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# PUBLIC HEALTH MAGAZINE.

Vol. I.]

NOVEMBER, 1875.

[No. 5.]

## Original Communications.

### CLAIRVOYANCE AND SPIRITUALISM.

BY F. J. AUSTIN, M.D.

*(Continued from page 97.)*

It will probably tend to throw some light on the subject, and, I trust, interest the reader, to enquire more particularly into the subjects of Catalepsy and Ecstasy, states allied to and forming the basis on which the so-called "clairvoyance" or mesmeric trance is founded; and thus giving ourselves all due latitude, seek to determine how far scientific investigation will allow us to go in our endeavors to reconcile the vagaries of the mesmerist and medium with scientific facts, and, if possible, decide and draw a line at that point where the reasonable and natural end, and humbug begins.

Sir Thomas Watson\* defines Catalepsy to be "a sudden suspension of thought, of sensibility, and of voluntary motion; the patient remaining during the paroxysm in the position in which she (for it is almost always a female) happened to be at the instant of the attack, or in the position in which she may be placed during its continuance; and all this without any notable affection of the functions of organic life. . . The patient so affected, with open staring eyes often, and outstretched limbs, looks like a waxen figure, or an inanimate statue, or a frozen corpse. That catalepsy depends on nervous influences, is shown by its being brought on by sudden or long continued mental exhaustion or

\*Watson's Lectures on Physic, Vol. I., pp. 714 and 715.

emotion, by its occasional alternation with hysteria, and by being frequently more or less artificial,—that is, induced voluntarily or by slight external causes. Those inclined to this condition, and who too easily yield to it, soon lose control over themselves, so that it is possible the cataleptic state may be induced in them by others, so that they become, as it were, puppets in the hands of a showman. The celebrated Mesmer first turned this faculty to account in producing the artificial or induced mesmeric trance. He has since had many imitators, “but,” as Dr. Chambers says,\* “the unfortunate subjects of it have brought to their masters so much ‘gain by their soothsaying’ that deception has largely adulterated the real phenomena, and it is difficult to get a genuine patient.”

The artificial catalepsy of the mesmeric trance differs from the true in that, although the subject of it is apparently motionless and unconscious, he can be made to execute movements and articulation in accordance with the commands so given. This state or condition is called “clairvoyance;” not, as we now know, that the subjects of it are able to see particularly clearly, but that all the faculties of the mind are so concentrated and oblivious to external objects—so isolated, and at the same time, so sensitive to impressions brought within its range,—that the brain is in a condition to elaborate and amplify suggestions and impressions of so slight a nature that, at other times, it would not take cognizance of them at all. So much so, that a word, a look, a sign, a glance, an inflection of the voice, &c., which under ordinary conditions would convey little meaning to them, in this exalted nervous state reveals much. In this way the credulous or superficial observer imagines it is possible for the intelligence to forsake the brain and concentrate itself in some distant part; and believes that the clairvoyants, though with bandaged eyes, can read writing when touched with the tips of the fingers, or when placed on the soles of the feet; can discern diseases in others; describe scenery in places never visited by them, and even prognosticate coming events. This faculty is soon acquired by practice, so that charlatans have little difficulty in obtaining and training their subjects.

\*Reynolds' System of Medicine, Vol. II., page 119.

Ecstasy may be defined as a peculiar state of the nervous system, in which the person being wholly absorbed and wrapped up in some object of the imagination, the balance between the mind and the body is upset, and he becomes lost to all external impressions; or in other words, the mind, temporarily losing control over the body, runs riot, conjuring up visions and fantasies in accordance with the nature of the object which strikes the imagination. Meanwhile, the body either remains motionless, as in catalepsy, until the balance between it and the mind is re-established, bringing to mind the picture of Balaam, the Midianitish prophet, who, "falling into a trance, but having his eyes open," had revealed to him the future of Israel—or, as is not uncommon during periods of intense religious or other excitement, an enthusiast is seized with an irresistible desire to communicate to others his pent up thoughts and feelings—or when the overwrought nervous system is impelled to exhaust itself in song, as in the Italian Improvisatore—or in violent muscular movements, as in the Shakers and Dancing Dervishes.

