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CANADA HEALTH JOURNAL

A Monthly Review and Record of
SANITARY PROGRESS

—EDITED BY—
EDWARD PLAYTER, M.D.

Public Health and National Strength and Wealth.

For Contents see next page.

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Vol. XIII.

JUNE, 1891.

No. 6.

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A Monthly Record of Sanitary Progress.

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SIR JOHN MACDONALD'S LAST LESSON.

THE sudden and greatly lamented death of Sir John Macdonald, when but the other day he appeared to be full of both physical and mental vigor, when still, from his constitution and general condition, not an aged man, should teach a lesson to many another politician, as well as to others, in other walks of life. When men reach seventy, or even sixty, years of age, although they may feel well and vigorous, they must ever bear in mind that they cannot stand the strain, nor nearly that, of earlier or middle life, although they may, in many cases, with care, live on for many years in comfort and usefulness.

Had Sir John not attempted the exertion, a few months ago, of a political campaign, he would in all likelihood be alive to-day, as almost everybody knowing the circumstances will probably concede—alive to day and able to continue to advise in affairs of state for many years yet to come. Had he made only half the effort he did during the election, it probably would not have seriously affected him; or had he even taken longer and more complete rest after his return to the capital, he would, quite possibly, be alive still and able to assist in the legislation of the Dominion.

On several occasions we have drawn attention to the high mortality amongst the members of the Commons of Canada, which has now long prevailed,—three or four times higher, for example, than among men in the armies of Europe. It is sad, and a great loss to the country, that it is so. Past warnings had not it seems been enough. The relentless desolator has now in the present parliament commenced early and struck a blow that may, notwithstanding the age of the chief stricken down, well cause the living, older and younger than he was, if they value their life for what they can accomplish in it, to pause and consider their position; to measure, even under skilled medical advice, their physical ability, and act in judicious accordance therewith. It is doubtless well we do not know who will be the next member of the House to succumb,—to end his career, but we may be sure that it will be he who takes the least care to husband his physical resources and capabilities and attempts to do all he desires to do perhaps regardless of his remaining powers,—he, in short, who takes the least proportionate care of himself.

LOOK TO THE SOURCE RATHER THAN THE "STANDARD" OF MILK SUPPLIES.

MANY municipalities are just now taking a good deal of interest in looking after the standard of, or quality as to the amount of cream, solids and water in, their milk supply, but neglect to have the source of the milk inspected. The source of the milk—the cows as to their health, the stables, feed, etc.—is of vastly more importance than the relative quantity of solids and cream it contains.

It is well known now that many diseases may be communicated to the human body by the milk of diseased cows which manifest but very slight symptoms of disease. Besides the danger from cows in the early stage of tuberculosis, when the cows commonly appear to be thrifty and still give abundance of tuberculous milk, diphtheria is clearly communicable to mankind by the milk of cows affected with a disease apparently of the same character, and which may be easily overlooked by the owner. Many years ago a Mr. Power made a report to the Local Government Board of England that he had found by far the greater number of 264 persons who had been attacked by diphtheria in N. London were supplied with milk from two farms, but after the most patient and close investigation he could not discover the way in which the milk could have been infected. Subsequently it was stated, at a meeting of the Pathological Society, that it had been shown that milk from cows affected with garget, regarded as but a very trivial disease, would, when taken into the human stomach, cause diphtheria. The subject has been under investigation at times ever since. Many outbreaks of diphtheria have been suspected to have had their origin in this way. Recently Dr. Klein has proved the possibility of the suspected inter-

communicability of this disease. As we have recently mentioned, he has found that on or about the fifth day after inoculation of cows in the shoulder with pure cultivations of the diphtheria bacilli from the human body, milk drawn from the udders with careful aseptic precautions contained bacilli which were proved by cultivation experiments to be undoubtedly of the same species as those with which the animals had been inoculated. On the previous day in these same cows an eruption of small vesicles had made their appearance on the udders, and these rapidly passed into pustules and crusted ulcers. Dr. Klein looks upon his udder-eruption as being a local manifestation of the constitutional disease induced by the diphtheria inoculation.

We give this here to illustrate how important it is for milch cows to be well looked after. It seems highly probable that some of the outbreaks of this disease, the source of which is puzzling, may have origin this way, in Canada.

In England, scarlet fever is suspected to have a similar origin. It is well known that both these diseases, and also typhoid fever, not infrequently arise from their infections having been absorbed by milk after it had been drawn from the cows, from a case of such disease near which the milk had been exposed, and taken with the infected milk into the stomachs of those who had been supplied with the milk.

We would therefore urge upon all local health authorities the vital necessity of having the source of the milk frequently looked after by a competent inspector, remembering that this is of vastly more consequence than to have the milk tested for its degree of dilution.

INSTITUTES FOR TRAINED COOKS NEXT.

IF it be true, as stated in the last Canada Lancet that the highest marriage rate for females is found among trained nurses, we believe that that record could be beaten by trained cooks, of a like nature. This is an age in which men "lay much store" on the dinner, more perhaps than on being well nursed in case of sickness from which there is ever a strong hope of escape. Institutes for trained nurses for the sick are now becoming common, and it is to be hoped that they may become numerous, but on the principle that "prevention is better than cure," cooking schools to teach young ladies how to cook well will tend strongly to prevent sickness,— will, indeed, greatly lessen the amount of sickness and so lessen the necessity for the nurses. As Prof. Youmans has said, our kitchens are the fortified intrenchments of ignorance, prejudice, irrational habits, rule-of-thumb, and mental vacuity, and the consequence is that we are suffering from wasteful, unpalatable, unhealthful and monotonous cookery. Our kitchens are almost abandoned to the control of raw servants. And, what is worse, there is a general acquiescence in this state of things. We profess to believe in the potency of education, and are applying it to all other interests and industries excepting only that fundamental art of the preparation and use of food to properly sustain life, which involves more of economy, enjoyment, health, spirits, and the power of effective labor, than any other subject that is formally studied in the schools. We

abound in female colleges and schools, supported by burdensome taxes, in which everything is studied except that practical art which is a daily necessity in the health and life of every household.

In England there are a number of training schools of cookery. At South Kensington, London, there is one which has a world-wide reputation. It was the outgrowth of the London International Exhibition of 1873, a division of the exhibition having been devoted to "Food and its Preparations." Ladies, young and old, many of whom are representatives of nobility, meet there not only to study, but to learn by actual practice the preparation of soups, meats, and dishes of all sorts, which shall render appetizing and healthful the future dinners of the people, rich and poor.

Were good wholesome cookery universally practiced there would soon be an enormous reduction in the sickness rate, with a vast increase in comfort and pleasure. We do not mean schools for teaching the preparation of fancy compound dishes, but plain nutritious food. Not only is the bad cookery now common, a prolific cause of disease, but it is most destructive and wasteful of the nutritious properties of foods.

Whoever will start the ball rolling for the establishment in the Capital, as well as in other cities of the Dominion, of an Institute for Trained Cooks, will earn the glory of being instrumental in building a more far-reaching, useful and lasting monument than any now in Canada.

