

Technical and Bibliographic Notes / Notes techniques et bibliographiques

The Institute has attempted to obtain the best original copy available for filming. Features of this copy which may be bibliographically unique, which may alter any of the images in the reproduction, or which may significantly change the usual method of filming, are checked below.

L'Institut a microfilmé le meilleur exemplaire qu'il lui a été possible de se procurer. Les détails de cet exemplaire qui sont peut-être uniques du point de vue bibliographique, qui peuvent modifier une image reproduite, ou qui peuvent exiger une modification dans la méthode normale de filmage sont indiqués ci-dessous.

Coloured covers/
Couverture de couleur

Coloured pages/
Pages de couleur

Covers damaged/
Couverture endommagée

Pages damaged/
Pages endommagées

Covers restored and/or laminated/
Couverture restaurée et/ou pelliculée

Pages restored and/or laminated/
Pages restaurées et/ou pelliculées

Cover title missing/
Le titre de couverture manque

Pages discoloured, stained or foxed/
Pages décolorées, tachetées ou piquées

Coloured maps/
Cartes géographiques en couleur

Pages detached/
Pages détachées

Coloured ink (i.e. other than blue or black)/
Encre de couleur (i.e. autre que bleue ou noire)

Showthrough/
Transparence

Coloured plates and/or illustrations/
Planches et/ou illustrations en couleur

Quality of print varies/
Qualité inégale de l'impression

Bound with other material/
Relié avec d'autres documents

Continuous pagination/
Pagination continue

Tight binding may cause shadows or distortion along interior margin/
La reliure serrée peut causer de l'ombre ou de la distorsion le long de la marge intérieure

Includes index(es)/
Comprend un (des) index

Title on header taken from:/
Le titre de l'en-tête provient:

Blank leaves added during restoration may appear within the text. Whenever possible, these have been omitted from filming/
Il se peut que certaines pages blanches ajoutées lors d'une restauration apparaissent dans le texte, mais, lorsque cela était possible, ces pages n'ont pas été filmées.

Title page of issue/
Page de titre de la livraison

Caption of issue/
Titre de départ de la livraison

Masthead/
Générique (périodiques) de la livraison

Additional comments:/
Commentaires supplémentaires:

This item is filmed at the reduction ratio checked below/
Ce document est filmé au taux de réduction indiqué ci-dessous.

10X	14X	18X	22X	26X	30X
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12X	16X	20X	24X	28X	32X

CANADA HEALTH JOURNAL,

A MONTHLY MAGAZINE OF
PREVENTIVE MEDICINE,

—EDITED BY—

EDWARD PLAYTER, M.D.

Public Health and National Strength and Wealth.

CONTENTS:

The Shortcomings of some Modern Sanitary Methods	193	--Consumption in Cows—Cheap Dinners— No Politics in Health Matters—New	
How to Avoid "Taking" Infectious Disease .	195	Museum of Hygiene in Berlin—Teething, etc., etc.....	206-209
Ventilation--The two chief Obstacles--Heat- ing	196	The Public Health for July	210
Walking the best exercise for Mind and Body	199	Mortuary Statistics.....	211
Fish and Brain Food.....	200	Ordinances of the JOURNAL, etc	212
Tobacco and Wine two and a-half Centuries ago	201	Editor's Special Corner—Early Impressions— The Bad Book- Notes on Reports of Local Boards of Health	213-215
Food Adulteration—its Prevention	203	Observations and Annotations—Injuriousness of Filters—Precocious Children—Arsenical Wall Papers, etc.....	215-218
The Method of Appointment, etc., of Health Officers	204	Notes on Current Literature	218
Miscellaneous Notes and Selections—Disinfect- tion of Dwellings—Adulteration of Candies			

Subscription Price, \$2.00 per year; Single Copy, 20 Cents.

ADDRESS ALL COMMUNICATIONS,

"HEALTH JOURNAL, Ottawa."

ESTERBROOK STEEL PENS



Leading Nos.: 14, 048, 130, 135, 333, 161.

For Sale by all Stationers.

THE ESTERBROOK STEEL PEN CO.,

Works, Camden, N. J.

26 John St., New York

Macdougall, Macdougall & Belcourt,

BARRISTERS, ATTORNEYS,

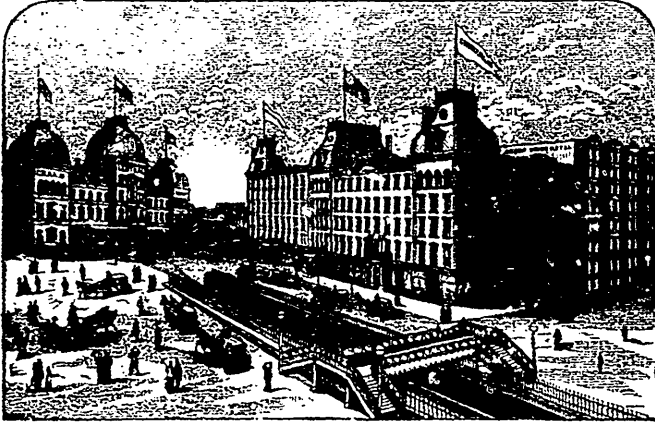
Supreme Court, Parliamentary and Departmental Agents, &c.,

HENRY WATTERS, CHEMIST AND DRUGGIST,

214-210 Sparks St., Ottawa.

Special attention given to the Compounding of Physicians' Prescriptions.

MONEY to be made. Cut this out and return to us, and we will send you free, something of great value and importance to you, that will start you in business which will bring you in more money right away than anything else in this world. Any one can do the work and live at home. Either sex; all ages. Something new, that just costs money for all workers. We will start you; capital not needed. This is one of the genuine, important chances of a lifetime. Those who are ambitious and enterprising will not delay. Grand outfit free. Address TRUNK & CO., Augusta, Maine.



THE GRAND UNION HOTEL,

Opposite the Grand Central Depot, New York City,

Offers travellers and families arriving or leaving the city to visit Saratoga, Long Branch, White Mountains, or other Summer Resorts, superior accommodations. All improvements, European plan, over 600 elegantly furnished rooms, fitted up at an expense of a Million Dollars \$1.00 and upwards per day.

Richly furnished suites for families, and elegantly furnished rooms for dinner parties for ten and upwards. Cuisine and wines of superior merit. The Restaurant, Cafe and Wine Rooms supplied with the best at moderate price. Toilet and Baggage Rooms, for ladies and gents, where coats, valises and parcels can be left free.

W. D. GARRISON, Manager.

Guests' Baggage taken to and from the depot free, and \$3.00 cab hire saved by stopping at this Hotel.

Be sure and try the Grand Union Hotel.

TORONTO SHOE COMPANY,

146 and 148 King St. East, Cor. Jarvis St.



We Invite your Confidence and Patronage.

148 Old Headquarters.

146 New Ladies' Parlor.

The Great and only One Price Cash Boot and Shoe House in Toronto.

THE CANADA HEALTH JOURNAL.

VOL. 9.

AUGUST, 1887.

No. 8.

THE SHORTCOMINGS OF SOME MODERN SANITARY METHODS.

AT the meeting of the Sanitary Institute of Great Britain last month (July 14, '87), the annual address delivered by C. V. Poore, M.D., F. R., C. P., etc., on "the Shortcomings of some Modern Sanitary Methods," was, as the British Medical Journal says, "as might have been anticipated, one of scientific interest and great practical value on important matters connected with modern sanitation. It was an attack on the practice of mixing putrescible matter with water, or, in other words, on the method of dealing with excrement by means of water-carriage."

From almost the first number of this JOURNAL we have expressed views strongly in favor of the earth system, similar to those now so ably given by Dr. Poore, and we are much pleased to find one so eminent taking such a strong position before the Institute, as it can hardly fail to operate, and in no small degree, against the present vile system of river pollution. In future numbers we purpose giving extracts from the address as published in the Sanitary Record for July; meantime we give the following abstract from the British Medical Journal of July 23:

Dr. Poore pointed out that recent investigations had shown that the decomposition of organic matter depended upon the growth of microbes. When organic matter was buried not too deeply in the soil the microbes were of a kind which caused oxidation

and nitrification, and prepared the organic matters for absorption by the roots of plants. When mixed with water the microbes produced were different, and those offensive changes were caused which were known as putrefactive, and ammonia and carburetted hydrogen were formed, and oxidation prevented. The mixing with water prevented and delayed the only natural use of organic refuse—namely, that of forming food for plants. The practice, therefore, was antagonistic to natural law. The mixing of organic refuse with water in cesspools and sewers caused putrefaction, and these putrefactive changes, repellent to our senses, were acknowledged causes of disease.

Dr. Poore further called attention to the fact that many zymotic diseases had been shown to depend upon living organic particles, which possibly multiplied in putrefying liquids, and most certainly were disseminated in the most perfect manner when organic matter containing them was mixed with water and allowed to flow to rivers or wells. No method of "sewage treatment" could, he said, be considered as reliable for the removing or rendering innocuous of zymotic organisms. The practice of mixing with water involved a neglect of the great principle of "resisting the beginnings," and as an illustration of this the lecturer alluded to the cholera epidemic of 1866, when the excrement

from a house finding its way into the river Lea, presumably caused the death of 4,000 persons, and he pointed out that if this matter had been buried or burnt instead of being mixed with water, many or all of those lives would have been saved. The water-carriage system fouled the rivers; of this fact, the Thames, the chief source of the water-supply of London, was a glaring example. With increase of water-carried sewage pure water was getting daily more difficult to obtain. The financial and economical results of the water-carriage system had been disastrous. Sewers which cost millions cost thousands to keep in repair, and the "treatment" of the sewage must be a permanent charge and never a source of profit, because the mixing with water arrested nitrification.