The difference between true catalepsy and ecstasy is generally well marked; the most striking distinctive feature being, that in the former all recollection of events occurring during the attack is lost, while in the latter the visions of the excited imagination are afterwards vividly remembered. On the other hand, it is by no means easy to distinguish between the artificial or acquired form of catalepsy and ecstasy, as they frequently present many phenomena common to both.

Regarding the subject from a scientific point of view, it is well known to physiologists that there are states of mental abstraction capable of being artificially induced in many persons, in which the attention is so concentrated upon the subject presented to the mind that the *will* is suspended, while at the same time there exists such an intense susceptibility to, or receptivity of, suggestions conveyed to the mind through the senses from without, that the individual is capable of doing, suffering and saying things of which he is incapable in his ordinary condition, and of which he has no recollection when the condition in question has passed off. In these states, the mind may be placed under the dominion of one idea by the slightest suggestion or leading question, as well as by a positive assertion; so that the sub-

ject of them shall feel hot, or cold, taste bitter or sweet, hear exquisite harmony or jarring discord, see angels or men, &c.; shall assume and maintain painful or awkward postures, manifest no feeling while undergoing a painful operation, exert unusual muscular strength or vocal powers, and so on, in accordance with the suggestion or commands made to him, and will feel perfectly assured of the reality of the sensations, ideas or emotions thus produced in his mind without his own co-operation, and without the power of recalling them when the mental state in question has been removed.

The phenomena of "mesmerism," "electro-biology," "clairvoyance," &c., when witnessed by persons unacquainted with mental physiology, undoubtedly appear marvellous, and it may be even admitted that some of them require a profound knowledge of psychology for their comprehension.

Thus far we may go, though in doing so it must be confessed there is often so much deception mixed up with what is real, that we are going near the line, if not actually overstepping it which divides scientific facts from humbug. For as we have seen it is quite possible for a person so to imitate or induce in himself or others a condition simulating one of these nervous states sometimes, but rarely, met with; and so to cultivate the habit of employing his powers of observation and intuition, aided by our in-born love and fondness for the mysterious, as to take such a strong hold on our mental organization as to induce us to overlook the imposition, and fancy him to be a being supernaturally endowed. On this point Sir Thomas Watson, whom I have already quoted, than whom no more eminent, clear-headed, or unprejudiced observer ever wrote, says. "Do not suppose, from what I have just said, that I ignore the glaring *facts* of mesmerism. I have seen and scrutinized too many of them to doubt their genuineness, or ascribe them to mere imposture or collusion, Of the brain and nerves there are many and various strange conditions which we reckon as manifestations of disease or disorder. I have given you several wonderful examples of such unnatural and morbid states under the heads of hysteria, chorea, catalepsy, ecstasy, trance. Now, whatever condition of this kind may arise thus spontaneously, may also, I believe, be produced in some persons under the mesmeric practisings; not, however,

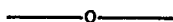
through any material or occult influence emanating from the mesmerizer, but subjectively, from the mental attitude (if I may use that expression) in which the person mesmerized is led to place himself; but the experiments of Mr. Braid show clearly that the agency of the mesmerist is not essential. Any one having the requisite susceptibility may put himself into the mesmeric sleep or trance by fixing his eyes and his attention steadily and unremittingly upon an object made to project a little way from the centre of his own forehead. The determining influence is from within as much as, or even more than, from without. Derangements such as sometimes occur thus in disease, may also sometimes occur under the mesmeric atmosphere; but no other or more mysterious derangements—thus much I perfectly believe, but I go no further. All the transcendental phenomena—the miraculous diagnoses and revelations, the clairvoyance, the prophecies—I class with the spirit-rappings and table-turnings, as evidences of imposture on the one side, and of miserable credulity on the other, and as alike scandalous in an age and country which vaunt themselves to be enlightened.”\*