RELATING TO MUNICIPAL HEALTH OFFICERS AND BOARDS—
A SUGGESTION.

THE people of every rural municipality in Canada employ on an average three or four medical practitioners in making efforts to cure the many diseases with which the people are afflicted. For this these people pay yearly at least six or eight or more thousands of dollars. This is but a small proportion of the actual costs of the sickness in the municipality. The medicine and the loss of time with those who are able to work, costs often much more than the medical attendance, saying nothing of the suffering, the anxiety, the bereavements and losses by deaths. Now, if every municipality would engage a competent physician, paying him fairly, say from four hundred to a thousand dollars, according to the size or population of the town, village or township, to give a considerable portion of his time to the work of prevention,—to seeking out and drawing attention to the many causes of disease which everywhere prevail, and having the causes removed, it would prove by far the best invested money ever spent by a corporation. Or if a number of municipalities—villages and townships, say, would unite and employ a physician, at a full fair salary, to give his whole time and attention to—to make a specialty of, sanitary work in his district, it would be a still better plan. Some may ask what such physician would do? how would he employ his time? He would have abundance of work to do. It would, perhaps, be his duty first to see that the soil of the entire district were drained as well as possible, and so kept free from excess of moisture, and clean, by having, with the aid of an inspector, all waste excremental matter of every sort properly disposed of; to visit the schools frequently, examine the children, and see that any cases of infectious disease were properly isolated, so that the infection should not spread to others; to look after the source of the various milk sup-

plies, the health of the cows, the byes, manner of feeding the cows, etc.; and, perhaps more than all, look after the water supplies,—wells or other supply. Many are sickened and die from the use of foul well water, even in the rural districts, on the farm. A recent report states that a wealthy farmer in Orange County, N.Y., experienced a terrible visitation of typhoid fever. The farm was one of the finest in that section; beautifully located, and to all appearances a sanitary paradise, and yet, when the affliction came, the cause of disease was not difficult to find. It was a dairy farm, and it had been found easier to carry water to the dwelling than to the stock; therefore the well was located adjacent to the barn. Gradually but surely the water supply was poisoned, the vital energies of the family lowered as the water deteriorated; and when the proper stage was reached, the infection, drifting from somewhere, took root, taking away the farmer's son in the prime of life, and leaving the father broken down in constitution and forever enfeebled by disease. It would be the duty of this special medical officer, besides preventing such conditions as this, to instruct the people, say by weekly or fortnightly public lecture or "talks," in various parts of his district, in regard to ventilation of their dwellings, their cellars, outbuildings, the hygiene of domestic animals, a most important subject, and on personal hygiene—the care of their own bodies. We earnestly hope, for the welfare of this Dominion, that this suggestion may soon be brought into general practice,—that some locality or community will make a start in this behalf; and also that the people, or their representatives in the councils, will soon become more liberal in supplying money to health boards for sanitary progress. Money thus spent will return many, many fold.

THE ART OF MEDICINE v. THE MACROBIOTIC ART

THE macrobiotic art, the art of prolonging life, has been sometimes distinguished from the common art of medicine, its means, aims and boundaries being said to be different. It is to be much feared that in the practice of the "healing art," in the prescribing as well as in the taking of medicines, the distinction is not recognized as it should be. The object of the medical art is rather health; that of the macrobiotic art, long life. In sickness, both the physician and the patient are too often only intent upon the restoration of health; forgetting sometimes, it is to be feared, that the means employed to restore health may tend to eventually shorten life. Whoever, physician or patient, thinks of enquiring whether by the means employed to regain the health which has been lost, life, upon the whole, will be lengthened or shortened? Is it not very well known, and probably few medical men will deny, that life is not infrequently unnecessarily shortened (not so often markedly at the particular time, but in the long run) by many of the methods employed in curing disease? It is not that this point would often be disregarded in practice were it sufficiently considered, but it is simply overlooked. It appears that long life has ever been the great, chief wish, the principal object, of the great majority of mankind. We all know how numerous yet how confused and contradictory have been the methods of obtaining it; from the really valuable writings of Hippocrates on the six articles—air, aliment, exercise and rest, sleep and wakefulness, repletion and evacuation, the passions and affections of the mind—to the efforts of the Alchemists and Rosicrucians, and thence down to recent times, when the medical

art endeavors to elevate mankind to the highest possible degree of physical strength and perfection. "Training," as frequently practiced, shortens life. And it is highly probable that the developing and strengthening, to the fullest extent, of the physical man, without, at the same time, developing and strengthening the moral or mental powers, may so accelerate life as to shorten its duration.

The conservative influence of disease, or especially of many of the symptoms of disease, is now very generally recognized. The process of inflammation occurs in obedience to a conservative law. Fatty degeneration of the heart causes reduced heart force, which may save the patient from apoplexy. It has been suggested that articular rheumatism, inasmuch as it is commonly associated with heart disease, is conservative, by necessitating muscular rest.

But the medical art is constantly, and perhaps too indiscriminately, breaking in upon and checking the progress of important conservative influences. Take a common symptom of disordered digestion, loss of appetite, probably from over-eating. Means are usually at once employed, bitters and tonics are taken, to remove this, to produce a false appetite; instead of employing nature's remedy, as plainly indicated—abstinence, fasting—until the return of the natural appetite. No one can say that the taking of bitters and tonics will not, under such circumstances, lessen the supply of vital force, and eventually shorten life.

So that in all efforts to promote health, to cure disease, and especially perhaps to remove or treat symptoms, the possible future effect upon life should not be lost sight of.

ON SOME PRACTICAL ESSENTIALS OF THE HEALTHY HOME.

THE home is where nearly everybody spends the greater part of his or her life. Health depending on the surroundings of one's life as well as on the personal habits, it is absolutely essential to health that the home be in every respect in a good sanitary condition. The first thoughts with those about to build appears to be, in respect to the dwelling, that it shall be "warm" and present a nice appearance; whereas the first thoughts should be that it shall be promotive of and not injurious to health.

The first essentials for consideration in the construction of a healthy dwelling are, that it shall be free from any excess of dampness, and that it shall admit abundance of fresh, pure air and sunlight.

In order to effectually prevent dampness, nearly every locality and soil requires to be well underdrained before a dwelling is built upon it, and to have a damp-proof course or layer of the best water-proof cement extending to the entire limits of the foundation and up to a little above the surface of the ground, in order that the warmth of the inside of the dwelling in the cold weather shall not draw moisture into it from the soil below and around the lower part of the foundation. The underdrains should be considerably below any cellar or basement floor, and the cement layer laid thickly on a foundation of broken stone, or some good substitute, over all the surface of the floor inside the foundation walls; it may then be laid upon the insides of the walls up to a point a few inches above the surface of the ground, and then, as it were, through the walls to the outside;—this last being done during the building of the foundation walls when these have reached about this point above the ground. Unless the precaution be taken of laying a moisture-proof course upon the inside, and through to the outside of the wall, moisture will

come from the ground rapidly through and up the walls, following the courses of the ordinary mortar, to the upper walls and so to the warm rooms.