It was pointed out that water-carriage, by enabling houses to be built without any curtilage whatsoever, was a great cause of over-crowding, the greatest of all sanitary evils. Water-carriage was common in country districts where there was no possible excuse for it. He advocated the encouragement of independence in house-holders, and he contended that those who did not use the sewers should not be compelled to pay for them. Our present method of levying rates was a distinct premium on jerry-building and over-crowding, and must produce mischief.

If an equitable adjustment of sanitary rates were instituted, and the Pollution of Rivers Act were enforced against individuals, and if water were supplied by meter, sewage schemes in such places as the Thames Valley would very quickly become unnecessary, and people would resort to rational methods of treating organic refuse, that is, they would, subject it to immediate burial.

The outcry for allotments was good, and if the allotments were near the houses so much the better. Sowage farmers advocated an acre to every 100 persons; but it was clearly better to let the 100 persons live on the acre of ground, and thus save the expense of sewers, and reap the benefit of the produce.

If every cottage (for the average five persons) had one-twentieth of an acre of ground, the sewage difficulty would disappear, and there would be an increase of health and contentment. A "Workman's City" built on this plan would accommodate 64,000 persons to the square mile, or, making allowance for roads, 50,000 to the square mile. With an equitable adjustment of sanitary rates, the lecturer felt sure that this plan would be very generally successful. The change would be very gradual, but he considered that the great failing of the present day was the constant attempts which we made to hurry when hurry was not possible.

HOURS OF FATE.—Dr. Richardson tells us that in the period between midnight and six in the morning the animal vital processes are at their lowest ebb. It is at these times that those who are enfeebled from any cause most frequently die. Physicians often consider these hours as critical, and forewarn anxious friends in respect to them. From time immemorial those who have been accustomed to wait and attend on the sick have noted the hours most anxiously, so that they have been called by our old writers "the hours of fate." In this space of time the influence of the life-giving sun has been longest withdrawn from man, and the hearts that are even the strongest beat with subdued tone. Sleep is heaviest and death is nearest to us all in "the hours of fate."

HOW TO AVOID "TAKING" INFECTIOUS DISEASE.

NOT long ago it was commonly believed that by carrying a piece of camphor gum in the waistcoat pocket one would thereby be, if not proof against "taking" any infectious disease, at least much less like to take it. Belief in similar "charms" has been almost always more or less common. The belief in such prophylactics probably had its origin in something more than superstition. It may have been supposed that, in the case of camphor, the infections were in some way destroyed by the aroma of the gum, or that like moths they could not live in the proximity of it. However this may have been, no certain, or even fairly probable prophylactics of this kind are known to science.

Infectious diseases are doubtless caused by the entrance into the body from without, and the enormous multiplication in the fluids and tissues of the body, of minute living organisms, animal or vegetable. These organisms or their seeds or spores must enter the body either with the air breathed or the food and water swallowed, and hence make their way through the mucous membrane lining the air-cells of the lungs or lining the stomach and intestines, or they must find an entrance through the outer skin of the body. This last named gateway is rarely open to them. Certain of them doubtless sometimes enter through chance abrasions or wounds of the skin. In the case of the ordinary infectious diseases, we must guard as far as possible the other gateways.

It need not be very difficult to prevent the entrance of infections by the way of the food and drink. Thorough cooking and boiling will destroy even the germs, wonderfully

tenacious of life as they are. Milk is a dangerous vehicle and readily absorbs infections. If suspected, it too should be boiled. It is probable that small-pox, scarlet fever, Measles, diphtheria and whooping-cough are usually communicated by means of the air breathed. This source is more difficult to guard, and the guards are less apparent.

It is probable after all that a vigorous, sound condition of body, with blood and fluids free from obstructing secretions or excretions which should have been thrown off, is the best safeguard. W. Dawson, M. A., M. B., of Bristol, writes to the *British Medical Journal*, in reference to the prevention of scarlet fever, as follows, bearing upon this point: "It would appear that many individuals do not take scarlet fever simply because their epithelium is able to resist the efforts of organisms to establish themselves. To what extent this surface resistance depends simply on inherent vigour of epithelium, or, together with this, on some condition of the blood unfavorable to the life of the organism, or how far it is influenced by other unknown factors, has yet to be determined. Further, the history of many scarlet fever cases shows that this resistance is not a constant quantity, that it differs in different individuals, and varies from time to time in the same individual. Amongst the most common influences capable of depressing this resistance are, probably, general exhaustion following overwork or excitement, foul smells, and sudden chill; and herein, it seems highly probable, lies the true explanation of the common experience that robust health so frequently fails to protect its

possessor against the attacks of specific organisms. A momentary depression caused by the common enemy, "a chill," may give organisms already implanted the necessary opportunity to establish themselves and gain entrance to the blood. Once there an inevitable train of consequences ensues. The chill is the predisposing cause, the organisms being the active cause of the disease. The chill deprives the door of the resistance of its lock; the organisms can turn the handle, and set fire to the furniture within the house."

If one is forced to go into the presence of infectious disease, even in the case of the physician, it is best not to remain a moment longer near the patient or in the room than is absolutely necessary. A handkerchief over the mouth and nostrils, or a little cotton wool in the nostrils, will doubt-

less afford protection by straining out the infections. The lips should be kept closed as much as possible, and one may avoid drawing in the breath even for a very short time, or breathe through the nose very quietly—not taking a long breath. One should go out into the air with precisely the same clothing on, even to the head and hands, as worn in the infected room, in order that any adhering infections may be blown off or destroyed and not enclosed and carried to another person. In a well ventilated and disinfected sick-room the danger of communicating the disease to others is reduced to a minimum. Such precautions as these may prevent the spread of an infectious disease, and be the means of saving many lives which with carelessness or inattention would be sacrificed.

VENTILATION—THE TWO CHIEF OBSTACLES—HEATING.

THE late Henry Ward Beecher, a few months before his death, in an address in Edinburgh, Scotland, said, "As a lecturer in public halls for the last fifty years, he could say he had never seen one that was fit to be spoken in. In less than an hour every person had in him, through the act of breathing, something of everybody else; and he condemned what he termed that unwholesome but almost universal vaporous intimacy of men with each other's interiors, which was the result of overcrowding in public assemblies. Nobody thought of these things, and of all creation the man who thought least was the architect." Dr. T. C. Miller, of the Ohio State Board of Health, in his first Annual Report of the Board (from advance sheets in the *Sanitarian*) not yet issued

says, "It is curious and startling, when we remember the disgust awakened by ordinary and comparatively innocent excrementitious products, to see the utter and unconscious indifference to an atmosphere loaded with physiological waste and robbed of its life conserving oxygen, which has run the gauntlet of foul eruptions from disordered and maltreated stomachs, viscid bronchial mucous, and throats and noses riddled by nameless diseases." "Many a time and oft" such texts as these have been given to the readers of the *HEALTH JOURNAL*, with the view of impressing the desirability of better ventilation.

"People," says Dr. Miller, "may be brought to realize the dangers to be apprehended from the adulteration of food. It is more difficult, though it may be possible, to bring them to a

practical recognition of the peril that lurks in water derived from a polluted source; but the air, which many times a minute enters the body through most delicate organs and comes in almost immediate contact with the warm life blood, is rarely thought of with misgivings, unless its *temperature* becomes uncomfortably low or high."

One great obstacle in the way of inducing the people to ventilate more freely, appears to be the difficulty of impressing upon them the fact that, "the air we breathe, although the 'breath of life' when only once inspired, becomes the very atmosphere of death when re-breathed." Yet almost everybody knows that breathed air contains that which is highly poisonous to re-breathe, and that a great deal of ill-health is caused by re-breathing it. Everybody knows the benefit of out-door air. Yet how slight is the effort made to keep in-door air as pure, or almost as pure, as the out-door air. "There is no way at present known by which we can purify polluted air and render it again fit to be breathed. The ventilation of a room is the process of removing the air which has become useless and hurtful, by reason of its foulness, and replacing it by air which satisfies the requirements of healthy respiration; the poisoned air must be taken out and fresh air admitted. The practical results of this double process, under the most favorable circumstances, are to dilute the foul air and maintain a state of tolerable foulness or proximate purity. There is only one source of supply—namely, the great mass of the atmosphere which is drawn from at some point, outside the building, not liable to local, contaminating influences.

The warm season in Canada is short. Soon now the cold season will be upon

us, when doors and windows can no longer be freely opened. The out-door air must then be warmed either before it is brought into the rooms or other closed places or afterward.

Here we come to the second great obstacle to free ventilation—the cost of it. Fresh air from the "great mass" costs nothing, but it costs something to warm it. This, however, is just a question of "an ounce of prevention or a pound of cure." For any one, even a poor labouring man, to breathe foul air because of the cost of warming pure air, is one of the most "penny wise and pound foolish" acts that can possibly be. Indeed, no man can afford to do so—to have his vigour impaired and his family made ill by foul air, when by a little extra expense he can warm abundance of pure air. Then as regards places of public resort, if people can afford to build costly halls, opera houses and churches, they can well afford to make provision for the proper ventilation of them. Churches, many of which are very elaborate and costly, and Sunday school rooms, too, are proverbial for being badly ventilated. A Philadelphia physician used to remark that, in meeting people on the streets on Sunday he could name those who had been to church by another odour than that of sanctity, which he could readily detect about them. Prayer and worship amid such foul air as is usual in most churches during service, cannot be pleasing to the Creator, who has provided pure air in such abundance. Mr. Henderson, in the July (87) *Sanitary Record*, says, Architects are severely blamed, but what of our men of science generally? Is it possible that in the new as in the old world, at the end of the nineteenth century, the proper mode for ventilating as well as for heating has yet to be learnt?

