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MAGAZINE

AND

LITERARY REVIEW.

Edited by GEO. A. BAYNES. M.D., &c., &c.

DECEMBER, 1876.

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VOL. II.] DECEMBER, 1876. [No 6.

Original Communications.

SANITARY SCIENCE FROM A RELIGIOUS POINT OF VIEW.

BY DR. ALFRED J. H. CRESPI.

Shall I be going farther than the majority of my readers will approve if I claim for sanitary science a high place among those practical philanthropic pursuits, which afford the grandest opportunities for the display of the Christian virtues? Many persons will at once reply that the preservation of health is undoubtedly most praiseworthy, but that it is not a part of religion, and ought not to be spoken of in connection with it. Science of all descriptions is generally regarded as inexplicably but necessarily opposed to religion, and as flourishing most where piety is at the lowest ebb. Science is thought to be the enemy of Christianity; its great leaders are branded as infidels; its triumphs are confidently stated to be ruinous to the spread of that spirit of resignation to the will of the Creator which is the essence of religion. Science is accused of trying to see too much into the purposes of God; of wishing to be wise above that which is written. Were all this true, it might be prudent, perhaps even right, for ministers of religion to oppose its progress, and to warn the world of the moral evils its study must bring upon mankind. But what is science? Knowledge generalised

is the definition often given, but that extensive knowledge is only attained by the long and patient observation of the works of God. Can he, who knows most of the mysteries of the universe, refuse to be a reverent disciple at the feet of the Divine Being who created and who rules that universe? Is it not likely that he, who from the contemplation of the majesty, the beneficence, the wisdom of the Almighty, as evidenced by his perfect works, has learnt most of the Perfection and Love of his Creator, should be of all others the man most eager to confess his own weakness? So one would expect; so one may say is often the case. There are among scientific men some whose faith is small, but these are exceptions; and perhaps no one is better qualified to expound to others the words of God than he who has studied long and well His marvellous works. What! is not the study of the exquisite structure of a leaf, of the perfect mechanism of the heavens, of the functions of the body, at least as good a preparatory training for time and eternity as an inquiry into the condition of the turbulent democracy of Athens, when Cleon was its mouthpiece, or of the state of the Romans, when the rival factions of Marius and Sulla flooded the streets of the Eternal City with blood?

Sanitary science teaches how to preserve in vigor that wonderful structure in which, though intimately connected with it, is placed the immortal spirit. Unless the body is sound the mind cannot be in health. The enfeebled intellect of the sufferer from disease is not in a fit state for praising its Maker. The emaciated limbs of the invalid are not in the best possible condition for providing their owner with food, rest, and the necessaries of life, and therefore it is highly improbable that there can be that mental composure most favorable to the worship of God in spirit and in truth. Believe me, ill health, mental suffering, poverty, bad sanitary surroundings are not the best circumstances for giving joy to life and peace in death.

But here I shall be told that disease comes from God for our benefit, and that we have no right to prevent it. Disease plays a useful part in the world; it awakens in many hearts contrition for past misdeeds; it is sometimes the beginning of a purer and better life; shall we, therefore, cultivate a science the avowed

object of which is the prevention of what, in the phraseology of some religious sects, is a means of grace? Yes, I answer, it is our duty to diminish suffering; to fit man for living out his days, and for doing his work manfully and happily. But, let me carry the war into my enemy's camp, and ask the opponent of sanitary science, the man who believes illness is a Divine dispensation, why, when ill, he summons the physician? Why does he then, let me ask him, gladly take nauseous drugs? why does he obtain the best medical advice? why does he subscribe to hospitals for the relief of suffering? Were he to answer truthfully he would say that he approves of the cure of sickness, because custom has sanctioned the resort to drugs, he disapproves of the prevention of disease, because he is not altogether sure that the Christian world would be unanimous in approving of trying to prevent what everyone vainly endeavours to cure. The opposition to sanitary science too often depends on nothing but a fear of approving of what the religious world is not yet prepared heartily to approve.

Sanitary science may be the handmaid of sensuality and godlessness, but not necessarily so. The desire to preserve health may come from the lowest and basest motives, but it ought not to have this origin. To draw the line with a firm hand between sensuality on the one hand and apathy on the other is difficult; it can and should be done. It is the duty of Christianity to care for the wants of the body, to lessen suffering, to increase happiness, but only for the glory of God. Sensuality and slothful ease are not to be sought, rather they are to be shunned; idleness and frivolity are to be as carefully avoided. Happiness is nevertheless to be the object of life; the diminution of misery, mental and physical, is to be always aimed at, prosperity and opulence are to be placed within the reach of all. But the heart is never to be set upon these things; they are to be subservient to true religion; the instant they possess the heart and draw it away from God, that moment, are they to be cast away as the greatest of evils, the deadliest of snares. The position is a paradoxical one: yet on attaining it all depends. Sanitary science, aye, and all branches of science, are worthy objects of study, provided always that the student learns in what

spirit he is alone to cultivate them. Those who oppose the science, having as its worthy object the prevention of suffering, need not be alarmed; its triumphs will not imperil the existence of religion, but pursued with zeal, applied with reverence and love, they will draw men nearer to God, and make them confess, as they seldom do now, His wisdom and beneficence.

"In the times of the Roman Emperors," says a profound writer of our day, "there appeared a sect which distinguished itself by the assiduous attention which it bestowed upon the bodily wants of mankind. This sect set the first example of a homely, practical philanthropy, occupying itself with the relief of ordinary human suffering, dispensing food and clothing to the destitute and starving. At the same period there appeared a sect, which was remarkable for the contempt in which it held human suffering. Roman magistrates were perplexed to find, when it became necessary to coerce this sect by penal infiictions, that bodily pains, tortures, and death itself were not regarded as evils by its members. These two sects appeared to run into contrary extremes. The one seemed to carry the regard for the body to the borders of effeminacy; the other pushed stoical apathy almost to madness. Yet these two sects were one and the same—the Christian Church. And though within the body every conceivable corruption has, at some time or other, sprung up, this tradition has never been long lost, and in every age the Christian temper has shivered at the touch of Stoic apathy, and shuddered at that of Epicurean indolence."

It is Christianity alone which makes sanitary science one of the great objects of the present age. Before Christ came upon earth philanthropy was unknown. The systematic prevention of disease is impossible where the love of mankind is not a possessing passion. Before Christ passed His days in works of benevolence, before He awakened in man a passionate, unselfish love for man, there had been few men who felt for mankind a lively, unselfish interest; there had perhaps never lived a man or woman who would have acknowledged it to be a bounden duty to love one's enemies, or to endure sorrow and privation for those alien in blood. It is an absurd piece of affectation to shudder at the mention of sanitary science, and to brand it as

opposed to religion and finding its warmest supporters among those whose hearts are dead to the call of duty, and who forget God in the admiration of man. The very reverse is the truth.

In another stage than this of the world's history there appeared on earth a man, who from the cradle to the grave lived for others, not for Himself. His language breathed forth tender love for all mankind. He had no enemies. He wept when He saw suffering. The record of that life of sorrow and benevolence stirs to enthusiasm millions, who see little to admire even in Plato and Socrates, and who shudder when Alexander and Cæsar are mentioned. They love most, most warmly admire those saints and martyrs whose lives were most pure and spotless, who in short reflected most perfectly in their conduct the actions and motives of Jesus of Nazareth. Yet that Jesus passed his life in doing good, soothing the afflicted, curing the sick, diminishing the woes of mankind. He did with infinite power precisely what the sanitarian feebly tries to imitate. He smoothed the rough path of His disciples through this world. He sought to make less terrible the approach of death. But while preaching peace to the soul, He won His way to the heart as well, by healing the sick and feeding the hungry.