The first essential in a fresh air supply is provision for withdrawing the breathed, deoxygenated air of all occupied rooms, none of which should be less in size, even for one person to occupy, than about 1,000 cubic feet. With this view, unless there be a constant grate or open fire, there should be an opening from the room into a warmed chimney flue or even stove-pipe. If the outsides of all chimneys, above the roof, were painted black, the heat of the sun thus absorbed by the black surface would greatly aid, winter and summer, in keeping an upward and outward flow of the used-up air of the rooms communicating with the chimneys. Ordinary windows should never be depended upon for a fresh air supply. When open they give rise to too strong drafts. There should be special fresh air inlets, or at least provision should be made at the window openings for turning the incoming air at once up toward the ceiling. Never occupy a room for a day or a night where there is not some provision for a good supply to your lungs of fresh outdoor air. The construction and occupancy of a close room warmed by coils of steam or hot-water pipes without provision for constant change of the air in the rooms is little short of murder or suicide. The best method of warming a dwelling, as conceded by all authorities, is by means of air constantly flowing into the rooms which has been warmed by means of coils of hot-water pipes attached to and near a furnace, usually in the basement, instead of the coils being placed in the rooms, with provision for a constant withdrawal from the rooms of this warmed air after it has been breathed and has received exhalations from the body and other impurities. Remember, always, it is better to pay for a little extra fuel to

warm the cold fresh air than to breathe the foul air of a room over and over again and pay for doctoring and medicine.

Dust in rooms, as dust usually consists of particles of the vilest sort of dirt, is a constant cause of lung and bronchial disturbance and catarrhal symptoms, and all rooms should be so constructed as not to be retentive of dust. Sanitary flooring is now made with joints glued together so that it cannot form dust receptacles. All finishings and furnishings should be so constructed that dust

settling on them may be easily reached and taken off with a damp duster, that the rooms may thus be kept as free from dust as possible. With this view all carpets, curtains, etc., must be so arranged that they can be frequently carried out of doors and well shaken.

Use abundance of window glass to let in sunlight. Not only is the light a great destroyer of disease germs, and, too, a direct promoter of health, but with it all dirt can be seen and easily removed.

PRACTICAL COMMON SENSE REMARKS ON SEWER AND HOUSE AIR

IT has always been contended in this Journal that typhoid fever and other infectious diseases are but rarely, communicated by sewer air, but rather through the water, and often food, consumed, and from rooms and elsewhere. Dr. Duncan, a leading authority, in a recent address in Glasgow, said:—There is no gas in a sewer that you may not find outside of it. The air of a sewer, when it is properly ventilated, is much better from the chemical point of view than the air of crowded churches and schools, or even than the air of the houses in which one half of the population of Glasgow lives. To many of these people it would be a great advantage to be permitted to lived in an average sewer atmosphere rather than in the air of their own houses. In view of the connection between micro-organisms and the spread of infectious diseases, it is important to note that Professor Carnelly and Dr. Haldane found by experiment that the micro-organisms in sewer air are not generally derived from the sewage matter, but are carried in from the outside air, and that many of them adhere to the moist surfaces of the sewer. "Hence," they say, "air in its passage along a sewer will tend to deposit its micro-organisms." And they prove that the number of

micro-organisms in sewer air is actually less than the number in the outside air. Other observers have demonstrated that liquids and damp surfaces do not give off micro-organisms to the surrounding air, and that even when they dry on a surface it is difficult to detach them. The conclusion of the whole matter, therefore, is that it is scarcely possible that the germs of such diseases as typhoid fever, diphtheria, or phthisis can be carried back into our houses through moist drains and soil pipes, and this conclusion is quite in accordance with the opinions I have expressed on various occasions, as the result of careful observation of the spread of such diseases. But it does not follow that the breathing of sewage gases is innocuous. The evidence I have brought forward as to the large percentage of plumbers who suffer from sickness, sore throat, and diarrhoea, and the still larger number who die from consumption of the lungs, point to the direction in which to look for the evil effects of sewage gases. By the breathing of an impure atmosphere the lung tissues are manured and prepared for the growth of the tubercle bacillus, which sooner or later takes advantage of the altered circumstances.

SOME POINTS ON THE VALUE OF PARKS AND OPEN SPACES IN CITIES.

IN ancient times, thousands of years ago, the great cities seem to have been planned with a greater respect for sanitary completeness than the cities of the present time. At their beginning, then, with greater foresight on the part of their founders, large areas of country were included within the city limits, and many open spaces were retained throughout them. So much was this the case that Babylon and its compeers were designated "garden cities." "Inter-spaciousness" and "magnificent distances" were among their most striking characteristics. In this respect the cities of modern times are wonderfully behind those of the ancients. Within the last century or so great efforts have been made in many cities in Europe, London amongst others, to remedy this serious defect, by throwing down old buildings, opening up old unused burial places, etc., in various parts of the cities, for the use of the masses of the people rather than for the more wealthy classes. There are many cities in Canada now in which it is high time better provision were being made for a number of small parks centrally situated, and so of easy access to the busy masses of working people, to which mothers and nurses with their little children in baby carriages may go and spend hours daily in the fresher, purer air.

If the people of this generation, now, when land for open breathing spaces can be easily obtained, do not acquire and secure it in abundance for the purpose indicated, the next generation, our descendants, will have just reason to censure us for our want of foresight, because in their time it will not be so easy to get such vacant spaces, or in many cases it may then, when they are all built upon, be quite impossible to do so. Vacant lots for such parks may be purchased now, and for very much less than they can be even a few years hence, and in such a way that the next generation will aid largely in paying for them, too.

The value, from a health point of view, of many small parks throughout a city is incalculable. It is the opinion of the most eminent sanitarians that the great reduction in the death rate of London in recent years is largely due to the many open spaces which have been provided for the working people. The effect has been indeed the saving of hundreds of thousands of lives. Besides the moral and æsthetic influence of these cooling oases in the deserts of bricks and mortar, making the city more like the original, natural country, they act as powerful ventilators of the city. While dispersing the strong drafts of the streets they promote mild currents of air. The vegetation—the trees, grass, shrubs and flowers, which should be grown upon all such spots, absorb, dilute and dissipate impurities in the atmosphere, and help greatly in equalizing the humidity, and hence the temperature of the atmosphere, making it altogether more salubrious. The odor of the flowers and the ozone and peroxide of hydrogen given off by the vegetation, are highly promotive of the health of all animal organisms exposed to them. Frequent showers, too, which wash the roofs, walls and streets of cities are most salutary, especially in warm weather, in purifying the air, and it is well known that abundant vegetation is promotive of rainfall. The amount of rain in parts of Egypt has been nearly doubled by the planting of date palms and olives; and the tableland of the Wady-Halfa has been rendered in a marked degree more tolerable by the planting of currants and mulberries. The beneficial effects of groves on the diminution of malaria is well known.