Some ten years ago, he continues, having an unlet hall in Edinburgh, I was led to experiment on heating and ventilating it, and so resolved to begin by trying to understand what became of heat when sent into it. I placed a stove in a small adjoining disused engine-room at the south end, and allowed the heat from it to enter the hall by an opening of three square feet about ten feet from the floor; I next hung thermometers along the centre of the roof, a foot from it, and on the four walls, about six feet from the floor; these were looked at every half-hour, and the temperature noted. The facts revealed surprised me a good deal, especially that at the same time the temperature at the roof should be about double that at the floor (if 70° at the floor, 140° at the roof). How, then, about ventilation in getting rid of the air vitiated by a congregation? The warm air given off in breathing cannot possibly rise, the air above it being hotter. What then? If fresh hot air continues to be poured in from the stove room, outlets must be made somewhere for some of the air to be let out, in order to make room for it; what more natural than that such outlets should be near where the vitiated air is produced? I found it was so; and established, as it were, a regular circulation, by tubes in or on the walls and from the roof.

It is, however, the great masses of the people—the farmer and mechanic—that suffer most, and daily, and hourly, from want of free ventilation; and this more especially at night in bedrooms. The public schools, too, are “a disgrace to our civilization.”

Nearly all the dwellings of the great body of the people are heated by stoves, and chiefly because this constitutes much the most economical way

of heating. Many of these people both in town and country, whose circumstances would permit and who have large houses, would consult their interests by warming their dwellings by means of a furnace in the basement or cellar. A hot air furnace can now be bought for but very little more than a large stove. Messrs. Clare Bros. & Co., of Preston, Ont., make them superior to any we have seen, for wood or coal, at prices ranging from \$40 to \$100, or more, and well constructed for economizing fuel. Very little in the way of flues for conveying hot air is absolutely required if doors are left open.

Hot-water or steam furnaces, for heating the air by means of pipes filled with steam or hot water within the furnace, are much more costly, and are unquestionably better, but as a means of warming a room, a hot-air furnace is far superior to hot-air stoves. The practice, becoming common too, of warming churches, halls, schools, or even living rooms, by hot-water or steam pipes placed in the apartments, without special means of ventilation, should not be tolerated.

Whatever means is used for heating, there can be no ventilation without provision for removing the foul or breathed air. This is the main point. The only practical means for ordinary purposes is the warm upright flue—a chimney, a flue beside a chimney, or even a stovepipe. Any room which is connected with a chimney or stovepipe used as a smoke flue, or which can be so connected, as we have before pointed out, may be fairly ventilated with very little trouble. All that is required is an opening of communication, five or six inches square, between the room and the warm chimney or pipe. Through this a great deal of foul air may be drawn

from an apartment, when, if the atmosphere be much colder outside than in, the fresh air is sure to find its way in.

In the next number of the JOURNAL we shall endeavour to give somewhat in detail a simple method by which public schools and churches, especially

in rural districts, may be fairly ventilated at little cost. Then if the members of the local Boards of Health would interest themselves, the air in the schools and public buildings in their respective municipalities would be greatly improved and the public health be much deftute.

WALKING THE BEST EXERCISE FOR MIND AND BODY.

IT is the great distinction and pride of Man that he can walk erect. Many have borne witness to the value of walking as an exercise. For those in fair health, who wish to keep and improve it, there is no better exercise practiced or known, if indeed any nearly so good.

On the advice of his physician, the writer many years ago, in practical experience, found it of the utmost benefit in imparting needed physical vigour to walk daily from six to eight miles. Gardening is good exercise, but in walking there is the advantage that all the bodily organs are in a natural position. Again, in walking one may make the exercise of any desirable degree—moderate, medium or very active. One may walk at the rate of one mile (or possibly less) an hour or four or five miles an hour. Some people think they cannot walk. They tire soon and get discouraged. This is, usually, because they walk too fast. It was the writer's experience that he could almost from the first walk any distance—almost constantly, if he only walked *slowly* enough.

In the "Annals of Hygiene" are given some happy thoughts on walking, which are given in conclusion below:

The exhilarating motion of riding and its utter relaxation are truly pleasant, but he who has not the

opportunity to ride can undoubtedly find much to entertain and instruct him even in short rambles. In company with good mother Nature, he will gain pleasure, benefit, and health, if he but try to read the manifold pages of her beautiful volumes; pages on which are written such lessons of truth, and goodness, and beauty, that he who reads them feels refreshed and strengthened for the conflicts of life. Happy is he who has acquired this power of understanding her teachings, as they are written on every leaf and flower that grows. When one rides, one must necessarily keep to the highways of the world; while on foot one may explore the byways, narrow streets of quaint old cities, shady forest walks, and rugged mountain climbs.

What is more pleasant than on a hot midsummer day, to seek the shady recesses of the woods, and become acquainted with their inmates! The great trees intertwining their branches overhead would give ample employment for an afternoon in finding out their names and uses. Beneath their genial shade, from early spring till frost-bringing fall, may be found the blossoms which give delight to the botanist and artist. Beside the brook that murmurs so musically through the rocky ravine the angler may wander, reel in hand, while he lures to a sad end the shining trout. Who

would rather ride on the dusty high roads in preference to a quiet ramble in this delicious seclusion? The cool and graceful ferns waving in the gentle breezes, and the chirping and twittering of the busy birds o'erhead, replace tenfold the artificial amusements of man's contriving. Here the sick would find rest, the sorrowful consolation, the wicked repentance, and the good and happy untold enjoyment in the unconscious association with the Maker and Father of all.

Not only in his study of nature, but in his study of human nature, the foot traveler has the advantage. He may come in contact with every phase of life in his wanderings. At the door of the farm-house, where he stops for a drink of water from some moss-lined well, he may meet, perhaps, a shy and sun-browned country maiden, or perhaps a talkative matron, who will relate to him all the wonderful stories of the region round about, while he rests and refreshes himself. In some out-of-the-way clearing he may find some queer old character, leading, apart from the world, a strange and

lonely life. He may see the sad contrasts between the life of the rich and that of the poor.

Goldsmith, whose writings teem with such a variety of natural characters, walked through France and Holland in his youth, mingling with high and low, learning their thoughts and feelings, to jot down afterwards in his charming books. Who has described better than our own Bayard Taylor the life and customs of the people through whose countries he traveled on foot? There is no surer way of getting acquainted with human nature than to meet people on an equal footing.

Students especially, in their long vacations, should lay all books aside, except some of nature's text books, and should seek the woods and fields and mountains, searching for health and pleasure in the swamps and highlands. Thus they will lay a firmer foundation for the next winter's studies, and they will learn, without their knowledge, precious lessons for the hard voyage of life.

FISH AND BRAIN FOOD.

IN one of his articles on food, in the Century Magazine, Professor Atwater disposes in the following manner of the popular theories that thought is especially dependent upon phosphorus and that fish is particularly a brain food. Even if fish were richer in phosphorus than meats or other food-materials, this would not establish its superiority for the nutrition of the brain or the production of intellectual energy. But there is no proof of any especial abundance of phosphorus in fish. On the contrary, an extended series of analyses in this laboratory

have revealed proportions of phosphorus in the flesh of our ordinary food fishes differing in no important degree from those which have been found to occur in the flesh of the other animals used for the food of man.

Physiologists tell us that the way to provide for the welfare of the brain is to see that the rest of the body is in good order, that, in other words, the old proverb of "a sound mind in a sound body" is sound doctrine. And they are getting to tell us further that one way in which brain-work is hindered is by bad dietary habits, as,

for instance, overloading the digestive organs by taking too much food. Of the vice of over-eating (a vice which we Americans by no means monopolize), a considerable part, in this country at least, and I think in England and among well-to-do people on the Continent of Europe also, is the vice of fat eating. We are a race of fat-eaters. If anyone doubts this, I think the statistics to be shown in a succeeding article will convince him, unless he is ready to deny the practically unanimous testimony of such facts as I have been able to gather. It comes about very naturally and is really due to the fertility of our soil, the consequent abundance of food, and the toothsome-ness of food-materials rich in fatty matters. The result of this is, that the quantity of fat in the average American's dietary is very large indeed, mainly because of the large amounts of meats, butter and lard consumed, and is far in excess of the demands of his body, unless he is engaged in very severe muscular work or exposed to extreme cold, or both. For people with sedentary occupations,

including the majority of brain-workers, this simply means charging the organism with the burden of getting rid of an excess of material. This excess, the physiologists and physician assure us, is detrimental.

Now it seems to me very reasonable to assume that brain-workers and other people who do not have a great deal of muscular exercise may very advantageously substitute fish in the place of a portion of the meat which they would otherwise consume. I am very well aware that such hygienic advice might come more appropriately from a physician than from a chemist, and am therefore glad to be able to quote from no less an authority than Sir Henry Thompson, who urges "the value of fish to the brain-worker" on the ground that it "contains, in smaller proportion than meat, those materials which taken abundantly, demand much physical labor for their complete consumption, and which, without this, produce an unhealthy condition of body, more or less incompatible with the easy and active exercise of the functions of the brain."

TOBACCO AND WINE TWO AND A HALF CENTURIES AGO.

A BRIEF & ACCURATE TREATISE, CONCERNING THE TAKING OF THE FUME OF TOBACCO, WHICH VERY MANY, IN THESE DAYES, DOE TOO LICENCIOUSLY USE.—BY TO. VENNER, DOCTOR OF PHYSIC IN BATHE, 1637—
FROM "MEDICAL CLASSICS."

THE herbe Tobacco is of much antiquitie and reputation among the *Indians of America*. It is also called *Nicotian*; but neither this nor that is the name that the Indians give unto it: for it was called Tobacco by the *Spaniards*, by reason of an Island so named, which abounded with this herbe: and by the *Frenchmen*, *Nicotian*, of the name of one *Nicot*, that first gave the intelligence thereof unto

them. But the *Indians* call it *Petun*, or *Petum*, which indeed is also the fittest name that both we and other nations may call it by, deriving it of *Peto*, for it is farre fetcht and much desired. And thus much for the name.

