed in 1861, provision is made for a temporary continuation of a policy when the premium has been left unpaid, by applying three-fourths of the net value of the policy as calculated by actuaries, deducting all indebtedness, as a premium for temporary insurance—the term to be determined according to the age of the party at the time of default in payment of premium. In case of death of the party insured within the extended term, the whole amount of the policy is to be paid with the deduction of the premiums forborne, or which should have been paid. This is an equitable safeguard against many cases of loss accruing soon after the lapse of a policy. I don't understand how the law is constructed in Massachusetts in respect to a continuation beyond the term to which the net value of the policy applies as a premium—that is to say, whether the insured can keep it in force for a longer period by renewing payments of premium. Probably further legislation will be found necessary for the more perfect accomplishment of the object had in view.

A more effectual benefit to the larger number in the community would be a reduction of the premium to the real standard of risk, so as not to straiten unnecessarily the large class who ought to be insured, but whose limited means are inadequate at the present rates. That such a change will, at some future time, be brought about, I venture to predict, but how soon is exceedingly questionable. A reduction was proposed by the officers of the Mutual Life Insurance in November, 1872, but was vehemently opposed by old policy holders (for reasons which I have before adverted to), and also by other companies, and the project was, after an acrimonious discussion, abandoned.—*The Savitarian*.

New York, February 1, 1876.

THE DISPOSAL OF THE DEAD.

In his annual report on the mortality in England, just issued, the Registrar-General enters at some length into the consideration of the disposal of the dead. Dismissing embalming as a failure, and moreover as forbidden by nature, Dr. Farr reviews the system of cremation advocated by Sir Henry Thompson and combated by Dr. Holland, the Medical Inspector of Burials. On the whole, the Registrar-General seems about equally balanced in favor of burial and cremation. He says:—

“ In comparing the two methods, their cost in ceremonial and monuments may be set down as equal, it may be either great or small, but the indispensable outlay in inhumation and cremation will differ to an extent that experience alone can determine. On the side of the public health cremation has the best of it; it destroys the germs of zymotic diseases, of offense, and of corruption at once. It is especially suitable to the dead by epidemical diseases. The present abuses of a barbarous burial system must cease. But there is no reason why a well-devised inhumation and perfected cremation should not go on side by side; the one or the other being adopted so as to meet the exigency of each case, creed, place and climate. Habits change slowly, and if trials are made experience will decide. Neither of the systems when once in use will excite in common minds more repugnance than Nature, desiring her creatures to love life, has thrown over the contemplation of dissolution. Some will prefer a house of rest in the earth; others a home in the sky. It is easily conceivable that a woman of refined mind might choose cremation to escape what she dreads of worms, mould, eremacausis, putrefaction, or any kind of profanation. The question of interment is, as the population increases, becoming every day more urgent; it is not a mere question of sectarian grievance; it is a prime question of public health. Churchyards infect cities. Burial must be shorn of its dangers. It is vain to attempt to throw all the blame of existing abuses on undertakers. Their occupation is not attractive; it is unhealthy. They do very fairly what they are required to do by families who are swayed by fashion. Nor is it in England a matter of great reproach against the proprietors of cemeteries that they are ‘trading companies’, that is, companies which advance capital, and offer to perform certain services on certain terms. What would the state of London be without its fourteen cemeteries, some of which are now full? The day will probably soon come when the several municipalities and sanitary authorities may, after due inquiry, and on equitable

terms, relieve the cemetetics and yards of their office; and lay down such wise regulations as may secure the decorous, safe inhumation or cremation of the seven hundred thousand bodies that fall victims to death annually in the United Kingdom."

ALCOHOLIC THIRST.

To these symptoms, whichever of them be present, there is added one which is never absent altogether; I mean an undue thirst. The real amount of liquid required per day by man under ordinary circumstances, does not exceed a pint, because every portion of what seems to be solid food supplies water. But when alcohol is introduced, the natural demand is increased at every turn. The alcohol while in the tissues, itself demands water, owing to the great affinity for that fluid; and to gratify this demand, the necessary pint is increased to many pints a day, by different fluids drunken at different meals, and between meals. Thus I have known a temperate man take a pint of tea or coffee at breakfast; a pint of ale between breakfast and luncheon; a couple of glasses of sherry with a half-a-pint of water at luncheon, an intermediate glass of ale or cup of tea between luncheon and dinner; two pints of mixed drinks, in form of ale, wine or water at dinner; a half a pint of tea or coffee after dinner; and a final draught of spirits and water, or wine and water, or seltzer, amounting to yet another half-pint before going to bed. In this instance the body has been receiving fluids to the extent of at least six pints per day, or five times beyond what is really required. Naturally, a body thus treated deteriorates. Naturally, it becomes gross from the quantity of unused water laid up in its tissues; naturally, its secreting organs become overtaxed; naturally, its stomach becomes distended with fluids and gases, its muscles relaxed, its heart and its mechanism of respiration enfeebled. Most naturally, its nervous system becomes deficient in activity and power.—From "*Diseases of Modern Life*," by Dr. B. W. Richardson.