With more parks and open spaces, well provided with vegetation, in cities, for the people to sit in as much as possible, there certainly would be less typhoid fever, diphtheria, consumption, and all other diseases promoted or caused by impure air.

THE MEDICAL OFFICER OF GLASGOW ON EPIDEMIC PHENOMENA

THE following interesting extracts are from a valuable paper in the Glasgow Sanitary Journal, by the Editor, Dr. James Christie, medical officer, &c.

Were a single grain of wheat planted in a suitable soil, and surrounded by circumstances favourable to its growth and development, it would, in process of time, produce a number of similar seeds which could be propagated in like manner, and so on, *ad infinitum*, or until the crop covered every spot of the earth's surface favourable to the growth and development of that cereal. But, as a matter of fact, plants do not multiply according to their full inherent capacity; only a few seeds produce their kind, and by far the greater number remain barren, although possessing all the powers of fructification. Were a field of wheat allowed to remain unreaped, the probability would be that not one grain in a thousand would prove prolific, and, when the harvest season of the following autumn came round, the living force of the previous autumn would be represented by a few sickly plants. In all probability the wheat crop, as represented by a single field, would soon become extinct were it not for accidental circumstances such as the dissemination of the seed by winds, or by animals. Take, for example, the thistle which, as a plant and as a seed, possesses a greater tenacity of life, and power of propagation under adverse circumstances, than the wheat seed. Not one in a thousand of the downy seeds of the thistle, although carried far and near by the wind, finds a suitable spot on which it can germinate. Were it otherwise the greater portion of the habitable part of the globe would be covered with thistle plants of one variety or other. So is it throughout the entire vegetable kingdom. Each plant multiplies after its own kind; but only a very insignificant proportion of seeds

and spores become prolific, and multiply according to their full capacity. So is it in the realm of epidemic disease, and in many respects the analogy is complete. Take, for example, the case of a patient suffering from an attack of confluent smallpox. You may have seen such cases in which you could not place a pin point on a portion of sound skin, the entire external surface of the body being occupied by variolar pustules. May not such a patient be aptly compared to a field covered with a full crop of wheat, corn, or even thistles? Were that crop of pustules to fructify according to its full capacity, it might reproduce itself a hundred or even a thousand fold, and so on, multiplying according to its kind until humanity became a smallpox field.

I believe that disease products possess but slight powers of vitality, and that, were it not for surrounding favourable circumstances, the vitality of such disease products would soon be destroyed. Lymph from the vaccine or variolar pustule must be preserved with care in order to insure its persistent vitality for any great length of time; but I could easily imagine that, were due precautions used, lymph might be preserved intact and possessing all its potency for an indefinite length of time. I would, perhaps more correctly express the opinions which I entertain on this subject were I to state that the tendency is rather on the side of extinction than on that of propagation; for, were it not so, I can see no reason why a case of sporadic disease should not multiply itself until it died out for want of additional victims.

The important practical deduction is, that the most efficacious mode of arresting an epidemic is to strangle it at its birth; for, from a single case of epidemic disease, hundreds may and do arise; so that, according as cases multiply, the dangers and difficulties increase, until they become altogether insurmountable.

We must follow the same plan as the agriculturist does in his efforts to eradicate noxious weeds. The weeds must be rooted out before they run into seed. The course to be pursued is not identical, but the modes are similar. When the case is put into competent hands, there is no great difficulty in isolating any case of communicable disease, nor is there any great difficulty in destroying

every vestige of the *materies morbi* as it is eliminated from the body. The medical practitioner should look upon every case of such diseases, whether it be cholera, small-pox, enteric fever, or scarlatina, as a possible centre of a great epidemic, and every effort should be used not only to save the patient, but to prevent the possibility of the propagation of the disease.

MISCELLANEOUS NOTES AND EXTRACTS.

VALUABLE HINTS TO PLUMBERS.

The mortality of plumbers is high, largely from lead poisoning. Dr. Duncan, a high authority, in the Glasgow Sanitary Journal of last month, says:—The plumber seldom dies directly of lead poisoning, but he dies from the continual absorption and accumulation of minute quantities of lead in the organs of his body. Careful washing of the hands and scrubbing of the nails with a nail brush before every meal, and washing out the mouth with water to remove any particles which may have been breathed through that aperture, would minimize the danger from lead compounds. If, in addition, the plumber would avoid the fumes of lead from the smelting pot, as far as lead is concerned, he would suffer very little from this danger.

WHAT ALCOHOL DOES.

The following extracts from an address by Dr. Leslie Keeley, published in the Chicago Tribune of May 16, 1891, are of practical value at the present time and in full accord with what this JOURNAL has long contended. We respectfully ask our prohibition friends to consider it well, and "come over and help us" in the work of PUBLIC HYGIENE, as of the first importance. In the first place, Dr. Keeley says, people drink because they have other diseases. Ever since the landing of Noah after the flood and the Cana wedding alcohol has stood by the sick bed and has held the lamp for feasters and revelers. It has waited

upon birth, sickness, injury, pain, joy, marriage, revelry, and death alike. If drinking is a vice only, then the prescription is a crime. Alcohol is the instinctive remedy for injury, for sudden illness, for pain. It is not the least among the remedies used by physicians, and is acknowledged to be beneficial and an antidote to disease and disease infection. As a medicine alcohol antagonizes disease poisons which depress the action of the heart. It antagonizes the physiological effects of the ptomaines of pathogenic microbes. It antagonizes the poison of sewer gas in the physiological perversions. It antagonizes fatigue, it antagonizes body waste, due either to labor or disease. It furnishes heat force which is converted into work, labor, and other physiological force. It anesthetizes sorrow, it stimulates joy, it kills microbes, it destroys ptomaines, it prevents the overformation of poisonous leucomaines during labour and during fever. Why, then, need we try to account further for the drink habit? Alcohol is medicine for rich and poor. It takes fatigue on its own shoulders and climbs the hills of toil with the workman. It sits up late with the genius and is consumed along with the midnight oil while dramas and poetry are written, machines are invented, fortunes are discovered, and campaigns are planned. If alcohol nerves the arm of the murderer, it also nerves the heart of the fever patient. If alcohol is the genius of the gambling den it is also the emblem of the blood in

the commemoration of the Lord's Supper. If it is crime it is also sacrament. If it is poison it is also medicine. If it murders it also saves. If it causes disease it also heals. If it is a law-breaker it makes the laws. If it is an outcast it is also clothed in purple and fine linen. Alcohol carried in a little tin-pail by a forlorn and ragged child is degradation. Alcohol in a "new bottle," covered by the cobwebs of age and the dark cellar, carried by the butler to the table of the millionaire is aristocracy.

WHEN PROHIBITION WILL SUCCEED.