As touching the temperature and faculties of it, it is hot and drie in the third degree, and hath a deleteriall, or venomous qualitie, as I suppose: for it being any way taken into the bodie, it

tortureth and disturbeth the same with violent ejections both upward and downward, astonisheth the spirits, stupifieth and benummoth the senses and all the members. This noysome facultie of *Tobacco* proceedeth not from the temperature of it, but from the very essence of its substance. As for the stupifying or benumbing qualitie thereof, it is best perceived upon the taking of the fume at the mouth: for thereupon followeth a drunken-like lightnesse of the head, and especially if it be much taken at once, a benumbing sleepinesse of the limbes and senses. Wherefore *Tobacco*, though it be in taste, biting, and in temperature, hot, hath notwithstanding a benumbing qualitie; which, because it cannot depend of an extreame cold qualitie, the hearb being very evidently hot, it followeth, that it is hot and beauming, not benumbing by reason of its temperature, but through the proprietie of its substance. There is in the iuyce of this hearb an excellent digesting, mundifying, and consolidating facultie; by meanes whereof, it is of ineffable force for the speedy curing of any wound or cut in the flesh, or soares, ulcers, scabbs, &c., for which it is worthy of very great esteeme, and not much for any other proprietie to be magnified and respected, (as I conceive.) And thus much briefly concerning the nature of *Tobacco*.

WHETHER IT BE EXPEDIENT FOR HEALTH
TO BE DRUNK WITH WINE ONCE
OR TWICE A MONETH.

O HOW impudently would our drunken Potisuges vaunt themselves, if for the health of the body, I should approve the custome of being drunk once or twice in a moneth! Verily, it hath beene written and affirmed by some of the ancient Physi-

cians, and approved as a thing wholesome: because drunkennesse observed in manner aforesaid (for often drunkennesse they did condemne) doth (as they say) by inducing sleep, alleviate and make quiet the animall powers, provoke vomiting, urine, and sweat: whereby it cometh to passe, that the weake and troubled spirits, through immoderate cares and perturbations, are revived and pacified, and the evill humours not onely ejected from the stomach, but also expelled from all parts of the body. But this their assertion, as it is most ungodly, so it is unto the health of the body most pernicious: for drunkennesse spoyleth the stomach, maketh the bloud waterish, hurteth the braine, dulleth the senses, destroyeth the understanding, debilitateth the sinewes, and subverteth the powers of all the body. Wherefore seeing that all drunkennesse is evill, and hurtfull to the true health of the body, and that the disease is pernicious, which doth chiefly distemper the place of understanding; they erred very grossely, that thought drunkennesse profitable once or twice a moneth. Neither are their reasons of such validity, as that they should perswade any to a custome no less hurtfull to the mind, than to the bodie. For the animall powers defatigated, or otherwise disturbed. may be holpen with a safer, better, and a more godly remedie, than by an unquiet and turbulent sleep. caused by meanes of drunkennesse: for Drunkards verily doe not enjoy sweet and quiet sleep, whereby the animall powers are truly refreshed. In like manner, to procure vomiting, urine, and sweat, by meanes of drunkennesse, as it is wicked, so it is beastly. Moreover, by a remedie of this kind, the hurt is farre greater than the help; for drunkennesse, besides

that it doth extinguish the light of the understanding, causeth the Apoplexie, and such other like diseases of the braine and oftentimes a sudden suffocation. In a word, it doth by much more hurt all the parts and faculties of the body, than any way help by the evacuation of superfluities, as the barbarous Authors pretend for their assertion: for infinite are the hurts that drunkenness bringeth unto mans body. Well therefore was *Androcides* wont to say unto *Alexander*, being about to drink wine, that he might beware of excesse, *O Rex, memor sis te*

terre sanguinem bibere. But heere I will not deny, but that it may be very lawfull and expedient, for them that are wont to be wearied with great cares and labours, to drink sometimes until they bee merry and pleasant; but not drunken: for in observing such a rule, the aforesaid crapulentall hurts are not induced, but the spirits and the whole body are thereby so recreated, refreshed, and renewed, as that the next day, they doe more ingeniously undertake, and more readily execute their accustomed businesses.

FOOD ADULTERATION—ITS PREVENTION.

WE feel constrained to often refer to this subject; trusting it may "come home" more to some minds than some other health subjects, because it touches so directly the purse as well as the health.

Although adulteration is still practiced to a large extent, it has received a decided check in Canada. Much yet needs to be done, and the public—the consumers of adulterated food, who are thus being robbed as well as injured in health—should assist more in the work of prevention; especially should municipal health officers, for the benefit of their constituents.

A member of the Ohio State Board of Health, Dr. Beckwith, in a report on Adulteration, writes as follows in reference to the prevention of the practice in this country: "The wisdom of prohibitory legislation can be seen on our side of the water by the results obtained in Canada. The work of examination there began in 1876, when 51.66 per cent. of the articles examined were found adulterated. In six years thereafter, or in 1882, this percentage had been reduced to twenty-

five—a remarkable showing, when we consider that the only mode of punishment for infraction of the law has been the publication of the names of guilty parties."

Since 1882, improvements have been made in the Adulteration Act, and the Department is still more active and efficient. But as Dr. Beckwith, in his Report, says, "There is probably no more important subject before the thinking public of to-day than the condition of our food supply; and no subject in the last decade, relating to the human economy, has received greater consideration or elicited fuller discussion than its contamination through the agency of adulteration. The wonderful revelations of science have made possible not only the wholesale sophistication of most of our food products, but have provided a way, in numerous cases for the actual substitution of fraudulent, if not pernicious, substances for many others. To such an enormous extent has sophistication been carried within the past two years, that legislative action in nearly all civilized countries of the world has been taken

with a view of alleviating, if not relieving, the sufferings of protesting humanity."

Spice and coffees appear to be most subject to adulteration. The manufacturers of the various preparations of which "carry as capital, and well-paying capital too, receipts for incorporating foreign and worthless substances with the genuine articles." In conversation with the manager of the spice department of a large and reputable house not long ago, Dr. Beckwith states, no attempt at concealment of this fact was made. The conception of adulteration in this particular line, he said, lay in a rapid advance of prices for the imported articles at one time, its growth in the gullibility of the consuming public, and its full maturity in the sharp competition of hard times.

The substitution of glucose for sugar

is another tremendous fraud on the public. It is largely used in syrups, the lower grade of sugars, jellies and confections. As artificially prepared (chiefly from corn) it differs materially from cane sugar, having but about one third the latter's sweetening power. It is frequently contaminated by the lime which is used to neutralize the sulphuric acid employed in the conversion of the starch into sugar.

The people in the rural districts suffer most, it is thought. Manufacturers have less fear of detection in sophisticated "goods" shipped to country dealers.

We again appeal to health officers, medical and other, to look after adulterators. Health Inspectors in rural municipalities might do much, if they would go about it "without fear, favour or affection."

THE METHOD OF APPOINTMENT, DUTIES AND COMPENSATION OF HEALTH OFFICERS.

READ AT THE SANITARY CONVENTION, WOODSTOCK, MAY 18TH, 1887—BY DR.

P. PALMER BURROWS, MEDICAL HEALTH OFFICER, OF LINDSAY.

TO my mind no duty entirely in the hands of municipal councils is more important than the selection of competent Health Officers and the formation of efficient Local Boards. It is but fair to add that, taken as a whole, the trust has not been misplaced, especially is this true with regard to Medical Health Officers, and chief Advisory Officials. I am sure you will quite agree with me that those in your immediate neighborhood with whom you are acquainted, as well as those present from a distance whom you have had occasion to hear and see, reflect every credit on their official positions. I am pleased, indeed, to pay this deserved compliment to our

municipal corporations and their appointees, the Medical Health Officers, still I am not prepared to recede from my personal conviction, that to fully serve the wise purposes intended by the Public Health Act, Health Officers should be elected by the popular vote, and be directly and only responsible to the people. They should have control of municipal funds for such sanitary work as in their judgment is wise and proper, and in as complete a manner as is accorded Boards of Education and even municipal corporations. They should be entirely independent of and not subsidiary to municipal councils, in too many instances the accredited belief

that "Corporations have no souls" is verified in this connection. They fail to extend that generous support necessary to carry on sanitary work, in fact the bond of friendship and sympathy which may have existed early in the history of the local board, becomes strained, the moment the *papulum vitæ* is required, and from this time we mark inertia and decay of our local boards. I speak from personal knowledge. The Lindsay Board at its formation was a good one, every individual member anxious to do his duty. They were men of nerve and spirit and at once proposed putting the town in improved shape; wells, streets and sewers were cleaned by their orders; strict isolation in cases of contagious diseases insisted upon; premises in which such diseases had appeared, fumigated and sweetened, and by this prompt action and energy an epidemic of diphtheria which threatened to assume formidable proportions was effectually stamped out. They carefully considered the question of water supply and efficient drainage, and advised immediate action towards improvement; but when they reached this important point, when they had the temerity to ask necessary funds the councillors metaphorically bid them a very good morning and promised to consider their proposal at another day. From this time they became discouraged, their influence for good destroyed, and all that remains is a mere name, and the record of their good intentions. It is now a matter of singular good fortune to get together even a quorum for the transaction of routine business. This description I take to be the common experience, knowing this as I do, you will thoroughly realize that if local boards are to exist, a change is called

for. Once placed in such a position that they can use public money without being dependant upon soulless corporations, a great point will be gained. The matter or manner of their selection, whether by the councils or by electoral vote, is a secondary consideration, although I think the latter a better choice.