"Christ spoke of suffering as a wholesome discipline, but there is an extreme degree of suffering which seems more ruinous to the soul than the most enervating prosperity. When existence itself cannot be supported without an unceasing and absorbing struggle, then there is no room in the heart for any desire but the wretched, animal instinct of self-preservation, which merges in an intense, pitiable, but scarcely blameable selfishness. What tenderness, what gratitude, what human virtue can be expected of the man, who is holding a wolf by the ears?"

You who think poverty and sickness a wholesome discipline, the best preparation for the life to come, show your faith by your works! Resign your wealth, your comfortable, well-ordered houses. Go and live in the wretched hovels of the poor; toil morning, noon, and night in coal pits and factories, sleep in rooms occupied by a dozen persons, pass your days in courts and alleys, where disease runs riot; where the sun's glorious beams never penetrate, where the joyous song of birds, the sweet odors

of many flowers are unknown, where there is no hope, no joy, no peace. There you will find discipline, for there reign want and suffering. There you will find disease, but do not expect from it resignation and patience. Great tribulation may exercise a salutary influence over the mind, and cause it to shake off the petty miseries of earth; but the small worries, privations and sufferings of a poverty-stricken and unhealthy home spoil the temper, destroy happiness, beat out all that makes man the image of his Creator, the temple of the Christian graces.

Those who have seen the dreadful dens in which many of the poor pass their days, who know how speedily and completely poverty destroys all that is kindly and generous in the heart, who from their own experience can bear witness to the injury which long-continued indisposition works on the temper, will not look upon bodily and mental suffering as any great blessings. When they come they must be borne patiently and calmly; as evils of the first magnitude, though having few of the advantages of one great blow. Above all things let those, who have the power, try to diminish their horrors and lessen their frequency. Then will they be carrying into practice the spirit and the letter of that greatest of all commandments, "Love one another."

Times have so greatly changed that the difficulty of living in accordance with nature's laws has immensely increased. Hundreds of thousands of children are growing up, who are debarred by the very conditions of modern life from breathing the pure air of the country, playing in grassy lanes and green fields, being invigorated by the health-giving sun. Theirs is a childhood onl in name. As to the same extent was never before the case, these infants are dependent on their homes, and if those homes are bad and miserable what will be the tone of morality, what the standard of health of the coming generation? Never before to the extent that is now the case did humanity call on the opulent and powerful to exert themselves for the good of the poor. But, alas! before long the need for energetic philanthropy will become greater far than now. We stand only on the brink of the vast abyss of vice, disease, and suffering, stretching far before us. Let us bridge over that abyss while there is time, before the task is too Herculean to be even attempted. Before our enormous cities

get still larger, before the courts and alleys of our overgrown centres of population present sights still more appalling than those for which they are now infamous, let us lay the foundation of a better state of things, and try to make the infancy of the generations that are coming brighter and happier than if we do not bestir ourselves they are likely to be. It would be a Christ-like thing to restore to the lives of the weary pilgrims in our great cities some of that peace they will never know again; for them, alas! the day is over, and the past cannot be recalled. But something may be done to prevent this state of things being perpetuated. The wealth, philanthropy and energy of England are not, cannot be unequal to the task proposed. Surely it is not impossible that there will some day be a heartfelt and spontaneous response to that sweet and touching exhortation, "Suffer little children to come unto Me." How can that response be more beautifully and practically given than by making childhood happier, more innocent, healthier, shielding it with the strong hand of love from the dangers of the foul dens of our great cities, guiding it upwards to the light?

Sometimes I think, as the discordant voices of angry theologians fall on my ear; as I hear men boldly promising salvation to those who follow one beaten path, sternly and relentlessly refusing it to those who strike out a path for themselves; as I see the enormous, yearly growing mass of human suffering, the greater difficulties of modern life, the wider separation between rich and poor, the relaxing of the family ties, the increase of armies, the lust of riches, that these are evil days on which I have fallen. Has it always been as it is to-day? One of old exclaimed in bitterness and anguish, "So I returned and considered all the oppressions that are done under the sun, and behold the tears of such as were oppressed, and they had no comforter; and on the side of their oppressors there was power, but they had no comforter." What would Solomon have said had he been living now?

If better days are to come upon the earth, especially in this our beloved country; if the sun, when it looks down from its place in the heavens, is to see fewer of the sad sights on which it shines every day, it will only be because men of all ranks and

conditions have learned to love one another more. "Against all unjust privilege, against all social arrangements which make the prosperity of one man incompatible with the prosperity of another, the Christian is bound by his humanity to watch and protest." That time I shall not live to see; no one now living can hope that his eyes will be gladdened by the advent of that most glorious morn. Should it ever come, it will be when men with one accord have resolutely set themselves to exterminate the causes of suffering, and have learnt to prevent that needless disease and corroding poverty which are such blots on our boasted civilization.

[In support of the foregoing, we can say that it only echoes what we have frequently expressed before, and need not apologize for quoting from an editorial of last year, wherein we stated that, systematically, we may classify our subject under three distinct heads, according to Dr. Parkes:

1st. In relation to the natural conditions which surround man, and which are essential for life, such as air, water, food, sunlight, &c., &c.,—in short, relatively to nature at large.

2nd. Man in his social and corporate relations as a member of the community, with the effect upon him arising from certain customs, trades, conditions of dwellings, clothing, &c.

3rd. In his capacity as an independent being, having within himself sources of action in thoughts, feelings, desires, personal habits, all of which affect health, and which require self-regulation and control.

It will be seen, therefore, that if so large a field properly comes under the study of hygiene, it may be said to embrace all laws that have for their aim the most perfect culture both of mind and body, for the two are inseparable, as is manifest from the fact that the body is affected by every mental and moral action, while the mind is equally sensible to the influences arising from bodily conditions. A perfect system of hygiene must combine the knowledge of *physical*, *mental* and *moral culture*, and must train the body, the intellect and the moral soul, with a just regard to the necessities of each in a well-balanced order. If we may credit Rabbincal theories, sanitary rules were blended intimately and woven into the divinely appointed order of their ceremonial

observances, and a due regard to hygiene, or the preservation of the health of the people, was secured under the law of Moses. The elaborate detail of things clean and unclean, compassing, as it did, that which might be eaten or not eaten, carefully excluding every animal and bird as a subject of food whose habits and propensities led it to indulge in filthy and gross substances, established the rule that nothing could be considered wholesome for man that had not avoided all putrescent matter and the grosser form of aliment. Hence every carnivorous beast or bird was rejected from the list of the proper food of man. Every animal that had not certain marks or habits that constituted it of the species of ruminating and cloven-hoofed combined, was excluded from the class of clean and wholesome. The rigid rules enforced on the subject of cleanliness, embracing the *removal* of all *filth* from their camps; the *covering with earth* of all *fetid matter;* the great attention to ablutions; the stringent regulations as to contact with diseased or unclean persons, or with dead bodies, while they excluded persons for times long or short from the congregation in its religious aspect, secured likewise the wise precaution of separating such persons from the community while in absolute contact with what was unhealthy and unclean; and, added to all this, the wisest legislation on the all important matter of the alliance of the sexes, prohibited unions of too close consanguinity, and established the highest order of moral obligations. We may fairly assert, therefore, that the subject of hygiene stands foremost in moral obligations to man, individually and in community, and boasts of the most ancient and divinely ordered rules to secure its observance and establish its blessings. If we consider the reality of the fact that the divine law stooped down and took hold of man by the ordinary infirmities of the flesh, and dealt with special regard to the lowest element of which he was moulded, we shall not easily overrate the sacredness attached by the Creator to the human body, which He constituted the dwelling of the Spirit, nor shall we wonder at the superintending care that could say "the very hairs of your head are all numbered," "and in his book were all your members written when as yet there were none of them."]