Dr. Keeley continues: But, now, to conclude our argument on the vice or disease relations of the drinking habit, let us further consider our same individual who can resist both the poison of the microbe of tubercle and the poisoning of alcohol. Is it a vice for this man to swallow tubercle germs and whisky with his breakfast or not? In one sense it is, perhaps, but in another, it is not. So long as tubercle germs and alcohol exist the only method of acquiring an immunity and keeping it up must be by more or less continual exposure to both poisons; unless a substitute cure is discovered. If this man is no longer exposed to consumption poison, and his children are exempt, in time they will again begin to have the disease. The same rule will hold with alcohol. The question will come up now: If there were no alcohol in the world, and no consumption microbes, then all this trouble could be avoided. Most certainly it could, but shortsighted people are the prohibitionists. The reason is easy to give. The poisons of this world are antagonistic to each other; the poisons of disease are antagonized by so-called remedies which are also poisons. They forget that though alcohol is a poison, it is also a remedy for the poison of disease. The difficulty of prohibition arises from the fact that the public will not be deprived of a remedy which is so convenient and easily manufactured. Call it a charm and delusion, and drunkenness a vice and indulgence, if you will, but the fact

remains that if prohibition ever succeeds it will be after the banishment of the infections of disease and their poisons. If the good people who are agitating prohibition would turn their attention to sanitation and prohibit disease infection, the question of alcohol prohibition would take care of itself.

EFFECT OF TOBACCO SMOKE ON MEAT.

Cases of poisoning due to meat which seemed thoroughly wholesome have sometimes occurred, and have remained unexplained. In the *Revue d'Hygiene*, M. Bourrier, Inspector of Meat for Paris, describes his experiments with meat impregnated with tobacco smoke. Some thin slices of beef were exposed for a considerable time to the fumes of tobacco, and afterwards offered to a dog which had been deprived of food for twelve hours. The dog, after smelling the meat, refused to eat it. Some of the meat was then cut into small pieces and concealed within bread. This the dog ate with avidity, but in twenty minutes commenced to display the most distressing symptoms, and soon died in great agony. All sorts of meat, both raw and cooked, some grilled, roasted, and boiled, were exposed to tobacco smoke and then given to animals, and in all cases produced symptoms of acute poisoning. Even the process of boiling could not extract from the meat the nicotine poison. Grease and similar substances have facilities of absorption in proportion with their fineness and fluidity. Fresh killed meat is more readily impregnated, and stands in order of susceptibility as follows—pork, veal, rabbit, poultry, beef, mutton, horse. The effect also varies considerably according to the quality of tobacco. All these experiments would seem to denote that great care should be taken not to allow smoking where foods, especially moist foods, such as meats, fats, and certain fruits, are exposed.

PROMPT ACTING—DISINFECTING PATROL.

The Health Department of Milwaukee, Wis., is preparing to put in operation a

disinfecting patrol system, according to the Sanitary News. This, according to Dr. Farnham, is a preliminary disinfecting system by which is meant "a disinfection made at once on the report of any case of contagious disease. It consists of the renovation and the establishment of sanitary conditions in a house so far as disinfection will do it. It aims at striking at all sources of primary contagion and in the isolation, so far as is possible, of the patient afflicted with a contagious disease. This will be accomplished by disinfecting all heaps of outside rubbish and the outhouses, by disinfecting the cellar and making it dry, by repairing leaks in sewer or water pipes, and by taking from the house and disinfecting in the van at the door all carriers of contagion such as clothing, curtains, carpets, etc. While this work is being done in the van, the clothing of any members of the family not affected by the disease may be attended to at the same time. The floors of the house will be washed and the walls, floors and furniture will be sprayed with anti-septic solutions. This done, the patient will be isolated. It is believed that in the majority of cases this method will limit the disease to the person who has already become affected. While no system of disinfection can perhaps be perfect without careful treatment and until people have been educated up to the use of hospitals for the treatment of contagious diseases, it is believed that this method will be the direct means of saving many lives and of greatly reducing the number of cases of diphtheria and scarlet fever. This system is to be carried out by the aid of a corps of three men, a van which will be a closed apartment on wheels that can be easily drawn by one horse, and a light wagon to carry chemicals and apparatus to be used in disinfecting. The chemical wagon will be provided with a stretcher so that, in case of emergency, it can be used as an ambulance. The value of such a system of disinfection is readily understood. It has worked well in many places in England, and there is not a city of any size in this

country but what should be similarly equipped. The prevention of disease means its immediate prevention, and this is one of the means to that end.

WHAT IS SANITARY SCIENCE ?

Sanitary science, says the Sanitary News, is a science that does not relate to the earth we live on or to the heavens we live under, but to the conditions of the homes we live in [including our bodies]. We can live on the earth or under the heavens without knowing much about them, but to live best in our homes we must know them well. Geology cannot change the conditions of the earth beneath us, or astronomy those of the heavens above us, but sanitary science can change from unhealthy to healthy the conditions of the homes we live in. Is it not then a science worthy of study? It touches the highest interests of mankind, cleanses and purifies the present generation, and will strengthen and will glorify posterity. The effects of obedience to its laws are not remote but immediate. They touch the everyday life of all, and enter into all the relations of life. They give strength and vigor to whatever capacity in which human endeavor is put forth.

THE FLORENCE NIGHTINGALE sick bed appliance, has the reputation among the members of the medical profession of being the most perfect thing of the kind that has been brought before the public. Leading members of the profession speak of it in the highest terms. It is adjustable to any bed; the heaviest patient can be safely and easily cared for by any lady of moderate strength, without lifting or disturbing the bed covering, and the head or foot, or either side of the bed, raised to any desirable elevation with the same ease and safety, the turning of a patient in the bed being a matter of the greatest ease to patient and nurse. It seems destined to become an indispensable, labor-saving, ease and comfort giving article in every case of lingering sickness.

THE PRIME OF LIFE

Between the ages of forty-five and sixty, a man who has properly regulated himself may be considered in the prime of life. His matured strength of constitution renders him almost impervious to an attack of disease, and experience has given soundness to his judgment. His mind is resolute, firm, and equal; all his functions are in the highest order; he assumes mastery over his business; builds up a competence on the foundation he has laid in early manhood, and passes through a period of life attended by many gratifications. Having gone a year or two over sixty he arrives at a stand-still. But athwart this is the viaduct called the turn in life, which, if crossed in safety, leads to the valley of 'old age,' round which the river winds, and then beyond, without a boat or causeway, to effect his passage. The bridge is, however, constructed of fragile material, and it depends how it is trodden whether it bend or break. Gout and apoplexy are also in the vicinity to waylay the traveller, and thrust him from the pass; but let him gird up his loins and provide himself with a fitter staff, and he may trudge on in safety and with perfect composure. One injudicious stimulant, a single fatal excitement, may force it beyond its strength.

SOMETHING NEW FOR DETACHED DWELLINGS.