Unless Sir Thomas Watson's assertions are too sweeping, I fear Canadians are still benighted, though for that matter we are not much behind our neighbors across the border. It is astonishing how many of these charlatans flourish on this continent. If it were only the ignorant who patronized them, we might possibly understand it; but when we find men, who, from their position in the State and in society, must necessarily be expected to have some amount of intelligence and education, firm believers in their miraculous powers, we are lost in astonishment, and can only account for their infatuation on the grounds of the attraction possessed by the marvellous acting on a mind imbued from earliest infancy with superstition and mystic lore.

For example, only a few months ago, a grave and worthy legislator of the Dominion had so much confidence in one of these clairvoyants, a man who did not pretend to know anything about medicine, that upon receiving intelligence that a member of his family, then in England, was dangerously ill, and, I suppose, not having a lock of hair at hand, he immediately sent this

\*Extracts from Watson's Lectures on Phisic, Vol. II., pp. 717 and 718.

man to England to investigate the case. Again, an astute, clear-headed ex-Cabinet minister, brought the same man a long distance to see a member of his family who was sick—of course in both instances at considerable expense. Other similar cases could be given, besides numbers of others in which locks of hair had been sent long distances to some celebrated operator for his opinion of the case and treatment to be employed. As might be expected, the patient occasionally at first improves under the treatment, especially if the disorder is one of the nervous system, but only sooner or later to return to his former condition.



## VEGETARIANISM.

BY DR. ALFRED J. H. CRESPI.

*(Continued from page 108.)*

To return from this long digression. Let me show why abstinence from animal food is compatible with vigorous health and with longevity.

Foods are divided into two classes—the organic and the inorganic. The latter are of service in the metamorphosis of organic foods in the human economy. They consist of saline matters and water; according to some vegetarians they would not be of use, and so for our present purpose may be dismissed. By the way, organic food always contains large quantities of water and salines; so that, do what the imprudent vegetarian lecturer mentioned above could, it would be impossible for him to avoid, as he said he had done, taking fluids and salines into his system for a month. The organic articles of food may be divided into several classes; but, whether obtained from the animal or from the vegetable world, or from both, they would always comprise carbonaceous and nitrogenous compounds; the former would again be subdivisible into fatty and saccharine. Now as the phenomena of nutrition depend principally on the interchange of oxygen with nitrogen and carbon, it is also possible to consider the nutritive values of foods according to the quantity of car-

bon and nitrogen in them. But since the value of the carbonaceous constituents of sugar is much less than that of those of fats, it is necessary to calculate carbon in such a way that, whether contained in fat or in sugar, it should be reduced to some common measure. Starch is generally adapted for this purpose. The nutritive values of different foods may now be correctly represented by the number of grains of carbon and nitrogen a dry pound of them contains. The consideration that at once presents itself is that, if it be known that at least 200 grains of nitrogen and 4,000 of carbon must be contained in the diet daily consumed, would any wholesome food, whatever its source, provided that it contained these quantities of nitrogen and carbon, meet the requirements of the human body? We can now answer that it would; but I question whether the discussion of this question would not have occupied the advocates of vegetarianism on the one side, and those of a mixed diet on the other, till Doomsday, had not the attention of the scientific world been drawn to another matter. It was this, that all foods contain certain alimentary principles which are identical, whether derived from the animal or the vegetable world. It is on these alimentary principles that the human body depends, to their being supplied in proper proportions the maintenance of life and health is due.