It is somewhat difficult to define the duties of health officers, not what should be their special work, but as laid down by legislative enactment. Indeed, on considering the several health acts we find their powers wonderfully circumscribed, cramped and ill defined, an example, I presume, of the wisdom of our legislators, who are apt to regard with suspicion advanced public measures and improve by such emendations as make the law almost inoperative. I am quite sure the several Health Acts do not appear on the Statute Books as originally drafted by my friend Dr. Bryce, the worthy secretary of the provincial board. I need not quote particulars to exemplify this, as these acts in all their minutiae are familiar to you. I will merely say that the authority given Boards of Health and especially the Medical Officers, is not sufficiently arbitrary the words "or other medical practitioner" too often dividing the responsibility and the little word "may" qualifying his duties and powers as well as that of the Board. And I am sorry to say the Act of 1887 is open to similar objections. Throughout all there is the one weakness, that Local Boards cannot successfully finance, even in the smallest particular. All their accounts go before the municipal fathers and are of course passed with that cheery nonchalance so characteristic of those benevolent Christians. Outside and beyond these troubles the

live Health Officer will find plenty to engage his attention. It is his first duty to be vigilant and active, to anticipate the advent of epidemic and other diseases, to remove and remedy such unsanitary conditions as provoke disease, study the character of the locality over which he has supervision, strenuously advocate improved and effectual drainage and insist upon a bountiful supply of pure water for domestic purposes; see to the cleansing of wells, cellars, highways and byways, and have his inspector regularly visit every house and suspected locality, and regularly report. In his hands is placed most sacred interests which he should properly realize and faithfully serve. He should be prepared for every emergency and should not allow the enemy to gain an entrance before he defends the citadel—he must not awake to find the plague-stricken corpse at his feet.

The Local Health Officer has important, but not very onerous duties to perform. He does not require to devote very largely of his time, not

certainly more than any intelligent citizen would willingly contribute, but with the Medical Health Officer, it is different. He is required to reflect and mature his views and to direct by wise counsel, and is open to severe comment, sometimes unkind criticism; the correctness of his suggestions questioned, and even his confreres in medicine will not at all times extend that sympathy which is his due. For these reasons I think his position should be permanent, so long as he proves himself a qualified and efficient officer, and his services remunerated by stated salary. The amount need not be princely, but it should be commensurate with his duties and calls upon his time, awarded by parliamentary enactment if practicable, and not left to the judgment of municipal councillors; in country districts merely nominal, in cities and towns in proportion to population. [Dr. Burrows then discussed the question of the sanitary inspection of schools to which we have so often alluded in this JOURNAL—ED.]

MISCELLANEOUS NOTES AND SELECTIONS.

DISINFECTION OF DWELLINGS.—After testing various disinfectants by Koch's method on threads impregnated with spores, Guttman and Merke come to the conclusion that a 1:50 sublimate solution is the best antiseptic medium. Their method is as follows: After thoroughly soaking the floor with the above solution, the roof is sprayed with the same solution till drops appear; the walls are also treated in like manner. To remove the sublimate the parts are then sprayed with a one per cent. solution of soda, which converts the bichloride of mercury into

the insoluble subchloride, the crystals of the latter being removed from the walls by means of a brush when they are dry.—*Virchow's Archiv.*

THE ADULTERATION OF CANDIES.—The Herald of health says: A well-known writer, who has studied, gives the following account of his investigations on this subject: "*Terra alba*, or white earth, is used largely in the adulteration of candies. The body of candies, the coating of almonds and lozenges are often made from this earthy material. I have seen an ounce of lozenges dissolved in water in

which two-thirds of an ounce was white earth. Pine-apple flavor is often obtained from rotten cheese and nitric acid. Poisonous coloring is very much used for candies. One of the commonest is "carlot," into which arsenic largely enters. Liquorice drops for the trade are sometimes made of poor brown sugar, glue and lamp-black, flavored with liquorice." It is the duty of mothers to protect their children from the baneful effects of such stuff. The safest way to accomplish this is to keep candies of every kind out of their reach.

CONSUMPTION IN COWS.—Tuberculosis seems to be rather prevalent of late among cattle in Paisley, especially among milch cows. From a report presented to the police commissioners of the town by the sanitary inspector, it appears that a systematic visitation of the dairies and market has recently been found necessary, and that good results have already ensued. Since the beginning of March last, the carcasses of sixty-two animals suspected of having been affected with disease of one kind or another have been examined, and thirty-three of them have been condemned and destroyed. Nearly the whole of these animals were affected with tuberculosis, and a considerable number of them were milch cows. The necessity for the inclusion of tuberculosis among the disease dealt with by the Contagious Diseases (Animals) Act was strongly advocated by the Commissioners, and steps are in contemplation for securing, if possible, an amendment of the law with this object.

HEREDITARY TAINT.—How many medical men have the courage to tell parents that their daughter had better a thousand times live and die an old

maid than wed a man whose body is soaked with alcohol? It has come to such a point nowadays that if a man keeps pretty sober in public he is not regarded as a bad match if he has cash. We as physicians know that if his body is soaked with alcohol he is unclean, he is rotten and he cannot beget a child that has a sound body and a sound mind. Physical purity means that the bodies of both parents are pure.—Dr. DeArmond, in *Iowa State Medical Report*.

CHEAP DINNERS.—The report of the cheap dinner movement in connection with the Board Schools of Birmingham has just been issued. It deals with the period from Nov. 4, 1886, to May 27, 1887. During that time, in the five kitchens opened and in operation, 212,853 meals were distributed. No attempt was made to get a profit. Experience proved that at a cost of a halfpenny per head the children can be supplied with more wholesome palatable food than they can eat, and in many cases two children were satisfied with the portion allotted to one. The experiment of farthing dinners was tried, and it was found possible for that sum to supply a meal equal to the halfpenny meal of the previous year, of course only in sufficient quantity to satisfy younger children. The cost for food was .302 of a penny; general expenses, .112; rent, gas, and water, .057; making the total cost per meal per head, .472 of a penny—considerably less than a halfpenny, including management expenses. This could not, of course, be done without skilful management, and plenty of willing and voluntary assistance. It was considered that the moral effect upon the lives and tempers of the children was almost equal to the physical results.

NO POLITICS IN HEALTH MATTERS.—In Scotland, municipal government is not in the least tinged with politics. In this respect we differ from both England and Ireland. In the course of a municipal election with us no reference is ever made to imperial party questions or to the political opinions of the candidates. After a provost is elected—the civic head corresponding to your mayor—you have to ask whether he is a Liberal, a Tory, or a Radical. While in office he maintains neutrality in all local political movements. So said Dr. Russell, Medical Health Officer of Glasgow, at the meeting last October, in Toronto, of the American Health Association. It would be well if the same could be said of Ontario.

NEW MUSEUM OF HYGIENE IN BERLIN.—A large hygienic museum has recently been opened in Berlin. The rooms on the first floor, of which there are sixteen, contain exhibits relating to fire, building, heating, ventilation, lighting, water supply, and road and street making. On the second floor are eighteen rooms, in which are shown objects used in civil and military nursing, clothing, baths, education, asylums, prisons, etc.

CURES OF CONSUMPTION.—Statistics show a marked decrease in the annual mortality of phthisis, the gain being in England in males fourteen per cent., and in females twenty-two per cent.; in Massachusetts there has been a gain of fifty-four lives per one hundred thousand. Thirty per cent. of the cases have an hereditary predisposition to the disease.—*N. Y. Med. Times.*

CANNED "CHICKEN."—We have observed it stated on what seemed good authority that large numbers of calves only a day or two old are regularly

sold in New York, and probably elsewhere, which are minced and sold as canned chicken. The *Chicago Herald* gives the following:—"Yes," said a Madison street butcher, "you've seen dead rabbits hanging in front of this market for the past ten years; but they are not the same rabbits. Oh, no; do we ever sell any? Once in a while. You have eaten rabbits, haven't you? No! Oh, I guess you have. Ever eaten canned chicken? I thought so. Then you have eaten rabbit. Frozen rabbits will keep for 40 days. If during that time they cannot be sold, they are gobbled up by the canned meat men and chopped into chicken."

SALICYLIC ACID IN FOODS.—There is a growing belief among sanitarians that salicylic acid is being used more and more extensively in the preservation of canned food, milk, wine, beer and other articles. A Brooklyn chemist has found fifteen grains to the gallon in beers. The French government have also taken action in this matter. Dr. Popoff, of the Kharkov Hygienic Laboratory, ably reviews the whole question of adding salicylic acid to articles of food for preserving purposes, and lays down the following: 1. Salicylic acid does not represent a natural ingredient of any food article or beverage. 2. The results of studying its antiseptic, anti-fermentative, and physiological action fully justify the admission that on a prolonged use, even in small quantities, the substance must interfere with the normal course of the physiological functions of the human system. In other words, a continuous injection of the acid from day to day is injurious to health. 3. As an anti-fermentative means, in small quantities salicylic acid manifests but a feeble and uncertain action. In large

doses it acts more effectively and with a greater certainty, but at the same time produces a well-pronounced depressing influence on the animal organism (the assertion is supported by experiments.) 4. Under normal conditions of civic life and food supply, the use of salicylic acid as a means for preserving food articles and beverages should be prohibited.

TEETHING—ERRORS REGARDING IT.—

Dr. Russell, of Albany Medical College, in a paper recently read before the Albany Medical Society, said, it is the belief of mothers almost universally that most disorders of children are due to teething; this belief is, very unfortunately, too common among physicians. On the contrary, it is the belief almost unanimously of experienced specialists who devote themselves to the treatment of children's diseases in America and abroad, and whose books are authority with the profession everywhere, that teething is rarely the cause of children's disorders, and, as a rule, the cause of none. The object of my remarks this evening is to show the mistake that is daily made, by the profession as well as the laity, in allowing the so-called teething-disorders to go on without treatment till a stage is reached in which the health, and perhaps the life, is in jeopardy. For example, a mother says of her child's diarrhœa that it is a sort of vent by which is thrown off a something that would otherwise "go to the brain," and without which other and more serious disorders would supervene; and therefore no effort is made to check it.