The new process of treating sewage with a salt of iron, mentioned in the British Architect, seems well adapted for small and isolated areas. It consists simply in treating the sewage with a salt of iron supplied regularly in a certain fixed proportion; the effect is not merely to do away with all offensive odor, but to actually destroy all the noxious elements of the sewage, reducing it to a fine black ash; and producing a perfectly clear effluent. The iron is supplied by means of a ferro-meter. This consists practically of a glass receiver, holding 30 lbs. of the specially prepared chemical, enough to last a household of fifteen

persons for a week. The lower end of this receiver is perforated by a series of holes, and dips into an earthenware vessel, through which runs a constant flow of water, which gradually dissolves the chemicals, after which it is allowed to pass into the drainage system of the building. By raising or lowering the receiver in this bowl, according to a fixed scale, the rate at which the contents are dissolved may be regulated to suit the size of the household, and the flow of water is capable of similar regulation, a drop per second usually sufficing for a small household, the cost per head per year not exceeding ten pence.

"HEALTHERIES" NEXT.

The outcome of the interest awakened by the progress of sanitary science are new enterprises designated as "Healtheries," says the Sanitary News. London, we believe, was the first to possess an institution of this kind, and now New York is to follow with what is known as the American Healtheries Company. The object of these healtheries is to assist in preventing the use and sale of adulterated foods and to keep the people informed as to the character of food products placed upon the market. The foods now on the market are to be given a chemical and microscopical examination, and the character of the foods is to be published. These will be issued in bulletin form and give the pure and adulterated foods prepared for general consumption. The projectors of this scheme do not expect to charge for this information, as they believe that an annual exhibition will pay all expense and leave a profit which will be devoted to the erection of a permanent building for the "Healthery."

TUBERCULOSIS IN EARLY CHILDHOOD, SPECIAL REFERENCE TO HEREDITY.

This subject has been investigated by Brandenburg (*Archiv. Pediat.*) He says: Heredity in its strictest sense was not observed in a single case. On the other hand, in about one-third of the cases the causes of infection could be traced to

tuberculosis in the family. In the other two-thirds there was no evidence available of tuberculosis in the home surroundings. In forty-four per cent of the cases the mother had tuberculosis; in twenty-four per cent. the father had the disease, and in thirty-two per cent. brothers or relatives were suffering with it. The source of infection in the family was phthisis in forty-four per cent. of cases; miliary tuberculosis in forty-three per cent., and osseous tuberculosis in thirty-four per cent. Conditions of debility were present in thirty-seven per cent. of the cases analyzed. The digestive apparatus was the medium by which infection was received in the greater number of cases. Operations in consequence of local bony tuberculosis were frequently the cause of general infection. For general miliary tuberculosis, the point of departure of the infection is most frequently a cheesy focus in one of the lungs. Tuberculosis is propagated exclusively by direct infection.

THE FRIENDS of the typhoid fever patient will not fail to remember and be grateful to the physician for his care and skill in treating the patient, says the Builder, but would have thought him intrusive and troublesome had he taken one-half the same trouble to see that the cause of the fever was prevented.

OF THE Proxide of Hydrogen, Dr. Dickey, in the Annals of Gynecology and Paediatrics, says: I know of nothing in the whole materia medica that will dissolve the diphtheritic membrane so quickly and thoroughly, and yet leave the healthy mucous membrane intact. We have in it a remedy of the greatest value in combating this dangerous malady. None will destroy the false membrane and bacilli more speedily and with greater certainty.

THE Peroxide of Hydrogen is a valuable deodorant and disinfectant, but it must be used with caution about the hair, if the color of this is a matter of importance; for, under an alias, it is the golden hair bleach of the *nymph's* *despate*, and a dark-haired man with a candy-colored moustache is a striking object.

Usually it is an unstable compound, and becomes weaker as oxygen is given off, but Marchand's 15-volume solution will retain active powers for many months if kept tightly corked in a cold place. It should not be allowed to come into contact with metals, as oxygen is then given off rapidly.

BOVININE, the concentrated, nutrient principle of beef, is a food which every physician should try, especially in cases of great exhaustion, as after surgical operations or profuse hemorrhages. It is probably the best preparation for rectal feeding.

MANY READERS of this JOURNAL may be undecided where to go for the hot summer holidays, or physicians, where to send patients. The Queen's Royal Hotel is a delightful resort, situated at Niagara-on-the-Lake, and of which Messrs. McGaw and Winnett, of the Queen's Hotel, Toronto, are the proprietors. It will open for the season on June 20th. As a family hotel the Queen's Royal makes a very desirable residence for the summer months, being situated in a private park, with tennis and croquet lawns, good fishing, bathing, boating, &c.

TO LOCAL BOARDS OF HEALTH, this JOURNAL will now, for a "trial period," be sent at the following low rates: For the balance of this year, seven months, five copies for one dollar; for one full year, five copies for two dollars, separately addressed if desired. Scores of the local boards have been receiving from five to ten copies regularly for the last four or five years,—Berlin, Port Arthur, St. Mary's, Woolwich, and Dereham, for example, among them. Will the medical officer or other member receiving this copy kindly bring its "claims" and rates before the Board?

THE concentrated heat and ascensional velocity of a small flame, properly placed, is said to have more drawing power than a hundred thousand times its quantum of heat diffused through the air in a flue. This power is applied to the ventilation of the Southport, Eng., sewers through hollow gas lamp shafts. It has been also applied to the ventilation of rooms in New York.

EDITORIAL NOTES.

IN the death, and, as we regard it, premature death, of Sir John A. Macdonald, this JOURNAL as well as the public health cause, has lost a friend. It is probable that but for him the JOURNAL would not have survived more than a year or two. The public apathy in health subject was soon found to be too great for one man alone to overcome. Over fifteen years ago, when the JOURNAL was struggling on in its second year, the late Dr. (afterward the Hon. Senator) Brouse, and others, urged the Ontario Government to assist it by a small subsidy. The leader of that Government hesitated a long time, and at length suggested that the opinion of Sir John Macdonald be obtained as to the constitutionality of such subsidy. This suggestion was carried out, and Sir John's opinion soon came. It was given at considerable length, and all in his own handwriting; and in effect that, owing to the entirely exceptional character of the publication, affecting as it did, and so vitally, all classes and creeds, it would be quite constitutional, in his opinion, to give it Government aid. Later, when, after the organization of the Ontario Provincial Board of Health, this aid was discontinued, the Federal Government, of which Sir John was and has ever since been the head, regarding the JOURNAL as rather a Dominion publication, granted and continued more liberal aid, in order that such a valuable instructor of the public in the ways of preventing disease should be efficiently continued. We much regret that Sir John had not felt at liberty, although recognizing the value of public health proceedings, to *crowd his other great works*, as we have repeatedly urged him to do, by making provision for a Federal Sanitary Bureau or Department, for collecting health statistics, investigating causes of disease in Canada, and educating the masses of the people in preventive methods. But considering the general apathy of the people in regard to prevention which had until recently prevailed, and the many other more popular demands upon him, it is not a matter of wonder that he did not make such provision; well fitting as it would be for the Federal Government to do so. Last year in the House in the discussion of Dr. Roome's resolution, Sir John made a most valuable suggestion: that of calling a convention of representatives from

the various Provinces for the consideration of the whole question of a Dominion Sanitary System, in association with the Provincial systems. Although this suggestion has not yet been carried out, it appears that some months ago he requested a prominent Government official to investigate, consider and report upon the whole subject, especially as relating to statistics. It is hoped that this report will be instrumental in causing such action, or beginning, as will culminate in the desired Federal sub-department of health, as advocated in the House by Dr. Roome, and that the credit of the first official act toward the organization of such a valuable department, directly affecting as it would the deepest interests of all classes in the Dominion, will rest upon him who has so long been Canada's greatest, and is now, alas! her most lamented, statesman. *Nulli secundus; Fama semper vivat.*