Let me endeavor to make my meaning clear. There would have been nothing easier than to arrange dietaries, consisting of flesh alone, or of vegetables alone, or of both mixed in proper proportions, all of which would have contained almost exactly 200 grains of nitrogen and 4,000 of carbon. But interminable disputes would have arisen whether the vehicles in which these quantities of carbon and nitrogen were conveyed into the body were wholesome or not. Nor does it appear probable that this controversy could ever have terminated. So much could have been said on both sides that each party would have remained of the same opinion. We now know that ordinary articles of food contain nitrogenous compounds, such as albumen, legumen, fibrin, syntonin, gluten, casein, gelatine, and carbonaceous compounds, as sugar, starch, and cellulose, and—this is the all-important fact—not only is the chemical composition of some of these constituents nearly the same, whatever their source, but some are precisely the same. The casein of milk is said to be indistin-



guishable from that in peas and beans, the fibrine in meat from that in wheaten flour and the cauliflower, and the albumen of the cabbage from that of the white of egg. The ablest chemist might be unable to tell the source, animal or vegetable, from which pure specimens of these principles were obtained.

Should, therefore, attempts be made to supply the body with the proper quantities of fibrine, albumen, or casein to maintain it in health and vigor, it seems immaterial from a physiological point of view, whether this albumen, fibrine, and casein come from the animal or the vegetable world. A death-blow, on the one hand, is struck at any objections to a purely vegetarian diet; and, at the same time, on the score of its being less wholesome, vegetarians seem unable to object to a mixed diet. At any rate, the question is in such a condition that great caution is required on both sides. The construction of wholesome dietaries, however, whether mixed or vegetarian, becomes apparently easy, but the construction of cheap dietaries, quite another matter, must be undertaken on other principles.

We have consequently seen that there is no possibility of denying that a vegetable diet, whether it includes milk and eggs or not, can be wholesome, and can supply the body with everything it can need. That is tantamount to saying that health and strength can be kept up upon it in full vigor and as well as on a mixed diet.

All theories must be brought to the test of experience to make them of real service to mankind. Experience shows that persons who keep to a vegetarian diet enjoy vigorous health. There seems no reason to believe indeed that there is any part of the world where this would not hold good, and, whether near the poles or near the equator, a vegetable diet, varied according to the different requirements of the system at different temperatures, would undoubtedly sustain life and vigor.

One of the great arguments in favor of a vegetarian diet might, one would imagine, be its undoubted cheapness when carefully constructed. But this argument does not meet with the support of all vegetarians; some whom I have talked to having denied that there was any saving. They were right if they only substituted expensive fruits and puddings for meat and game. But, carefully constructed, a vegetarian diet is exceedingly economical,

and might in any family, rich or poor, be a considerable saving. It is, however, indispensable that young people, if they are to have a cheap vegetarian diet, should be trained up to it from infancy. There are many nutritious and wholesome foods, as oat-meal, maize, and barley flour, which, from a certain harshness of flavor, require to be eaten from childhood to be agreeable. If the palate is accustomed to them early in life the habit is formed, and there is small difficulty in doing without meat. Indeed, young people brought up as vegetarians care little for animal food. Sometimes they actually dislike it.

Some of the vegetarian bills of fare I have seen have been rich and expensive, and have had little to recommend them on the score of economy. Certainly they did not err on the side of too great simplicity or frugality.

That a vegetarian diet should be both wholesome and palatable it appears certain that considerably more care should be given to cookery than is usually now the case. Those of us who know something of the waste caused by imperfect and careless cooking could not complain that something should be done to remedy a great defect in our household economy.

Vegetarianism could easily be practised in a household in which every one keeps to it. There would be some hardship, not to say impossibility, in attempting it alone. At any rate, it would be much easier and pleasanter if every one in the house gave it a fair trial; then the food could be well prepared, properly cooked, and pleasantly varied.

A young man, I once read, determined to become a vegetarian. His mother and relatives objecting to imitate him, he had to cook his own food, and his amateur cooking appears not to have been of high quality. Under such circumstances vegetarianism would be a great hardship.