LADIES HAIR.—With regard to the ladies, their hair should be brushed rather than combed daily, its tangles carefully unraveled, its split ends cut off, and, when done up, it should be bound in as easy rolls and coils as

possible. One reason for this is to allow as free ventilation as possible for the scalp; the other that you may not break the hair or strain the roots by tight tension upon them. Twisting or tight binding should be avoided. A persistent mechanical pressure on the shaft, by obstructing the flow of oleaginous fluid designed to soften it, tends to dry those portions which are beyond the ligature. Ladies should loosen their hair well every night before retiring. Crumping, the use of curling-irons, and bleaching the hair must be avoided. For invalids, or those confined to bed, the hair should be oiled daily, and then combed with a coarse comb. The skin should be washed twice a week with a sponge and a little soapy water. The water may be either cold, lukewarm or warm. Loss of hair is generally caused by a permanent irritation. In adults, heavy head-covering or coiffures may cause this irritation. Those having weak hair should avoid pads. A daily shower bath on the head is injurious. Lotions should not be used; most of them contain lead. They have been known to cause paralysis. Dyes are very deleterious.—Dr. Foley, L.R., C.P., Lond., etc., in *N.Y. Med. Jour.*

SPREAD OF CONSUMPTION.—The medical officer of Oldham, Eng., Dr. Niven, in a recent lecture on the "Origin of Disease," before the Manchester Sanitary Association, said, "Consumption is widely spread amongst the animals which form the food of man. Thus, it is not uncommon in cattle, in rabbits, and in birds, and several attacks of consumption have been with some degree of probability traced to eating animals so affected. So well is this recognised by veterinary surgeons, that I have heard one declare he would not eat a chicken unless he had seen its inside after it was killed."

THE PUBLIC HEALTH FOR JULY.

MORTUARY RETURNS FROM THE TWENTY-SIX CANADIAN CITIES AND TOWNS.

IN the twenty-six principal cities and towns of Canada which make monthly returns of deaths to the Department of Agriculture in Ottawa there were in July 2,060. The mortality in July was 33 per cent. higher than in June; or at the rate of 36 per 1,000 of population per annum. The record of deaths for May and June was 1,323 and 1,552, respectively.

In Montreal, the mortality was slightly lower in July than in June; whereas in Toronto it was more than double—157 deaths in June and 327 in July—an increase of over 100 per cent. In Quebec the mortality increased about 80 per cent.; in Hamilton, 75 per cent.; in Ottawa, over 31 per cent.; and in London 26 per cent.; while in nearly all the other cities and towns there was a large increase.

From zymotic disease there was an increase in the mortality in the twenty-six cities and towns, in July over June, of nearly 80 per cent.—438 deaths from this class in June and 780 in July.

From measles there were 6 deaths, and from scarlet fever 2.

From diphtheria the number of deaths decreased from 72 in June to 55 in July.

Typhoid and other fevers increased from a total of 16 in June to 25 in July.

Diarrhœal diseases caused in the twenty-six cities and towns the appalling total of 668 deaths; or a mortality, from these diseases alone, at the rate of nearly 12 per 1,000 of population per annum—nearly one-third of the total rate from all causes, and more than double the high rate in June.

Not one of the larger cities can

reflect on the others. In all, almost alike, was there a large increase in the mortality from diarrhœas.

The intense and continued heat will of course be blamed for the high mortality; and the heat was doubtless the chief exciting cause; but with absolute cleanliness—pure air and pure water—and proper food there would be no such death-rate or anything near it.

Nor can the blot upon the sanitary condition and system in the cities of Canada be removed by asserting that the mortuary returns are not perfect, as some have asserted. If there are imperfections in the returns from any of the places they are chiefly imperfections of omission. Comparatively very few of these 2,060 deaths were of those who went, or were taken, into the cities to die. More persons, probably, with the view of saving their life when perhaps near death, were taken to the country and buried there.

As was observed in the JOURNAL last month, should there take place among the domestic animals such a fearful proportionate destruction of life, there would probably be created thereby a good deal of excitement and the cause or causes would be investigated and prompt measures would be employed to prevent its recurrence.

If wine and beer were universally substituted for ardent spirits, a long step would have been taken toward true and substantial temperance and self-control. Grape growing and wine making should receive every encouragement in Canada, where it is becoming a valuable industry. Grapes are probably the most valuable and wholesome of all fruits. We purpose devoting an article to the subject in our next issue.

THERE should be a law to compel milk dealers to bottle the milk at once, as it is taken from the cow. The risk then from contaminated milk would be greatly reduced.

VISITORS to New York may be reminded that the Grand Union Hotel, directly opposite the Grand Central Depot, is one of the largest and best kept of the New York hotels; while the charges are very reasonable, considering the excellent accommodation. It is kept on the European plan. The bill of fare and the beds are of the best.

ON many occasions during the past five or six years the family of the publisher of this JOURNAL have had dyeing done at the works of the "British American Dyeing Co." of Montreal, and always with perfect satisfaction in every respect. The company have offices in the other chief cities. See their advertisement on another page.

THE "Sanitary Era," a semi-monthly journal, of New York, in its August 1st issue, says, "We cut the CANADA HEALTH JOURNAL all to pieces. The valuable excerpts and notes for which we are indebted to Dr. Playter's appreciative selection are so numerous that we have not room to label them in detail."

ONLY "mad haste" surely can induce any one to travel by rail, either way, between Montreal and Toronto during the boating season; or, indeed, between Toronto and Ottawa, via Prescott, as the railway and boats make connections both ways. The accommodations on the Daily Mail Steamers of the Richelieu and Ontario Navigation Company are all that the most fastidious could desire—the "the bill of fare" being unexceptionable. The same may be said in regard to travel between Ottawa and Montreal, and vice versa, on the Ottawa River daily Line Boats—the Empress and Prince of Wales.

THE ARRIVALS at the Caledonia Springs Hotel are numerous this season and the hotel appears to be growing more and more in favour. Sir James Grant has been again enjoying its recuperating influences; and we hear many speaking highly of the accommodations there and of the benefits derived from the use of the waters.

THE "ROCHESTER" LAMP, as manufactured by the Burn & Robinson Manufacturing Company, of Hamilton, Ont., is far superior to any lamp we have seen, both in its light giving powers and in the designs of the stands. It gives a brilliant light, equal to four ordinary lamp burners, and some of the lamp stands are highly artistic in design and very elegant and chaste. The designs in shades, too, are exceedingly handsome. We would strongly recommend anyone wanting a first class lamp to send to the above firm for descriptive circulars, or get their furnisher to do so. The prices are reasonable.

ORDINANCES HEALTH JOURNAL.

Pure Air: The complete destruction of all waste organic matter, by fire or otherwise; no collections any where of bodily excrement—perfect sewerage or daily disinfection or deodorization with frequent removal: through ventilation of all buildings, public and private; complete isolation and disinfection in all cases of infectious disease.

Pure Water: Strict prohibition of the pollution of all inland waters—rivers, lakes, streams—by sewage or other waste substances; thorough filtration of all public water supplies; closing of suspected wells.

Pure Wholesome Food: Prompt and severe punishment of all adulterators of food, with frequent and repeated analyses; thorough inspection of foods—meat, milk, flour, bread, fruits, &c., with punishment of all offering impure or bad food; improved methods of preparation and cooking food.

Education of the Public in all Matters Pertaining to Health.

PUT ice around, instead of in, the water jug, as ice is often impure.

GO not into cold water when you are much heated, nor when *cooling* fast but wait to get somewhat cooled, yet still warm.

"A VALUABLE SERIAL, which ought to be in the hands of every Mayor, Alderman, Town Councillor and Health Officer in the Dominion." So it is stated of the CANADA HEALTH JOURNAL in a Report on Epidemic Diseases, &c. By J. T. Bell, Esq., late Chairman Board of Health, Belleville.

Canada Health Journal.

A MONTHLY MAGAZINE OF PREVENTIVE MEDICINE.

THIRTEENTH YEAR of Publication.

NINTH VOLUME.

Specially designed for medical and other health officers, heads of families and all interested in promoting the public health. The only Health Journal in the English language published in Canada.

ITS AIM. - To prevent sickness and promote public and individual health.

Communications solicited on all sanitary subjects

Local health officers would confer a favor by sending to the Editor copies of their reports, brief notices of their sanitary condition, improvements, or events in any way connected with health.

See Club Rates to Health Boards and others on advertising page.

All communications, with remittances or otherwise, should be addressed,

"Health Journal," Ottawa, Can.

A blue cross opposite this indicates that the subscriber to whom it is addressed is indebted for *this year's* subscription (from Jan. to Dec.), and all such will confer a favor by kindly remitting, for which we shall feel obliged.

We cannot undertake to make out accounts and send them by mail or otherwise and only charge \$1.50.

All not remitting during the early part of the year—the first month or two—must expect to pay \$2.00; we must insist on this in common fairness. Physicians pay \$3.00 for their Medical Journal, containing no more reading matter than this one.

\$1.50 now is worth more to us than \$2.00 many months hence, with cost of time, bills and postage.

Will all friends please think of this, and help us in the work by an *early* remittance.

ADVERTISEMENTS of unexceptionable character taken to a limited extent and at reasonable rates; advertisements of "patent medicines," not accepted

EDITORS' SPECIAL CORNER.

EARLY IMPRESSIONS.