"YOU HAVE OUR GOOD WISHES in all matters relating to Good Health and Sanitary Reform; you can count on us as co-workers in the cause of such reform." These words come to us from a leading Weekly paper of Nova Scotia. We are as pleased as thankful for them, and our "mouth waters" for more such. If we could receive the same from a hundred such Weeklies in various parts of the Dominion, we should feel that the "cause" would soon be far on in its way to most profitable results. How many more of the many highly creditable weeklies published in Canada will give us the same encouraging, assuring words? They crush out discouragements and stimulate to renewed, more pleasing efforts.

"ONE OF THE DANGERS of summer resorts" is the subject of a long editorial in the New York Medical Journal of May 30th. "We will not stop to examine all of the ambuscades made by disease to await victims at many health resorts, but will particularize with regard to one only. Among communicable disorders, consumption or tuberculosis takes rank as the chief destroyer of mankind. In many of the rooms and spacious verandahs of the legion of hotels and boarding-houses which have sprung up, for years consumptive patients have passed whole seasons, taking no precautions as to the ultimate destination of the bacilli which emanated from

them." There is doubtless much danger as above indicated, and we add our voice to the imely warning.

A MEETING is to be held in St. Louis, Mo., in October, of the committee of fifty physicians, appointed at the Washington meeting, in May, of the American Medical Association, to make arrangements for the time, place, &c., of the proposed "Inter-continental American Medical Congress." We trust that in the programme of subjects for consideration and discussion abundance of time will be provided for subjects on preventive medicine. We would suggest that the relations of the profession to the public be a special subject; with the view of bringing about a different line in the general practice of medicine, as distinct from surgery, whereby the public may be encouraged to look more to the physician as a guide to the *prevention* rather than the *cure* of disease, which would be not only easier for the profession, but for which the public could afford to pay much better than in the present line of practice. Sir Wm. Jenner has said, "To prevent disease is the most important aim of the science and art of medicine"; and the eminent Dr. Samuel Wilks, F.R.S., &c., in a lecture at Guy's Hospital, said, "The idea of cure is low-born and common-place," "Cure lies at the bottom of all quack systems." Prevention is significant of higher intellectual advancement: with all of which this Journal has ever been in full accord, and outspoken in its views thereon, alone and in council.

THE ANNUAL CONFERENCE of the State and Provincial Boards of Health was held last month in Washington. A number of most valuable subjects were freely discussed: such as Quarantine and Maritime Sanitation, the Prevention of Consumption and River Pollution. We cannot learn that anything specially new was brought to light. Why don't such bodies get up a little more enthusiasm and vigor of action, and press the various sanitary needs upon the authorities by vigorous resolutions and influential committees to bring the resolutions before the authorities from time to time, pressing them until acted upon? The work of such official bodies is often rather, too, of a routine or perfunctory character.

FROM AN INVESTIGATION in New South Wales, by the Board of Health, concerning diseases of cattle there, the following is given by the Commissioner: That the disease known as "coast cough" is really bovine tuberculosis. That bovine tuberculosis manifesting itself by "coast cough," or by other symptoms, is extensively present among dairy cattle in the South Coast District. That actinomycosis and cancer are also to be found among dairy cattle in this district. That infectious disease, probably tuber-

culosis, is to be found among swine fed on skim-milk from butter factories, and is not probably due to the use of milk from tuberculous cattle. That all these diseases are identical with diseases occurring in human beings, and are, so far as is at present known, incurable.

A PURE MALT EXTRACT is a sort of liquid bread that is partly digested. It is these qualities which give the fermented liquors a large part of their assimilative value. From the malt, the brewer makes his ale and beer by further converting starch into sugar, and sugar into alcohol. He leaves some carbohydrates and albuminoids in his brewing, which give to beer and ale their body, and just so far, make them malt extracts. They differ from the latter in that their primary (and sometimes sole) object is to produce a stimulant. A malt extract, on the other hand, has for its principal object the production of nutriment—the stimulus it may contain, being of use partly to preserve the liquid from decomposition, partly to increase its palatability, and partly to serve in an important sense as food. We have used many of the malt extracts, but not one other so palatable as Wyeth's, of which the Davis and Lawrence Co. of Montreal are the agents. It is an admirable tonic food in low states of the system, from any cause, but probably its greatest value is manifest during lactation. It not only supplies strength to the mother, and improves the quantity and also the quality of the milk, by increasing the amount of sugar and phosphates, thus nourishing the infant and sustaining the mother at the same time.

K. HARTMANN (in *Gesund. Ingen.*) relates a case in which a lead pipe was cut through by an insect,—a worm, species of "wood wasp," that was actually found with its head in the hole pierced by it. The hole on the exterior of the pipe was of a rounded form, about one-quarter of an inch long by one-eighth inch wide, and penetrating through the entire thickness of the metal.

THE TANNIN present in tea, according to Grimshaw, is absorbed by suitable animal substances, such as horn shavings, dried albumen, hide clippings, and the like. It is preferable to add the material to the tea in the dry condition before the infusion is made, but it may be added to the infusion, or the infusion may be passed or filtered through a layer of the substance.

THE BRITISH consul at Christiana, Norway, (Sci. Am., June 13th, '91), four months ago forwarded a letter calling the attention of the Foreign Office to the fact that, owing to English printed fabrics containing arsenic, there had

been a great decline in the quantity of such goods imported into Norway, and British printed cloths were getting a bad reputation in consequence. The letter was forwarded to the Manchester Chamber of Commerce, which had samples of the goods examined, and they were found to contain arsenic in large quantities.

DR. KLEIN, the eminent English bacteriologist, in the nineteenth annual report of the Local Government Board takes occasion to emphasize fact which is of great practical importance and should always be borne in mind by health officers, to wit: The contagion of diphtheria is to be classed with those which can exist and thrive outside the human body; that a room may retain active the diphtheritic contagion for a long period; and that milk may be not only the vehicle, but even the multiplying ground of the diphtheritic contagion.

AN OUTBREAK of typhoid fever, somewhat curious in its origin, occurred in one of the English sanitary districts. The excreta from two cases of typhoid fever had been thrown into an ashpit. Subsequently, some decayed fruit was thrown upon the same ashpit. This fruit was discovered by some children, who were all associated as playmates, and distributed and eaten by all of them. In due time seventeen cases of typhoid appeared among the children whose ages ranged from three to fourteen years.