Sanitary Reports.

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CITIZENS' PUBLIC HEALTH ASSOCIATION.

A public meeting of the Citizens' Public Health Association was held in the rooms of the Natural History Society, on the 17th November.

Among those present we noticed Doctors Fisher, Girdwood, Godfrey, Proudfoot, LaRocque, McDonnell, Alex. Johnson, Carpenter, Trenholme, and Donald Baynes; Alds. McCord and McLaren; Messrs. Springle, Murray, Sutherland, (Eng)., Radford and others. The President, Mr. Mercer, took the chair at 8 p.m. After the minutes of the previous meeting had been read and confirmed, Mr. R. Carr Harris was introduced to the meeting. He described the principles of the pneumatic system of sewerage in full, quoting freely from his numerous papers in the PUBLIC HEALTH MAGAZINE. For a further description of the system, we refer our readers to the July, September and November numbers of the MAGAZINE. From a Sanitary point of view, it is the most perfect system of sewerage known, for it *absolutely prevents infection*, and Captain Liernur maintains that it will yield a revenue sufficient to more than pay for the working, by the sales of the poudrette. Be this as it may, one thing is perfectly clear: that it will be a vast saving in life alone from its Sanitary protection, which is sufficient to warrant its adoption.

The Chairman, Mr. Mercer, in complimenting Mr. Harris upon the able manner in which he had treated his subject, remarked there was no present question of greater public import than an efficient system of sewerage and a plentiful supply of water. It was important for the audience to keep their minds on the main features of the subject they had heard: the principle of suction over the water carriage system. The expense was a secondary consideration compared with its sanitary value. If the system was superior to the ordinary method of water-carriage,

it was very important that they should understand its principles. He was convinced that if the system was perfect it would be found to be much more economical than the one now in use.

Dr. Godfrey asked if Captain Liernur's system was adopted, whether the city could still use the present sewers for carrying off the water flow, and also stated that, to him, the system seemed only to recommend itself from a sanitary point of view.

Mr. Harris, in reply, said it would bring a return, and he was understood to say that he thought it would pay its working expenses, and that any city adopting the water carriage system was only wasting its money, and any such scheme would only have to be abandoned in the future. The system of sewage irrigation was a failure on the Queen's farm at Windsor, as he had himself seen, and no expense had been spared to make it a success.

Dr. Trenholme thought the cause of diphtheria and typhoid could be easily accounted for by an inspection of the drains. Another important consideration was that our noble stream (the St. Lawrence) was becoming polluted. Take for instance Hochelaga on a hot day, when the refuse was thrown up on the shore. It was vitally necessary to keep our water course pure. If the pneumatic system could be thoroughly carried out, he felt sure that any citizen—property holder or not—would put his hand in his pocket to help to carry out the scheme for its sanitary advantages alone.

Dr. Godfrey stated that at a *conversazione* of the College of Physicians at London, Captain Liernur's system was illustrated and greatly recommended.

Mr. Springle, C. E., knew very little of the system; but it possessed very great and important merits. The line of Beaver Hall, he thought, would be a very desirable place to have its practicability tested.

Dr. Carpenter drew attention to the fact that the current number of *Good Words* contained an allusion to the subject. He was of opinion that these theoretical ideas did not work well. This was an exceptional city with an exceptional climate. In summer the heat was great, and in winter the cold was excessive. Was it still possible, he asked, to try some experiments? They had an admirable city in which to trp experiments. Hoche-

lagi and St. Henri were now in the very act of securing an engineer to lay out a system of drainage at what he might call our north and south ends. It would be a very serious thing to go to any great expense on any one thing; but if it was intended to lay out a large sum of money on parks and for other purposes, it might with advantage be applied to this system. He then referred to the baneful influence of kitchen water, and the carelessness used in disposing of it.

Mr. Harris said the system applied to kitchen waste when it was first used, and that the question of changes of temperature had been solved long ago in Holland, and that no leakage could take place even if fissures did appear in the pipes, as the pressure was from the outside inwards, and not from the inside outwards, as in gas and water pipes.

Dr. Girdwood thought the separation of the fecal matter from the rest of the drainage to be an extremely good and practical one, and advised by the best authorities.

Dr. Fisher enquired into how many districts this system had been introduced in Amsterdam.

Mr. Harris said into seven, and in reply to a subsequent question from Ald. McCord, stated that in one of the blocks of a European city in which it was used there were 14,000 inhabitants.

Ald. McCord did not think that the dry earth closets would ever come into vogue or become satisfactory. The great benefit of the present water carriage system was the rapidity with which the matter was got rid of. For the moment he thought he saw many valuable points in the Liernur system. It was possible this experiment would be tried. With regard to the cost of the drainage of Montreal he did not think it was so great as generally supposed. The city had only paid for the main drains, the connecting ones being laid at the expense of private individuals. The silence which was shown by those present he thought to be an evidence that they were not prepared to take up the principle which seemed to him just then to be a good one. But it could not be adopted by private persons; it must be taken hold of by the city. He would try to get the cost of trying the experiment upon a limited area, if possible. The greater force would not come to them. The system might, perhaps, be introduced by

sections. The Health Committee had just concluded a contract with a firm for pumping refuse matter and converting it into *poudrette*. He could appreciate its mercantile value, but would be able to form a better opinion when the above experiment had been tried. The general feasibility of the pneumatic sewerage system from a central point was its great attraction to him.

After passing a unanimous vote of thanks to Mr. Harris for his interesting and exhaustive remarks, the meeting adjourned.

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SYNOPSIS OF METEOROLOGICAL OBSERVATIONS IN OCTOBER FROM McGILL COLLEGE OBSERVATORY.

* Barometer readings reduced to sea-level and temperature of 32° Fahr. ‡ Humidity, relative Saturation, 100. ° Ten inches of snow is taken as equal to one inch of water.

Mean temperature of month, 42.58. Mean of mean maxima and minima temperatures, 42.6. Greatest heat was 67.8 on the 23rd; greatest cold was 24.7 on the 29th,—giving a range of temperature for the month of 43.1 degrees. Greatest range of the thermometer in one day was 24.9, on the 19th; least range was 6.3 degrees on the 2nd. Mean range for the month was 12.91 degrees. Mean height of the barometer was 29.8537. Highest reading was 30.287 on the 30th; lowest reading was 29.348, on the 7th, giving a range of 0.939 inches. Mean elastic force of vapor in the atmosphere was equal to .2250 inches of mercury. Mean relative humidity was 79.10. Maximum relative humidity was 100 on the 6th, 14th and 24th. Minimum relative humidity was 54, on the 27th. Mean velocity of the wind was 12.64 miles per hour; greatest mileage in one hour was 29 on the 15th. Mean direction of the wind, S.W. Mean of sky clouded was 71.7 per cent. Rain fell on 17 days. Snow fell on 2 days. Total rainfall, 2.64 in. Total snowfall 1.0 in. Total precipitation in inches of water was 2.74.