EVERY practicing physician knows that cases of epilepsy, of chorea, and other neurotic or convulsive affections in adult life may be traced to a shock of some sort in early childhood—perhaps to a great fright or a severe beating. When such strong and lasting impressions may be produced in such a way, it is not difficult to understand that slighter causes—a beating less severe, a fright less terrifying, a nurse's horrible story, or perhaps an illness or a delayed, lingering recovery, may leave impressions, although less marked, as enduring, and of a kind to give rise all through after life to suffering more or less severe. We would then put in here a strong plea on behalf of the little ones—the frail, tender, loving, trusting little creatures placed in parents' keeping. They want in this age constant watchful care, that they may be protected from the many jarring elements which surround them on every hand. And we need not confine our care alone to those of our own flesh and blood. There are thousands of other little innocent ones, poor and exposed and buffeted and ill, not from their own fault, but from the faults, or the failings or misfortunes, of their parents. Think of these. Much can be done for them, sometimes easily done. A little act, or a little aid in sickness, may modify for good their whole future life. Some of the people of Ottawa have recently provided a sort of refuge—a children's Convalescent Home, a most

worthy object, and capable of a vast amount of good. We trust that for the sake of the little creatures for whom it is intended, it will receive liberal aid. It is much to be hoped that other cities and towns will take like action.

THE BAD BOOK.

COLERIDGE, the poet, wrote, "Never, under any circumstances, read a bad book; and never spend a serious hour in reading a second-rate book. No words can overstate the mischief of bad reading. A bad book will often haunt a man his whole life. It is often remembered when much that is better is forgotten; it intrudes itself at the most solemn moments, and contaminates the best feelings and emotions. Reading trashy, second-rate books is a grievous waste of time, also. In the first place, there are a great many more first-rate books than ever one can master: and in the second place, one cannot read an inferior book without giving up an opportunity of reading a good one." It may be asked, what has this to do with health? A great deal. The field of preventive medicine is long and broad. Medicine itself has a broader scope than setting a bone or prescribing a draught. It is the science of Man's well-being. The world is swarming with bad, vile books which no one ever should read—not only prurient, obscene, gross, but unreal, giving wrong views of life, making discontentment, weakening both the physical and moral

powers of youth and manhood. As the Southern California Practitioner says, in a late issue, "It is the unreal views of life and its duties, and the disappointments which grow out of these books, which lie back of much of the mental disease which as physicians we are called upon to treat and which people our asylums. It is this debased and debasing literature which is the cause of much of the immorality and its resultant diseases with which we as physicians have daily to deal." On a future occasion we may have a word to write about some of the "literature" in many of our ordinary "family" papers—some of the religious ones indeed—concerning which parents should be on guard.

NOTES ON THE REPORTS OF THE LOCAL BOARDS OF HEALTH.

DR. HENDERSON, Health Officer of Strathroy, in his report for 1886, says. The town during the months of April and May underwent thorough cleansing. A from house-to-house inspection was made (some four or five hundred in all) by the sanitary inspector, who, being a man of determination of character, performed his duties, uninviting and disagreeable enough though they were at times, to the satisfaction of the public. The arrangements made by the Board of Health were of such a systematic nature that the whole work was completed early in May. It would be advisable for the Board to consider whether those who sell milk supply their cows with good water, as the stream running through the place cannot be of very pure quality from the various contents that are thrown into it at all seasons of the year. Dr. Henderson recommends a garbage "destructor" for the town.

DR. MCLELLAN, Health Officer of Trenton, reports that, in the early part of the summer an epidemic of measles, chiefly, if not wholly, confined to the east side of the river, visited us. The first case was a direct importation from a neighbouring city, the children of a visitor having developed measles on the second or third day after arriving. The family of the nearest neighbour and playmates of the visitors contracted the disease from them, and it soon became general in east Tren-

ton. . . . The good effect of the improved drainage of the flats was observable in the absence of malarial disease during the year. The cases of typhoid fever were all confined to the higher portions of the town, and were in most cases traceable to drinking impure well water. "The soil on the hill is composed of loose drift gravel, and hence kitchen slops thrown on the surface, as well as the contents of privy vaults, readily percolate into the well through the ground. Each of the houses on both sides of the river, where the disease was found, was placed in the most favourable position for pollution.

DR. ROSS, Health Officer of Woodstock, reports that, over two-thirds of the wells in town have been cleaned out and the covers made secure. Two men have been kept almost constantly employed cleaning out and filling up the old privies, after which the dry earth system was introduced. A large number of very bad privies still exist, and a by-law should be passed ordering them all to be cleaned out and filled up without delay, after which the dry earth system could be introduced. A large number of the proprietors of houses erected this year have adopted the dry earth system. After an examination of the high and common schools they were found in a good sanitary condition. The inspector and myself visited the different dairies from which the milk supply of Woodstock is obtained, and found the stables clean and well ventilated, the water supply good, and the cows healthy. I cannot too strongly urge the speedy introduction of a supply of pure water for domestic purposes, such being an actual necessity for our town. In my opinion many, if not all, of the cases of fever we have had in the town this season can be traced to the use of polluted well water.

THE Medical Health Officer of Bath state that, in July diphtheria of a malignant type made its appearance. The members of seven families were affected, and the fatality was very great, especially amongst the young. The Board at once instituted the most stringent remedies for checking its spread, isolation of the affected being rigidly enforced, and all made to put their premises in proper sanitary order. A temporary hospital was

erected, but the disease was stamped out before it was needed. "The only cause" known was that, "where the disease occurred the drainage was bad."

OF Bothwell, the Secretary reports that, the Local Board had not experienced the least trouble in carrying out the provisions of the Public Health Act, as the residents had at all times shown a cordial disposition to carry out whatever orders and suggestions the Board made. There had been six cases of diphtheria, the disease being brought there by a member of a family who contracted it elsewhere. Dr. Wilson had charge of the cases and easily succeeded in stamping them out.

FROM Kingsville the Medical Health Officer reports that, there were fifteen cases of diphtheria and three deaths there during the year. Every possible means were taken for the prevention of its spread. The houses were placarded, disinfected and isolated, all unnecessary intercourse between the inmates being forbidden. The means taken had the effect of confining the disease to the narrowest limits possible. The Dr. states that they must not rest contented until the sanitary conditions are such that contagious diseases will have no foothold.

OBSERVATIONS AND ANNOTATIONS.

INJURIOUSNESS OF FILTERS.—A recent experiment by Dr. Swarts (*Boston Med. and Surg. Jour.*—*N. Y. Med. Jour.*) proved that the most generally used appliance for securing the purity of drinking water, the filter, is a direct aid in its contamination. His investigations show that, while some filters, when first used, successfully remove a certain proportion of organisms from the water, other tests made seventeen days later showed in every case a marked increase in the number of colonies of bacteria in the filtered compared with the unfiltered water. While the unfiltered water contained thirty-six colonies of growth, the filtered water showed the presence of colonies to the number of two thousand, nine thousand and ten thousand, and an examination the seventieth day showed an increase in one case of over one hundred thousand colonies. As there is present also a portion of the soluble

albumenoids of the water there is then collocated both micro-organisms and their culture medium: and with a proper temperature, such as is often present where such filters are in use, all the conditions requisite for the contamination of the filtered water with the complete series of the soluble products of decomposition are present.

PRECOCIOUS CHILDREN.—A scientific journal, lamenting these, says, first, we would *let them severely alone*. By this we mean, do not encourage the precocious development by pushing the child ahead, and showing the foolish weakness of exhibiting the child to visitors, or displaying him at the performances of Sunday-school concerts or public school exhibitions. We always pity the poor victims of such scenes. Second, be simple with such children; keep them young, and encourage them to talk child-talk, to read child-books, and to play with other children. Do not let them remain in the house in company with the older folk, when the bright sun is shining, and the other children are romping upon the green with all the glorious freedom of childhood.

ARSENICAL WALL-PAPERS.—At the meeting of the Edinburgh Medico-Chirurgical Society (July 6th, 1887). Dr. James Ritchie showed specimens of wall-papers, which chemical tests proved to contain arsenic. In each instance one or two persons had suffered from the noxious influence, the illness only disappearing on the removal of the cause. This source of poisoning was still more frequent than was usually supposed. Other similar causes of illness were spoken of; in particular, the presence of dead mice beneath flooring.

COOK'S SASH SUPPORT AND LOCK is a most ingenious device. We have had nearly two dozen of them in use for many months, on windows without weights and pulleys, and have found them so far entirely as represented in the advertisement on another page: and we see no reason why they should not last "a life time." Indeed we are very much pleased with them, in every respect. The costs of weights and pulleys in a large house is great, the cords often soon break and are very difficult to repair, and we were much pleased at being able to obtain so good a substitute.

OF making varieties of water closets there seems to be no end, and one is often greatly puzzled to know what sort is best, or what to buy. Some which seem to "work" well and are elaborate and costly too, are absolutely unsafe to use. After a good deal of enquiry and consideration we have reached the conclusion that on the whole the principle of the side outlet, float valve closet is the best. The Demorest has been extensively used in Canada, and it is not a bad one; but we have had in use now long enough to thoroughly test, a closet which is superior in many respects. It is the "Rouse" closet: manufactured by the United Brass Co. of New York (79 Fulton st.) The arrangement of the float valve in this closet is much better than in the Demorest: while the bowl is much wider, which is never an objection, and with many persons, a wide bowl is a great advantage. With ours we have a "bidet," manufactured by the same firm, which works admirably. This, although in no way essential to the complete working of the closet, and but very few such attachments are in use here, is yet an essential of cleanliness that should be attached to every closet, and doubtless will be in a little time. The above named firm we understand are still making improvements in closets—human nature like, never satisfied. But as we have the Rouse closet, fitted up with a bidet and good plumbing, it ought to satisfy anyone.