The absurdity of the china mania received a curious illustration the other day. A small pair of Sévres vases put up for sale at a suburban auction, after a brisk competition, fell at 1,800 guineas. At once a dispute arose as to the purchaser. Two rivals soon grew so angry as to spread their excitement to the rest of the company. In the *melée* which arose one of the vases was smashed into fragments. That meant a loss of a good deal more than 900 guineas. A solitary vase is never worth nearly

so much as one of a pair. The disputant were put out of the house, though how the financial question was settled appeareth not. In spite of this warning of the transitory nature of things fictile, the eagerness of bidders in nowise cooled. A pair of vases, only 18 inches high, was bought by Lord Dudley's agent for 7,500 guineas, and so forth, the day's sale realizing 43,000*l.*—a good day's work. But something must be done with too eager purchasers. An ang, bric-a-brac hunter, is, at a sale of Sévres, more dangerous even than a bull in a china-shop.

AN ECONOMICAL WIFE.

The following letter from Lady Compton to her husband, Lord Compton, afterward Earl of Northampton, written in the year 1610, the eighth year of James I., shows that our grandmothers were not so sparing of their husbands' purses, after all, as some would have us think them:—

“MY SWEET LIFE,—Now I have declared to you my mind for the settling of your state, I suppose that it were best for me to bethink and consider within myself what allowance were meetest for me. I pray and beseech you to grant to me, your most kind and loving wife, the sum of £2,600, quarterly to be paid. Also I would, besides that allowance, have £600, quarterly to be paid, for the performance of charitable works, and those things I would not, neither will, be accountable for. Also I will have three horses for my own saddle, that none shall dare to lend or borrow, none lend but me, none borrow but you. Also I would have two gentlewomen, lest one should be sick, or have some other let. Also, believe it, it is an undecent thing for a gentlewoman to stand mumping alone when God hath blessed their lord and lady with a great estate. Also, when I ride a-hunting, or a-hawking, or travel from one house to another, I will have attending; so, for either of those said women I must and will have for either of them a horse. Also, I will have six or eight gentlemen; and I will have my two coaches, one lined with velvet to myself, with four very fair horses, and a coach for my women, lined with cloth and laced with gold, otherwise with scarlet, and laced with silver, with four good horses. Also, I will have two coachmen—one for my own coach, the other for my women. Also, for that it is undecent to crowd up myself with my gentleman usher in my coach, I will have him to have a convenient horse to attend me, either in town or country, and I must have

two footmen. And my desire is that you defray all the charges for me.

"And for myself, besides my yearly allowance, I would have twenty gowns of apparel, six of them excellent good ones. Also I would have to put in my purse £2,000, and you to pay my debts. I would have £6,000, to buy me jewels, and £4,000, to buy me a pearl chain.

"Now seeing I have been, and am, so reasonable unto you, I pray you do find my children apparel and their schooling, and all my servants their wages. Also I will have all my house furnished, and my lodging chamber to be suited with all such furniture as is fit, as beds, stools, cushions, carpets, silver, warming-pans, cupboards of plate, fair hangings, and such like.

"So now I have declared to you what I would have, and what it is that I would not have."

Books and Pamphlets Received.

BACON *versus* SHAKSPERE.—A plea for the defendant, by Thos. D. King.

CANADIAN ILLUSTRATED MECHANICS' MAGAZINE.—Editor, F. W. Boxer. There is a good article on Ventilation in the April number.

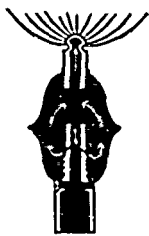
THE LOUISVILLE MEDICAL NEWS, for the week ending 15th April, received.

THE WEST VIRGINIA MEDICAL STUDENT.—A monthly record of the progress of medicine, surgery and applied sciences.

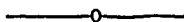
THE SANITARY JOURNAL for April.

Editorial Notices and Answers to Correspondents.

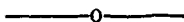
Kenneth Campbell & Co., having sent us several bottles of their Quinine Wine for trial, we can testify to its beneficial effects in several cases for which it has been recommended. It will be found useful as a tonic, and anti-periodic. It is of a light color, clear, with no deposit, and contains one grain of Disulphate of Quinine in two fluid ounces.—*Advertisement.*



THE MONTREAL NOVELTY Co. have placed in our editorial rooms, the "Ellis Patent Gas Burner and Regulator," for examination and test; and we have much pleasure in bearing testimony to its superiority over any we have used before. It regulates the flow of gas without reducing the light, produces no hissing, and by its perfect and regular combustion gives a pure, bright light. We draw attention to his advertisement, and invite inspection at his office, No. 256 St. James Street.



We have received regularly supplies of milk from the Dominion Dairy, and have examined it. It is all the proprietor says of it. Our citizens should support him in his undertaking for the health of their children as well as themselves. Mr. Taylor invites the authorities and consumers to subject the milk of his dairy to the severest tests, as he is confident of the result being to the credit and advantage of his dairy. Mr. Taylor's office is No. 262 St. Hubert Street.



DR. F. MONTIZAMBERTI, Grosse-Isle.—Your communication received; very much obliged. Will notice it in our next.

WALLACE TROTTER.—Your samples received, also your explanations in MS. Analysis is being prepared, and we will report in next number.

REPORT OF THE MINISTER OF AGRICULTURE for the Dominion of Canada, for the calendar year 1875, received too late for review. Much valuable information about Quarantine contained therein, which will be reviewed next month.

As our Magazine is generally out a few days before the month it is due, we would announce to the friends of the University that the Annual Convocation for conferring Degrees in Arts, will take place on Monday, 1st May, at 3 p.m., in the Wm. Molson Hall.