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"WELL, Pat," asked the doctor, "how do you feel to-day?" "Och, dochtor, I enjoy very poor health intirely. The rumatics is very distressin' indade; whin I go to slape I lay awake all night, an' me toes is swiled as big as a goose hen's egg, so whin I stand up I fall down immadiately."

FORMATION AND REFORMATION.—It is a great deal better to form a character on correct principles than to reform it. It is a great deal better to build a house as it ought to be when you build it, than to be obliged to alter it over after once made.

PUBLIC HEALTH IN THE UNITED STATES.

Mortality per 1,000 inhabitants, annually, from all causes and certain special causes.—(THE SANITARIAN).

POPULATION AND REGISTRATION AT MOST RECENT ESTIMATES AND DATES.	Deaths under 5 years.	Total No. of deaths from all causes.	Per 1,000.	By Violence.	Small-Pox.	Diphtheria.	Scarlatina.	Measles.	Croup.	Whooping Cough	Typhoid Fever.	Typhus Fever.	Puerperal Diseases.	Diarrhœal Diseases.	Consumption.	Lung Diseases other than Consumption.
New York, 1,065,142—4 weeks ending Sept. 23	1094	2084	25 44	100	1	53	26	3	22	39	38	2	23	460	321	174
Philadelphia, 825,500—4 weeks ending Sept. 30	531	1248	19.66	34	13	39	5		22	9	83	1	4	95	172	74
Brooklyn, 506,000—4 weeks ending Sept. 30	394	788	20.24	29		43	7		20	17	7		10	130	119	54
St. Louis, 498,000—2 weeks ending Oct. 7	102	281	14.67	12		11	3		4	4	10		1	25	22	25
Chicago, 420,000—4 weeks ending Sept. 16	617	884	27.36	21	1	74	60		27	12	13		3	235	50	34
Baltimore, 350,000—4 weeks ending Sept. 30	258	540	20.05	16		17	19	1	6	8	22	13	1	46	76	36
Boston, 352,000—4 weeks ending Sept. 30	305	588	21.71	21		24	10		3	10	19		1	129	73	34
Cincinnati, 265,000—4 weeks ending Sept. 30	156	364	17.85	15	4	16			9		24		2	35	49	30
San Francisco, 275,000—month of August	171	477	20.45	35	72	38	9	2	5	6	13		5	23	36	28
Washington, 160,000—month of Sept.	178	349	26.17	9		7	3	1	3	2	5		3	48	45	19
Pittsburgh, 142,000 -month of Sept.	164	258	23.62	27	6	6	7		12	4	8		1	40	16	25
Providence, 101,500—month of Sept.	72	145	17.14	3		8	1		9	3	9			26	13	14
Milwaukee, 100,781—month of Sept.	193	248	29.52	3	17	7	12	1		14	3	2	1	32	3	10
Rochester, 70,000—month of Sept.	70	156	27.74	3		8	1		4	5	2			26		21
Richmond, 72,500—4 weeks ending Sept. 30	67	144	25.82	3					2	9	5		1	20	17	4
New Haven, 60,000—month of Sept.	31	75	1.5	1		6					3			6	15	6
Charleston, 57,000—7 weeks ending Sept 30	137	283	28.94	1		10					4		1		9	4
Toledo, 50.000—3 months ending Sept. 30	116	244	19.52	12			4	3	1		5	4	2	61	11	7
Mobile, 40,000—month of Sept.	24	84	2.52	3				3				1		8	12	3
Dayton, 36,000—month of Sept	15	36	12.	1				1			1			1	7	3
Nashville, 27,000—2 months ending Sept. 30	61	127	28 22			11	2	6	6	1	3		1	19	13	5
Wheeling, 28,000—2 months ending Sept. 30	49	100	21 42	1		3	14	2		1	5			20	15	9
Buffalo, 170,000—month of Sept.	81	196	13.83	12		4			2	1	6			30	16	11
Knoxville, 13,000- month of Sept.	11	19	17.52	1	2									2	4	2
Paterson, 39,000—month of Sept.	52	87	26.76	1		15	3		6	1	2			10	8	5
Petersburg, 20,000—4 weeks ending Sept. 23	37	56	36.4	9		1			1	2	1			10	4	3
Selma, 7,500—month of Sept.	6	23	25.60											5	3	1
Elmira, 20 000—month of Sept.	16	28	16.8	3		1			2		2			4		1
Hudson Co., N. J., 170,859—2 months ending Sept 30.	299	734	25.71	34	4	37	9	4	8	6	17	1	1	55	59	40
Yonkers, 17,500—month of Sept.	20	31	18.8	2		6				2	1		2	5	2	
Memphis, 45,000—month of Sept.	47	116	30 93	2			2				2		1	23	14	3
Erie, 26,037																

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

Class.	Order.		Disease.	Total by Sex. Male.	Female.	Total both Sexes.
I. Zymotic.	I. Miasmatic.	1.	Small Pox	47	54	101
		2.	Measles			
		3.	Scarlatina		1	1
		4.	Diphtheria	6	3	9
		5.	Quinsy		1	1
		6.	Croup	3	7	10
		7.	Whooping Cough	1	1	2
		8.	Typhoid Fever, (Infantile Remittent Fever)	2	5	7
		9.	Typhus, and Infantile Fever	2		2
		10.	Relapsing Fever			
		11.	Fevers	2	2	4
		12.	Erysipelas			
		13.	Metria, (Puerperal Fever)		1	1
		14.	Carbuncle			
		15.	Influenza			
		16.	Dysentery	1		1
		17.	Diarrhœa	6	3	9
		18.	Pyœmia			
		19.	Cholera Infantum	2		2
		20.	Cholera			
		21.	Ague			
		22.	Remittent Fever			
		23.	Cerebro-Spinal Meningitis			
	II. Enthetic.	1.	Syphilis			
		2.	Hydrophobia			
		3.	Glanders			
	III. Dietetic.	1.	Privation			
		2.	Purpura and Scurvy			
		3.	Delirium Tremens } Alcoholism			
		4.	Intemperance }			
	IV.—Parasitic.	1.	Thrush			
		2.	Worms, &c.			
II. Constitutional.	I. Diathetic.	1.	Gout			
		2.	Rheumatism			
		3.	Dropsy and Anæmia	4	2	6
		4.	Cancer		3	3
		5.	Noma (or Canker)			
		6.	Mortification	1		1
	II.—Tubercular.	1.	Scrofula	1	2	3
		2.	Tabes Mesenterica			
		3.	Phthisis (Cons. of Lungs)	20	16	36
		4.	Hydrocephalus	1		1
		5.	Tubercular Meningitis	1		1
			Carried forward	100	101	201