DR. DEMME, in a report on the children's hospital in Berne, relates a case that clearly shows the dangers attending the feeding of nurslings with farinaceous food and artificial substitutes for milk. A child died at the age of seven weeks of inflammation of the intestines, caused by feeding with some prepared "infants food." Large accumulations of undigested starchy matter were found in the intestines.

COWS MILK, fresh, with the addition of a little more cream, and milk sugar, and diluted with water in proportion to the age of the child, is best. We have already in this JOURNAL given the composition of nearly all the "infants foods" on the market and shown that unchanged starch formed a large proportion of most of them.

"Children's poisons" would be a more appropriate name.

DR. CARPENTER'S most able article on disinfection in the June number of the JOURNAL has been very favourably received and is regarded as the best paper on the subject ever published.

HAS artificial respiration ever been tried after apparent death from sunstroke? It seems possible that after the reduction of the temperature of the body animation might be restored in this way.

GIVE the babies cold water. Milk does not always satisfy their thirst, especially in hot weather. Dr. Toussaint says, "We have seen peevish, fretful infants, upon whom all the arts of the nurse and mother had in vain been tried, suddenly brighten up at the sight of water, reach eagerly for it, and on obtaining a drink, go off to sleep calmly and contentedly.

BAKERS now use chromate of lead instead of eggs to give their cakes a yellow colour. Four deaths in Philadelphia have been recently caused by eating cakes and buns so coloured, made by a baker named Palmer.

A DISTINGUISHED Congressman's wife, a beautiful woman and a society leader, once, it is said, made it a systematic practice to spend two hours or more each morning in the kitchen. "I am generally engaged," she said, "in overlooking kitchen sinks, seeing to garbage pails, etc. These are the things my servants will not attend to unless I see to it that they do. I must do it to feel sure my house is clean in every part." It is useless to expect an ignorant girl in the kitchen to appreciate the danger to the health and comfort of the family, which may lurk about a sink or even a dishcloth.

A CASE of well marked whooping cough in a cat, with five or six severe coughing fits daily, is reported by the *British Medical Journal*: supposed to have been contracted from a child affected with the disease.

CANADIAN MADE SEWER PIPE, or much of it, is now hardly, if at all, inferior to Scotch pipe, and those who order the latter only incur needless expense. Some years ago there was considerable difference; the process of burning was not then fully

understood here. We have recently examined, carefully, some pipe manufactured by the "Campbell Sewer Pipe Co." of Hamilton, which seemed in every respect equal to Scotch pipe—hard, clear and perfectly impervious. If all the Company make are equal to the lot we examined, we can confidently recommend them.

IN the next number of the JOURNAL we propose to give some notes on physiognomy, the language of the nose, hands, etc.

IGNORANT tribes in Central Africa habitually boil the water they drink. So common is the custom among them that to drink unboiled water is considered very reckless.

DRAINING dishes, placed on their edge, instead of wiping them, is recommended by "Grandmother," in "Good Health," as an easy and hygienic process.

"NO SMOKING allowed" should be put up on the street corners as well as in the street and other cars, shops, factories, etc. Although it might interfere with the ungentlemanly practice of some dudes or semi-dudes who "puff" tobacco smoke on the sidewalk.

WHISKEY and tobacco are the two chief curses of this nineteenth-century age; and one of the ordinances of this JOURNAL shall be that, whiskey and tobacco "must go."

MILK AND PHTHISIS. In a paper read at the recent meeting of the Yorkshire Association of Medical Officers of Health, Dr. Mason of Hull expressed the opinion that milk which had been obtained from cows affected with tuberculosis would convey consumption if supplied to human beings. The President said it was very important that tuberculosis should be included in the list of contagious diseases by the Privy Council, as consumption, which in his opinion was preventable, destroyed more people in a year than all the other contagious diseases put together.

THE TELEPHONE as a source of blood contamination and even infection is properly receiving attention. The British Medical Journal was we believe the first to point out the danger in cities of infection arising from the promiscuous use of the mouth-piece of a public telephone by numbers of persons and recommends that the mouth-piece be disinfected every time it is used to

prevent accidents. In the contact of the breath with the diaphragm in speaking, a deposit of animal matter lodges and accumulates upon the parts, and forms a most suitable nidus for the development of germs, infections or otherwise. The only perfect safety is in having the mouthpiece frequently well cleaned and disinfected, as by a one per cent. solution of carbolic acid.

IN Göttingen, Germany, an important progress in school hygiene has been made by the institution of warm baths at a new school-house. It has been found that by far the greater part of the pupils never brought their body, with the exception of hands and face, into contact with water throughout the year. The baths are given gratuitously during school time on four days of every second week. The results have been most satisfactory. Whilst in the beginning but a few children availed themselves of the opportunity afforded them, they soon began to like bathing very much, and after a short time there remained not a single child that would shirk bathing. Not only did the children improve rapidly in appearance and health, but they also showed an increased freshness of mind and zeal for learning after the bath. The good example set by Göttingen is about to be followed in Berlin, Breslau, Magdeburg and other cities. It would indeed be well if the practice were universal. The unpleasant odor in most of the public schools in Canada is strongly indicative that the practice is as essential in this country as it is in Germany.

A Temperance Employment Bureau has been established in New York City.

IN "POPULAR SCIENCE," Dr. W. C. Gouinlock (of Warsaw, N. Y. State, an old subscriber to this JOURNAL), says that he believes the common form of baldness is due entirely to the kind of hat that is worn, principally to the high hat and the hard felt hat, but also to any other head-covering that constricts the blood vessels which nourish the hair-bulbs.

THE Executive Committee of the Sixth International Health Congress, to be convened at Vienna, September 26, 1887, has already issued its preliminary programme. The Congress is under the patronage of the Hereditary Prince of Austria.

NOTES ON CURRENT LITERATURE.

THE CENTURY for August opens with a frontispiece portrait of Mrs. Julia Ward Howe, the authoress of the "Battle Hymn of the Republic." "Snubbin Thru' Jersey" has many quaint illustrations. "Sunken Graves" is a poem which will attract many. "Is it a Piece of a Comet" describes the *ninth* iron meteorite which has fallen to the earth. "Nothing to Say" is a pretty poem with a pretty illustration. Edward Atkinson contributes a lengthy article on "Low prices, high wages, small profits.— what makes them?" The war articles appear to be drawing to a close.

ST. NICHOLAS for August opens with a beautiful frontispiece, illustrating some bright verses entitled "Invitation to Echo:" a little farther on is a charming sketch of Rocky Mountain life, called "An Idaho Picnic," with more pictures. Another artist tells his own story with pen as well as pencil—G. W. Edwards, who writes and draws pictures for "The Figurehead of the James Starbuck," a capital sea story told ashore. Nora Perry contributes a "girl's story," that has equal application to boys. There is a pleasant sketch of the "Autocrat of the Breakfast Table" by the editor of the Youth's Companion. "Winning a Commission" and Jenny's Boarding-house" are concluded, happily of course. The "Brownies," in this number go a-fishing and catch almost everything, and there are verses and pictures and lots of other nice things all to be found in the August ST. NICHOLAS.

A Christian lady will loan, free of postal and all charges to all such as will promise a careful reading (and to pay *return* postage after reading it) a book which in interesting style shows the Bible to be a self-interpreter, and its teaching grandly harmonious, viewed in the light of sanctified reason and common sense. "It is not dry, musty reading, but truly 'meat in due season' to the truth-hungry." The light of the little volume "has made the Bible a new book, a treasure, a mine of wealth." And she feels that she cannot better use her to her means than in circulating it. Address Postal Card to MRS. C. B. LEMUELS, Allegheny, Pa., U. S.

A UNIQUE WORK ON CANADIAN TOPICS.
—Mr. Erastus Wiman, President of the

Canadian Club, writes to the editor of this paper as follows:

"It is the intention of certain members of the Canadian Club, in New York, to issue, in the form of a beautiful book, the papers which have been delivered before the Club during the past winter by prominent parties, together with those which are to be delivered during the remainder of the season.

"These papers will include a speech on "Commercial Union," by the Hon. Benjamin Butterworth, member of Congress, who is said to be one of the most eloquent men of that body. A remarkable production by Prof. Goldwin Smith on 'The Schism in the Anglo-Saxon Race.' A paper by Dr. Grant of the Queen's University on 'Canada First.' One by J. W. Bengough, Editor of Toronto *Grip*. By Mr. LeMoine, of Quebec, on 'The Heroines of New France.' By J. A. Fraser, 'An Artist's Experience in the Canadian Rockies.' By Edmund Collins, on 'The Future of Canada.' By Professor G. D. Roberts, of Kings College. By Geo. Stewart, jr., of Quebec. By the Rev. Dr. Eccleston, on 'The Canadian North West.' By John McDougall, on 'The Minerals of Canada.' And by the Editor, G. M. Fairchild, jr., on 'The History of the Canadian Club.' The work will also include extracts from the speeches and letters of the President.

"The book is to be issued in beautiful style, at \$1 per copy.

"Parties desirous of obtaining copies can do so by enclosing the price of the book to James Ross, Canadian Club, 12 East 29th St., New York."

THE LITTLE BUSY BEE.

Hilda, mind! that bee will sting you!
Ouch! you saucy little thing you;
Are the garden roses few,
That you're wanting Hilda's too?
Only hear him where he goes,
Buzzing all about your nose!
Hilda, smiling, answered then,
"Bees are not as shy as men!"

Happy bee, I said, that sips
Sweets of Hilda's rosy lips.
Thing so bold, in all my wooing,
I had never ventured doing.—
Hilda tossed her dainty head,
"Stupid!" that was all she said,
But I wonder now, if she
Really meant it for the bee.

—DE TRAVERS.