The simplest rule that could be given to a person anxious to try in his household, the advantages and economy of a vegetarian diet, is to leave off meat and bacon for breakfast, tea, and supper, and at dinner to reverse the usual order of the courses. Begin this meal with plenty of tarts, fruit, and puddings, and when every one has had a sufficiency place on the table the meat, poultry, or fish, which usually comes first. If the pastry and puddings are nice, no one will care for meat, and in a week the latter can be altogether omitted.

There is one kind of vegetable food the deliciousness and fragrance of which are above all question greater than those of any other foods—I mean fruit. Everywhere people greedily eat fruit. Children and savages eat it *ad libitum*. Were fruit abundant in this country there would be little need for an elaborate defence of a vegetarian diet. All who could get strawberries, grapes, and plums in large quantities would soon cease to ask for meat. Unfortunately the cost of fruit is almost prohibitive. When good cherries are eightpence a pound, strawberries tenpence and a shilling the quart, and oranges—as they are at this moment at Plymouth—three halfpence a piece, who can speak of fruit as being likely to supplant meat? Were any vegetarian generous enough to supply me with all the fruit—fresh and preserved—I should require, I could promise him not again to touch animal food.

Let us ask our vegetarian friends, as a proof of their gratitude to scientific men for proving that the casein, albumen, and fibrine of vegetables are quite as wholesome as, and identical in chemical composition with, those of animal food, to give their attention to the importation of fruit from abroad, or to its cultivation in much larger quantities in this country. Then would they effectually and certainly prepare the way for the spread of their own principles, and all who could, would gratefully and cheerfully keep to fruit and give up flesh.

In the last place, the sanction which religion is assumed by many vegetarians to give to a vegetarian diet will, it seems to me, hardly bear investigation. That abstinence from flesh is sanctioned or rather actually commanded by the Christian religion seems insisted upon by many vegetarians. That English Christians are to be bound by whatever the Jews did or are supposed to have done, is ridiculous. If vegetarianism, however, is right it should be practised without any reference to the customs and opinions of the ancient Hebrews. It certainly is unfortunate that the Bible should be summoned as a witness in favor of a vegetarian diet, for there can not only be no reasonable doubt that the Jews ate flesh, but that they did so at certain seasons in obedience to their religion. If meat is always and necessarily injurious, if it is wrong to take life to obtain food, then it would have been wrong to eat flesh under any pretext. Nothing can alter the eternal principles of right and wrong, not even Jewish rites and ceremonies could do that.—*The Sanitary Review*.

## NOTES ON HOUSEHOLD SANITARY MATTERS.

BY JAS. H. SPRINCLE, ARCHITECT AND CIVIL ENGINEER.

*(Continued from page 103.)*

## NOTE 4.

Having, in the last number of the HEALTH MAGAZINE, described the conditions and requirements of a proper water-closet and ventilated system of house drainage, I will now give a general idea of the duties of an Inspector, to whose strict supervision all such matters should be entrusted, and perhaps these duties may be most intelligibly explained by describing the works themselves.

In the first place, it is of great importance that house drain pipes be properly inserted into the common sewer, and the brick work of the latter be carefully made good round the drain pipe. Careless workmen, when opening the sewer, frequently let bricks drop into it, which obstruct the sewage, and may in time choke the sewer. Next, every joint of the earthenware pipe should be embedded in a collar of puddled clay, carefully compressed round the pipe joint to prevent the possibility of leakage, and the entire range of piping must be laid to an uniform inclination; so it is scarcely necessary to say that some experience and care on the part of the workman is required to do this work in a proper manner. At present, any laborer capable of digging the trench is considered competent to set the drain piping of a building, and the result is the pipes are laid with little or no regard to inclination; the joints are simply stuck together, without any attempt to make them water-tight. Frequently imperfect pipes are used, or they are broken in the laying, and as the pipes now in use are far too large to admit the possibility of flushing, they soon become nearly filled with sediment, while the syphon traps, if any such are inserted, become choked, and sometimes, in gravel or sandy soil, the waste water of the house never reaches the common sewer at all.