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

CLASS.	ORDER.	DISEASES.	Total by Sex. Male.	Female.	Total both Sexes.
		Brought forward	100	101	201
III. LOCAL.	I. Brain and Nervous System.	1. Cephalitis	2	3	5
		2. Apoplexy	2		2
		3. Paralysis	4	6	10
		4. Insanity			
		5. Chorea			
		6. Epilepsy			
		7. Tetanus			
		8. Convulsions	1	4	5
		9. Other Brain diseases, &c.	6	3	9
	II. Organs of Circulation.	1. Carditis, Pericarditis and Endocarditis		1	1
		2. Aneurism	1		1
		3. Other Heart diseases, &c	4	2	6
	III. Respiratory Organs.	1. Epi-taxis			
		2. Laryngitis and Trachitis	2		2
		3. Bronchitis	2	9	11
		4. Pleurisy		1	1
		5. Pneumonia	7	6	13
		6. Asthma	2		2
		7. Other Lung diseases, &c.	1	2	3
	IV. Organs of Digestion.	1. Gastritis	1		1
		2. Enteritis		1	1
		3. Peritonitis			
		4. Ascites	1		1
		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	1	1	2
		13. Jaundice		1	1
		14. Liver Disease, &c.		2	2
		15. Spleen Disease, &c.			
	V. Urinary Organs.	1. Nephritis	2		2
		2. Ischuria			
		3. Nephria (Bright's Disease)			
		4. Diabetes			
		5. Calculus, (Gravel, &c).			
		6. Cystitis and Cystorrhœa			
		7. Stricture	1		1
		8. Kidney Disease, &c.			
	VI. Generative Organs	1. Ovarian Disease			
		2. Disease of Uterus, &c.			
	VII. Organs of Locomotion.	1. Arthritis			
		2. Joint Disease, &c.		1	1
		Carried over	141	146	287

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

Class.	Order.		Diseases.	Total by Sex. Male.	Female.	Total both Sexes.
			Brought over	141	146	287
V. VIOLENT DEATHS. IV. Developmental Diseases	VII. Integumental System.	1	Abscess		1	1
		2.	Ulcer			
		3.	Skin Diseases, &c			
	I. Of Children.	1.	Stillborn	5	3	8
		2.	Premature Birth	5	2	7
		3.	Infantile Debility	19	11	30
		4.	Cyanosis			
		5.	Spina Bifida and other Malformation			
		6.	During Dentition	2	3	5
	II. Of Woman	1.	Paramenia			
	III. Old People.	2.	Childbirth			
		1.	Old Age	3	4	7
	IV. Of Nutrition.	2.	Atrophy and Debility	3	3	6
	I. Accident or Negligence.	1.	Fractures, Contusions, Wounds			
		2.	Burns and Scalds			
		3.	Poison			
		4.	Drowning			
		5.	Otherwise	2	5	7
	II. Homicide.	1.	Murder, Manslaughter			
		2.	Execution			
	III. Suicide.	1.	Wounds			
		2.	Poison			
		3.	Drowning			
		4.	Otherwise			
	IV.	1.	Chirurgici			
			Not known	2	6	8
			Infection purulente			
			Emesis			
			Lock Jaw			
			Total	182	184	366

FOREIGN HEALTH STATISTICS.

United Kingdom of Great Britain, during six weeks, ending September 16th, 33,972 births and 21,000 deaths were registered in London and twenty-two other large towns. The natural increase of the population was 12,972. The mortality from all causes was at the average rate of 22.66 deaths annually in every 1,000 persons living. Other foreign cities at most recent dates, annual ratio of mortality per 1,000: Calcutta, 25; Bombay, 31; Paris, 26; Brussels, 19; Amsterdam, 20; Rotterdam, 24; The Hague, 36; Copenhagen, 34; Stockholm, 33; Christiana, 18; Berlin, 41; Hamburg, 33; Breslau, 35; Munich, 34; Vienna, 21; Buda-Pesth, 37; Rome, 20; Naples, 31; Turin, 18; Alexandria, 51.—*The Sanitarian.*

TOTAL MORTALITY BY AGES.

Under 1 year	102
From 1 to 5 years	91
" 5 to 10 "	28
" 10 to 15 "	9
" 15 to 20 "	8
" 20 to 40 "	49
" 40 to 60 "	39
" 60 to 70 "	12
" 70 to 80 "	18
" 80 to 90 "	8
" 90 to 100 "	2
100 years and over	..
Not known	.
Total	366

TOTAL MORTALITY BY NATIONALITY.

French Canadians	234
British Canadians	84
Irish	32
English	10
Scotch	4
Other Countries	2
Not known	..
Total	366

TOTAL BY WARDS.

St. Ann's Ward	54
St. Antoine "	72
St. Lawrence "	43
St. Louis "	29
St. James "	74
St. Mary "	61
West	...
Centre	6
East	5
Not known	.
	344

City Hospital	4
Hotel Dieu	7
Montreal General Hospital	
Other Institutions	11
Foundlings	11
Outside City Limits	99
Total	476

N. B.—The foundlings and deaths outside city limits are not included in classification of diseases, ages or nationalities.

Correspondence.

MUFFS *versus* MITTS.

[To the Editor, PUBLIC HEALTH MAGAZINE.]

DEAR SIR,—

While smiling one day over the remembrance of the famous quarrel between the "Belly and the Members," and the indisputable decision, establishing the right of freedom to each limb, in the full exercise of its allotted function, I was surprised to hear inside my wife's wardrobe, a regular dispute between her Muffs and her Mitts.

"We are living," said Mitts, "in days in which hygienic principles decide all questions between appearances on the ground of health, and you will find, Miss Muff, that your boasted beauty over my unquestionably homely look will not always insure your being preferred to myself."

"I am not the least afraid of that," replied the Muffs, "and as long as my dear mistress is going either to walk or drive, she will certainly prefer, as she always does, to take us out instead of you, and, indeed, I never knew you taken out except in wet weather, when it was not fit for us to go out. I do not wish to say anything unkind to you, poor dear Mitts, but do you think that our lovely little round, soft, exquisite beauty will ever want a pair of pretty hands to nestle in?"

"I don't know," said Mitts, "but I'll just tell you what I heard Doctor Rectify say to our master only this morning, when he was telling him how poorly our dear mistress had been of late, and complaining of such pains in her chest, and that instead of receiving any good when she took a walk, she always came back feeling the pain worse than when she set off. "'My dear sir.' said Dr. Rectify, 'I am not the least surprised at it—in short, before another month is over her head she'll have confirmed Angina pectoris, and from nothing else than those confounded muffs, that in the winter lay the seed of half the chest complaints going.' 'You perfectly astonish me,' said our master, 'do

explain, my dear Doctor, what you mean.' 'Did you ever watch,' answered Dr. Rectify, 'a lady walking with a muff, especially the dear little fashionable modern muffs? To get their hands together, they have to walk with their shoulders drawn in at least eight inches, and their arms and hands contracted before them, till, instead of an easy, expanded chest, they actually contract their breath so as to forbid the possibility of a full, free expansion of the lungs. I tell you,' said the Doctor, 'I would forbid any woman walking with a muff, on purely common sense principles. What ought to be the motion, I would ask you, in an easy and graceful walk? Should the shoulders be contracted, and the back rounded, and the arms pinioned in a muff? or the very reverse, the shoulders expanded, the arms free, the motion of the hands inducing the expansion of the chest, and not its contraction. The fashions of dress, my good sir, are constantly hurrying deserving, amiable women to their graves, and all because common sense has to yield to fashion. As your medical adviser, I simply ask you to request your wife, the next time she goes out, to leave her muff behind and take her mitts. You will find that she will come back without a pain in her chest, breathing freely, and not with her breast bones pressed together by her fixed and rigid arms that have bound her together with a muff. There is no period of the year in which the atmosphere demands full exercise of every member of the body more than winter. To confine, or constrain the limbs or muscles, is to hinder the activity of all the joints and muscles, which should be in full exercise to keep up the general circulation and heat in the whole frame. Again, even for securing the warmth needed for the hands, where is there anything more exposed than the wrist, for how is it possible to secure that part from exposure? and no part of the arm is more susceptible of cold than the wrist. On the other hand, in a warm mitt or gauntlet, the whole hand and wrist are warm, the hand and arm free, the full action of the shoulders and movement of the muscles that expand the chest are developed, and the invigorating and beneficial results of a healthy and combined action, such as nature has secured for us, if we do not fly in the face of it, are certain to ensue.'"