A RUSSIAN INVESTIGATOR has preserved tuberculous sputum on pieces of linen at the ordinary temperature of a living room and found that, under these conditions, the infectiveness of the tubercle bacillus was retained two months and a half, whether it was kept in darkness or in the light. His results are confirmatory of all preceding work in showing that this bacillus is very tenacious of life.

AT A RECENT MEETING of the National Association of Sanitary Inspectors, England, Mr. G. Burt, in an address on the value of meteorology and its relations to the public health referring to a dense fog said: The official meteorologist—had there been one—would have foretold this fog, and much loss and great inconvenience to the public might thus have been avoided. Ask the physician at what price he would value the power of giving timely warning of the coming of a "cold snap" to his patients. Ask the builders of London, or any other large city, what they have lost in the last ten years by sudden frosts or unexpected downpours of rain. But the roll is endless—a knowledge of meteorology is of the very first importance in every stage of human life, civilized or uncivilized.

DR. GRIFFIN, Brantford, Ont., medical health officer, estimates that there have been two hundred cases of measles there during the past two months. Overcrowding in the schools is given as the cause. Typhoid fever also has been very prevalent in Brantford, from eighty to a hundred cases occurring every year. Bad water from river pollution is doubtless the cause.

IN BOSTON the public bathing-houses were extensively patronized during last year, the figures showing the number of bathers to have been nearly a million. This gives about two baths to every Bostonian during the year.

A VEGETERIAN SOCIETY has been organized in New York with good prospects of a large membership.

THE Phrenological Journal says: One may be a blacksmith, a plasterer, a painter, a whitewasher, a tanner and currier, a stable boy even, and yet be clean. He can do dirty work, and himself, with reasonable effort, not be dirty. But, if one takes filthy substances into ones mouth or stomach, such as whiskey and tobacco, one will emit a very disagreeable stench, which neither clothes, cologne, or other substances can counteract,—be *unclean*.

AT A wedding near Louisville, Ky., April 15th, forty persons were poisoned, so that death resulted in five cases. Violent vomiting or purging, or both, with great prostration, marked all the cases, and collapse in some. Chemists have not determined the cause of the same.

BERLIN gives the carriages of physicians the right of way through the crowded streets. The coachmen wear a distinctive white hat.

DR. RUSSELL, Senior Pathologist of the Edinburgh Royal Infirmary, has at length secured a cancer parasite and traced its life history. He finds it to be a fungus of the yeast type. Dr. Russell says the discovery can not be definitely accepted until tested by others.

BACON said: "To be free-minded and cheerfully disposed at hours of meate and of sleepe and of exercise, is the best precept of long lasting."

TORSION BRAIDED WIRE MATTRESS.—This is another new thing likely to prove of great value. The spring is composed of a series of sixteen or more tubes of fine torsion braid wire, having a four-inch flattened face, which may be made to any width required. These Tubes are sewn together with wire, presenting a perfectly flat and smooth surface, and are so constructed that the Mattress when finished may be rolled

up if desired. They can be used without the Woven Wire or other Springs usually used under all other Mattresses, and are fully one-third lighter in weight than the ordinary Hair Mattress. They may also be used with only a thin hair mattress or even with only blankets over them, apparently. In this they approach very near to the Ideal Sanitary Mattress, nearer than any other we know of:—One that can be completely and daily opened up to the air, and will allow ALL PARTS of the bed to be repeatedly aired and washed. Persons wanting such, or further information, may address 123 Bay Street, Toronto.

NOTES ON CURRENT LIST

THE ILLUSTRATED LONDON NEWS (reprint, World Building, New York) for May 30th gives a highly interesting story, "The Briefless Barrister," by Grant Allen, profusely embellished with tinted illustrations, besides the usual number of illustrations of current and other events. Three pretty full page pictures are, "Chickens," "Conscripts" and "Love me love my Cat." Other late numbers have given, "The First Day of the Season" (in Tennis) "Hold Tight," "Undine" and the "Happy Family at the Crystal Palace," all full page. One gets more, we believe, in this admirable weekly, for four dollars a year, than from any other publication in the world.

THE CENTURY, the king of monthlies, for May, begins a new volume, and in it are begun several new features of what The Century calls its "summer campaign." "The Squirrel Inn," by Frank R. Stockton, is one of the principal and most popular of these new features. The "Inn" itself is carefully depicted in a picture which is the joint product of the artistic skill and ingenuity of both the author and Mr. Frost, the illustrator. Mr. Frost brings out also several of the principal characters of the story, which promises to be one of the most curious and characteristic of Mr. Stockton's inventions. The long promised papers (two in number) on the Court of the Czar Nicholas I. are now begun, the frontispiece of the magazine being a portrait of the Emperor Nicholas. These papers are by the late George Miffin Dallas, in his day one of the most distinguished statesmen of the country. There is an enormous fund of other matter.

SINCE THE DEPARTURE of Amelie Rives-Chanler, after her marriage, we have had only

brief paragraphs concerning her life and literary intentions. A recent paragraph in the daily papers announced the fact that she was hard at work upon a new novel destined to arouse the literary world by its artistic merit and bold originality. It is now announced that the first chapters of this will appear in the August number of the Cosmopolitan, and that, in the estimation of critics who are most competent to judge, this last story will be the most finished, as well as interesting, production of this versatile Southern pen.

ST. NICHOLAS for May presents a very tempting table of contents, beginning with an imaginative poem, "Morning," by the late Emily Dickinson, whose work has been so cordially praised by the critics. Nora Perry's "Siege of Calais," a ballad with striking illustrations by Birch, will delight little students of history, who will also read the second paper on "The Land of Pluck," by Mrs. Dodge, with keen delight, supplemented as it is by two very interesting letters on Holland. J. O. Davidson, has written and fully illustrated a short serial of adventure entitled, "Chan Ok," which describes the capture of a noted Chinese pirate by whom a steamer was recently destroyed.

THE GRAPHIC of Chicago is outstripping all the Eastern weeklies in the States, not only in its interesting reading matter, but in the clearness of its many illustrations and typographical work. It gives some very pretty full-page pictures, besides an enormous amount of illustrations of current events, portraits of eminent men, &c., &c.

THE DOMINION ILLUSTRATED of the 20th June will be devoted almost exclusively to an account with full illustrations, of the event which is in all men's minds, the funeral of the dead premier, Sir John A. Macdonald. The number will doubtless be a memorial worthy of the occasion.

ELEGANT PRIZES FOR THE LADIES.—The publishers of THE CANADIAN QUEEN, Toronto, Canada, are offering two new prize competitions, with leading prizes consisting of a pair of Shetland Ponies, carriage and harness, a Free Trip to Europe, first-class upright piano, two weeks vacation to any summer resort in Canada or the United States, all expenses paid; safety bicycle or tricycle, one hundred dollars in cash, suite of parlor furniture, ladies' gold watches, etc., etc. This magazine has become famous on account of its prize competitions. Hundreds of Canadians have won valuable prizes in previous contests. Sample number of THE QUEEN with full particulars, will be sent by the publishers upon receipt of the address of any lady and four 3 cent

THE QUEEN, Toronto, Canada.