Mitts paused. "O!" said Muff, "do tell me, dear Mitts, what did Master say?" "Why," replied Mitts dryly, he said, "Thank you, Doctor! Louisa shall wear mitts!"

Yours truly,

N. E. B.

Reviews.

KUKLOS CLUB: ADDRESS OF THE PRESIDENT.

The Kuklos Club was recently founded, and, we believe, holds its meetings every Saturday evening at some rooms on Beaver Hall Hill. The objects of the Club have been well sketched by Mr. Leslie Thom, in a paper entitled, "Why we are met," which was published some months ago in the *Canadian Illustrated News*. At present, we need only state that the members are for the most part Pressmen of Montreal, "knit together" (as the President quotes from the old *Spectator*) "by a love of society, not a spirit of faction—who meet not to censure or annoy those that are absent, but to enjoy one another, and to relax themselves from the business of the *week*, by innocent and cheerful conversation."

The President's address is lively and entertaining. He intended to entitle it, "Where we meet," and has accordingly given a pleasant description of the interior of the Club, its books, paintings, engravings, drawings, &c.; but, besides this description, he has incidentally informed us of the various names for the Club that were proposed and rejected, before the promoters finally decided on calling it the Kuklos. "After many grave and ineffectual attempts" (he tells us) "to furnish a name suited to the majority, one of our Council luckily and happily hit upon the word *Kuklos*, which certainly had the merit of being new and striking, and which our worthy Vice-President subsequently said expressed exactly the scope of the Association, the promotion of the whole *circle* of literary and æsthetic pursuits, and the union of all men addicted to these pursuits. The Club is intended to be cyclopædic, and while the aim is doubtless high, as it should be, it is only justice to say that it is not beyond the reach of the literary men of Montreal. So much for the name of the Club, Kuklos, upon which let not little critics exalt themselves, and shower down their ill-nature."

The President, we think, may rest assured that if the objects of the Club are faithfully carried out, its name will be an honored one wherever it is known, and will survive the sneers of any who may deem it eccentric. We have but little space to

quote from the address, which contains some sound practical advice, and considerable evidence of mental culture: but there is one point of public interest to which, before ending this brief notice, we will direct the attention of our readers. As the President has stated the case fairly, we can hardly do him a greater service than by quoting his own words:

"The present tariff 17½ per cent upon prints, commonly but erroneously called engravings, acts most strangely and unjustly upon collectors of the works of the old masters. A tariff or Custom House regulation so unjust and absurd needs only, one would think, to be pointed out as an oversight, to be repealed. For instance, large illustrated books full of choice prints, take for example:—Boydell's Shakspere, Hogarth's Works, Robert's Holy Land, and Layard's Nineveh, when handsomely bound, are only assessed at a 5 per cent. duty, whereas any loose sheets out of the same books would be assessed at a 17½ per cent. duty; and then, these excessive duties are not always levied upon the published prices, but occasionally on the fictitious or fanciful values. Surely this is very unfair. Again, if the Canadian book-making resources only require 5 per cent. to protect them, the engravers cannot require more than 5 per cent. to protect them. It may be said, in reply, that the reason why there is not a greater tax put upon books is because it would be considered a barrier to education. I contend that prints, copies of the works of our best ancient and modern masters, are educators; they are *libri idiotarum* as St. Augustine calls them—"the books of the simple." Such prints touch the heart and adorn the tale whether it be the narratives in Biblical, Roman, English and French history, or the writings of our great philosophers, dramatists, poets and novelists. The object of all true Art, more particularly Christian Art, is to teach; it is at once the instructor and edifier of the people. If books be the crown of literature or knowledge, prints illustrating them may be termed the adorning jewels. In a country like Canada, where so much is done by the different Provincial Governments for the intelligence and education of the people, the least the Cabinet at Ottawa could honorably do, with a clear conscience and a full treasury, would be to admit prints illustrative of literature, free of duty."

WALSH'S PHYSICIAN'S COMBINED CALL BOOK AND TABLET. (227 Four-and-a-Half Street, Washington, D. C., or C. Hill, 666 Dorchester Street, Montreal.)

The second edition of this extremely valuable pocket book has just come to hand. We welcome it with pleasure; as being a most trustworthy and convenient friend. Its superiorities are more evident to us the more we use it, and in "English fair play" we most unhesitatingly give it the palm over all other visiting lists. Its very convenient size, and its pliability, make it a comfort when in the breast pocket. Its general appearance is unsurpassed by any. We recommend it to all our confreres, and can safely say that if they use it one year they will never use any other. There are many new features in this edition, among which may be mentioned, Maximum Doses and Daily Aggregate of Poisonous Remedies; Disinfectants; Relations of Metrical Weights to Weights of the United States Pharmacopœia; Relation of Metrical Measures to Measures of United States Pharmacopœia; Diagnostic Examination of Urine; Directions for making *Post Mortem* Examinations; Treatment of Asphyxia from Drowning, &c.; list of incompatibles. For a further list of contents, see the circular elsewhere. Druggists will also find in the printed matter a large amount of valuable information.

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Books and Pamphlets Received.

Owing to want of space the following matter will be reviewed in next number:—

"On Personal Care of Health," by E. A. Parkes, M. D., F. R. S.

"Industrial Canada."

"On Tracheotomy, especially in relation to Diseases of the Larynx and Trachea." By W. Rugin Thornton.

PUBLIC HEALTH MAGAZINE

AND

LITERARY REVIEW.

DECEMBER, 1876.

NEW BY-LAW CONCERNING HEALTH.

Our civic authorities have been in deep consultation for the last month over the new By-Law concerning health. We are glad to see them take the bull by the horns. Reform was sadly needed in this department. The Board apparently have ample powers, but they are so conditional that their more efficient working is difficult. The By-Law strikes at the root of the difficulties by re-organizing the whole board. The suggestions that we offered in our September number have been carried out. The new Board will be composed of one alderman from each ward, and nine citizens chosen from among the foremost sanitarians. This is as it should be, and will no doubt be found to work admirably—the additional sanitary strength will carry immense weight with the citizens generally. It will resemble, we understand, the working of a "Board of Guardians," as in England, and will be a head from which the public will look for protection and advice in matters of health. It will replace the duties of the present "*Health Committee*," *which every one has acknowledged* is an unnecessary encumbrance. But to proceed. The new By-Law provides power for the appointment of health officers for superintending, visiting and otherwise carrying out the mandates of the Board. The orders for burial of the dead are good, and prevent intramural sepulture. The superintendents of cemeteries are ordered to send proper returns of the burials in the cemeteries under their charge, and they shall not receive any body for burial without a certificate of death from a responsible person, stating the name, age, birth-place, date, place of death, nature of disease.

The clause on the adulteration of food is very full, but, we think, too vague, and can be easily circumvented by those desirous of defrauding confiding customers. We are pleased to see a clause forbidding the sale of unripe or decayed fruits.

The Board have power to appoint a milk inspector, whose duty it shall be to visit all dairies and milk depots, to take samples of milk and cause them to be analyzed. All measures and cans must be stamped, and a license must be taken out by the vendor. The manner of feeding the cattle is also provided for in the case of stall-fed cows. Noxious and offensive trades are also placed under the surveillance of the Board of Health officers, and proprietors are compelled to carry on their business only under such supervision and direction as the Board may direct. The clause on the construction of dwelling houses is good, and was much needed, for the landlords never seemed to consider the hygienic comfort of the tenant, but simply his own pocket—how many he could crowd into a small space; and as for the drains, they were nothing more than *death-traps*. We hope the new Board will look to this clause being carried out to the letter. We see a prospect of no drain's being covered up without having been first inspected by a competent official. This is a very valuable provision, and much needed. Section 26 provides that no existing old or infected house shall be inhabited; also that hotels and public boarding houses must be kept in accordance with sanitary requirements. Public schools and school houses are also to be under sanitary control.

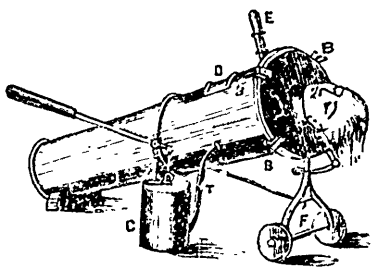
The vaccination clause is not what it should be—it lacks everything but *permissive vaccination*, which means, in Montreal, a license to parents and guardians to neglect the due precautions necessary for the protection of the children under their care from epidemic small-pox.

Physicians are compelled to report to the Board all cases of small-pox, typhoid fever and diphtheria occurring in their practice; scarlet fever should have been added.

The provisions of theBy-Law are, on the whole, good, and aim at protective measures for the benefit of the citizens, which we hope will be appreciated. Before closing, let us urge on our readers the importance of giving the constituted authorities their moral support in seeing these sanitary precautions carried out, for in case they are overlooked by the sanitary police, it is their duty to report all cases of infringement at once.

THE SPIROPHORE.

This apparatus was recently described to the Paris Academy by M. Woillez. It is for restoring asphyxiated persons, especially such as have been in danger of drowning, and new-born infants. We (*English Mechanic and World of Science*) are indebted to the *Journal de Pharmacie et de Chimie* for the annexed figure of the apparatus.



It consists of a cylinder of sheet iron closed at one end and open at the other. The case is large enough to receive the body to be treated, which is let down into it as far as the head, which remains outside. A tightly-fitting diaphragm closes the aperture about the neck. A strong air-pump, C, containing more than 20 litres of air, is situated outside of the case, and communicates with it by a thick tube, T. It is worked by means of a lever, the descent of which produces aspiration of the air confined about the body. The raising of the lever again restores the abstracted air to the case. A transparent piece of glass, D, on the upper part of the cylinder, enables one to see the chest and abdomen of the patient, and a movable rod, E, sliding in a vertical tube, is made to rest on the sternum.

M. Woillez states that he has made several experiments with the apparatus, the general results of which are as follows:—

When a human body is inclosed as described, and the lever quickly lowered, a vacuum is produced round the body, and immediately the external air penetrates into the chest, the walls of which are seen to rise as in normal life. The ribs separate, the sternum is pushed up a centimetre at least (indicated by the

movable rod which rests on it). Further, the epigastrum, and even the abdomen below, present an inspiratory projection, which shows that the enlargement of the chest is effected during this artificial inspiration not merely by the raising of the ribs and the sternum, but also by the descent of the diaphragm. All returns to the former position when the lever is raised again.

These complete respiratory movements may be repeated fifteen to eighteen times in a minute, as in the living man.

By means of a tube fixed into the windpipe of the body, and communicating with a graduated reservoir of air over a vessel of water, M. Woillez has measured the quantity of air which thus penetrates into the chest at each pressure of the lever. He finds that this is, on an average, *one litre*; whereas the physiological average is only *half a litre*. More than a hundred litres of air can be made to traverse the lungs of the asphyxiated person in ten minutes.

It is easy, then, to see the advantages presented by this apparatus for treatment of the asphyxiated, especially drowning persons and new-born infants. In all cases of asphyxia by vitiated or insufficient air, or by certain poisonings, in paralysis of the respiratory muscles, in most dysphoric affections, in asphyxia by bronchial mucosities, or that due to inhalations of chloroform, and lastly, in determining some cases of apparent death, the spirophore may be used to produce an efficacious artificial respiration.

This respiration is without danger to the lungs, which are not liable to rupture, however strong the action of the lever. This inocuity is due to the fact that the force of penetration of the air into the lungs is never superior in this case (as also in the case of normal life), to the weight of the atmosphere.

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UNIVERSITY LITERARY SOCIETY.

We are pleased to see that at the adjourned meeting of the above society, the motion for dissolution was not brought up again. The meetings of the society will be held semi-monthly, two out of three evenings to be devoted to regular debate, and the third to be for social purposes in discussing any literary topic. The following are the officers for the ensuing year:—President, Mr. F. J. Keller, B.C.L.; 1st Vice-President, Mr. C. L. De Salaberry; 2nd Vice-President, Mr. R. D. McGibbon; Corresponding Secretary, Mr. A. McGowan, B.A.; Recording Secretary, Mr. F. D. Monk; Treasurer, Mr. H. H. Lyman, B.A.; Councillors, Messrs. D. MacMaster, B.C.L., M. Hutchison, B.C.L., R. Huntington, B.A., H. T. Duffy, B.A., R. Robertson and J. Ross.

Miscellaneous Selections.

INFANTILE DIARRHŒA IN LONDON.

The Registrar-General, in his last Weekly Return, reports that infantile diarrhœa showed a greater fatality in London during the last fortnight of July than at any previous period since 1837, when civil registration was first established. The nearest approach to a similar fatality from this disease occurred in August, 1871. During the two weeks ending 29th July, 979 deaths were referred to diarrhœa in London, in addition to 49 deaths from choleraic diarrhœa or simple cholera; of these 1,028 deaths, 84 per cent. were of infants under one year of age, 12 per cent. of children aged between one and five years, and only 4 per cent. of children and adults aged upwards of five years. Hitherto London has suffered from a higher death-rate from diarrhœa this summer than the other large English towns furnishing weekly returns, although in the last week of July the deaths from this disease showed a marked increase in Leeds, Leicester, Bristol, Newcastle-upon-Tyne, and Sunderland. During the week ending 29th ult., the annual death-rate from diarrhœa in Inner London was equal to 7·8 per 1000, whereas in the Outer Ring it did not exceed 4·8, although the disease showed exceptional fatality in West Ham and Stratford. The diarrhœa-rate during this week ranged, in different parts of London, from 6·0 per 1,000 in the central, to 10·0 in the north groups of registration districts. As evidence of the fatal effect of the recent heat upon infant life, it may be noted that during the two weeks ending 24th June, when the temperature was below the average, 561 deaths of children under one year of age were registered; during the two weeks ending 29th July the number of deaths of infants registered rose to 1,717, or more than three times as great. Thus in two weeks the lives of 1,156 infants were sacrificed, more or less directly, to the heat.—*Lancet.*

THE HEALTH OF PHILADELPHIA

In a recent issue we drew the attention of our readers to some facts which were collected in Philadelphia, bearing on the health of that city, and we then showed by comparative statements that there had been a decided increase in typhoid, which is now believed to be largely influenced, if not actually produced, by imperfect sewerage or polluted water. The question is one which is not interesting to New Yorkers alone, but to the whole country, and we felt gratified in being able to make certain tolerably definite statements in regard to the actual facts in the case.

To many persons it may have appeared that in so doing we failed to show all the facts, for it is well known that a great deal of sickness, especially of a diarrhœal nature, has attacked persons after they visited the Centennial Exhibition. Rumors have also been prevalent to the effect that many have died of typhoid after their return. Almost every physician in the country has cognizance of one or more such cases.

Probably the reports about them have been much exaggerated, but at the same time there is doubtless some truth in the matter.

In the article referred to we showed that both the sewerage is bad and the water is more or less polluted, and that at one time it contained a pretty large amount of sewage. We are not prepared to say now, any more than then, that these unhygienic conditions were related to typhoid as cause to effect, because it may still appear that the increase has been as great in other localities—in fact, that we have been suffering from a general epidemic of the disease all over the country.

The benefit of this possibility we are willing to give to our Philadelpia friends; but we are rather surprised to find it stated by our contemporary, the *Philadelphia Medical Times*, that the Quaker city, "this summer, has been extraordinarily healthy, and that the water supply and the general hygienic arrangements have stood the very severe test so well as to reflect credit upon the city authorities and to demonstrate the great value of the homestead method of living practised in this city."

In the face of the large comparative mortality this summer from typhoid, we fail to see where either the "homestead method" or the "civil authorities" are deserving of any special credit. But this is a matter of little consequence. We are more surprised, however, to find it further announced "how much better the Philadelphia doctors are than those of New York." We might pardon this innocent conceit, which seems to be also a disease of an epidemic character in Philadelphia, but, as we have already stated, the facts are the other way, for typhoid fever, about which alone there is discussion, has shown a far greater comparative mortality in Philadelphia, this season, than in New York. We do not, of course, infer that it was owing to the doctors, for may it not have been the water or the sewage? We have no doubt, however, that the matter has been really exaggerated by the secular papers; but our friends, in their attempt to disprove such sensational statements, display a ridiculous sensitiveness in regard to a supposed conspiracy against the success of the Exhibition. We are told that "extraordinary efforts have been made by certain newspapers to injure the Centennial Exhibition," etc.

Perhaps this is an excusable anxiety, inasmuch as any allusion to the manner in which the Centennial wheel has revolved is a reflection upon the watchfulness of the flies upon it.—*Medical Record, N. Y.*

THE FOUNDER'S FESTIVAL.

We are pleased to be able to inform our readers that at last McGill has again begun to celebrate the birthday of her founder, the Honorable James McGill, by a repetition of the annual festival that in our undergraduate days we loved to honor. We were unable to attend personally, so we quote from our exchange. *The McGill Gazette*, an account of its celebration. It says:

"After the lapse of five years this great event of our session has been restored, and with even more than its former brightness and splendour, as the brilliant assembly of last Friday evening can testify. It was, without doubt, a success, owing to the indefatigable efforts of the Graduates' Society, to whom and the Com-

mittee of Management much praise is due for the truly able manner in which the proceedings were conducted. The evening was cloudy and threatened rain, but this darkness only increased the brilliancy of the display of Chinese lanterns on the trees, and the bright electric light which threw its rays far down the avenue. The walls all around were tastefully decorated with flowers and evergreens. The reading-room served as a small dining-room, and, being comparatively out of the way, was much frequented by students during the evening. The museum was found to be the resort of many young couples, who, finding it rather warm, generally made their way into the shell-room, there to enjoy the beauties of nature, and amuse themselves in other innocent ways. Proceeding to the Molson Hall, we found the Library full to overflowing. At the upper end of it was a well-loaded table, while at the other end, where there is usually a door, was another refreshment booth shrouded in flags and evergreens, the effect of which was simply magnificent. In some of the alcoves were microscopes, for which we have to thank Dr. Osler; and many were the bevies of young folks, and old too, there congregated. We cannot forbear again mentioning the decorations. On all the tables were vases full of beautiful flowers, which, we believe, the Committee procured in Boston; upstairs the pillars were twined round with evergreens, and wreaths were hanging everywhere. After our reception we passed into the hall, in which were assembled the cream of Montreal society. Here, there and everywhere, swept the gowns of our classmates, intermingled with brilliant hoods and elegant *toilettes*. In conversation, *en promenade*, listening to the music, hurrying to meet a partner, grouped and separate, all felt at every moment that the evening was a thoroughly enjoyable one.

"The evening's proceedings opened with the customary oration from the President of the Graduates' Society, Mr. R. A. Ramsay, B.A., B.C.L. The speaker gave a short account of the life of the Honorable James McGill; the progress of the University and its present *status*. He traced its history through the early legal and later financial troubles, ending in a few remarks about the Graduates' Society, and the extension of a hearty welcome to its guests, there present."

VACCINATION AND YAWS.

An interesting communication bearing on these subjects has been received by Drs. Tilbury Fox and Farquhar, the editors of the "Report on certain Endemic Skin and other Diseases of India and Hot Climates generally," from Mr. N. W. Keelan, medical officer to the Poor-house Lunatic Asylum and the police force, Dominica. Mr. Keelan believes that he has discovered in compulsory vaccination a sure and certain means of mitigating, if not of altogether stamping out, the disease called "yaws," or "frambœsia." The grounds on which this belief is based are, first, that out of several hundreds of cases of yaws attended during a series of years very few indeed had been vaccinated; secondly, that the few who had been vaccinated were attacked very mildly by yaws, and were easily cured, the disease being apparently modified and much more amenable to treatment than the ordinary form; thirdly, that a considerable number of the patients who came suffering from yaws were vaccinated, but the lymph took effect in only a small percentage, though in these cases vaccination seemed to act beneficially.

These important propositions have been again and again submitted by Mr. Keelan to the test of experiment and observation. If it can be shown that vaccination is competent to prevent or to modify the distressing yaws malady, so prevalent in our West Indian colonies, another powerful argument will be gained in favor of compulsory vaccination. The pathological relations of yaws and vaccination remain yet undiscovered. Dr. Bowerbank has alleged that yaws does not seem to interfere with the occurrence of, or to modify, other diseases such as syphilis, vaccinia, and the acute febrile diseases, while others have imagined that they have traced a similarity between yaws and syphilis. Of late years most observers seem to have agreed that yaws is essentially a disease devoloped *sui generis*. Mr. Keelan may, perhaps, have opened the way to a more complete knowledge.—*Ibid.*

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