These large pipes, again, are frequently brought up only to the front of the house, instead of being brought through the walls, as they ought to be, to receive the vertical soil pipe; and as this latter is rarely more than four and a half inches diameter, the

space between the large and smaller pipe (unless the architect watches closely) is left open, and may thus render useless all the other precautions taken to prevent sewer gases from entering the house.

Inside the dwelling, also, after the junction of the metal soil pipe with the earthenware drain is completed, we encounter fresh and altogether different risks and difficulties. It is necessary to see that the joints and junctions of the soil pipe are properly soldered together. Frequently they are not. Sometimes the carpenter, in casing over this pipe, carelessly drives a nail through it, which thus becomes a peg to suspend the miscellaneous refuse which servants are in the habit of thrusting into the water-closet. We have known severe sickness, and a frightful amount of trouble and damage arise from the choking of a soil pipe by this cause. Sometimes, also, in laying the basement floor, the soil pipe will be reduced to half its size by the carpenter driving his work against it, and occasionally the junction of the horizontal and vertical soil pipes will be completely severed by similar carelessness. In such cases the space under the basement floor becomes the receptacle of the water waste of the house, which would otherwise have passed off to the common sewer. Again, it is necessary that the waste pipes of all baths, wash-basins, &c., have proper air traps—there are hundreds of houses, which are said to have all the modern improvements, in Montreal, without air traps—and that all waste pipes are properly secured to the under side of said wash-basins, sinks, &c. Frequently, they are not secured at all, but propped up with a bit of wood. Moreover, the waste pipes of all sinks which receive hot greasy water should have at least twice the diameter of the others, and have sludge taps in their bends to empty the air traps in case of choking. It is equally important to have the overflow pipes of all cisterns, baths, wash-basins, &c., either to terminate in the air traps of these appurtenances, or else to be separately trapped. The air of some houses in Montreal is poisoned with sewer effluvia from these overflow pipes alone, and persons have been made sick by using wash-basins the overflow pipes of which communicated directly with the soil pipe, without any air trap whatever between.

Now, all these works can be properly executed by artificers of ordinary experience. They are, in fact, comprised in the plans and specifications of all architects. The one thing needful for their proper execution is the supervision of some competent inspector, having municipal authority to enforce the execution of

his requirements; for it unfortunately happens that the works which we have described are rarely comprised within the limits of one contract. Ordinarily, the bricklayer does the excavation and puts down the earthenware pipes; then the plumber comes on and completes his work, and gives it over to the carpenter, who cases it in and covers it up out of sight. What may have happened to it during this latter process is neither seen nor known, unless some leakage shows itself in the ceilings or walls, and failing this, nothing is known by the occupants of the condition of the works until sewer effluvium makes its appearance, or perhaps some outbreak of disease takes place, as the natural result of the utter want of supervision over that portion of the essential works of a homestead, on which, above all other, the sanitary well-being of the inmates is dependent.

I will close these notes on ventilated house drainage with an outline of the mode of testing the drainage service of a dwelling house. I have already stated that the first length of earthenware pipe between the inside of the wall and the syphon trap should have a movable cover for the proper examination of the work. After the drain and all the works connected therewith are completed according to the instructions of the inspector, the cover should be removed from this length of pipe, and the following tests made before permission is given by the inspector to use the drain. First, for flushing. Let all the wash-basins, sinks, bath and cistern be filled with water; then let all the plugs be removed together, and the passage of the united stream be watched at the uncovered pipe, which should have a small bank of clay round it to prevent overflow. The inspector will easily detect any serious displacement or damage to the soil pipe by the volume and velocity of the current, and if the pipe flows *full*, it will show that the size of the waste pipes is sufficient to flush the drain whenever required. Next, let all the basins, sinks, &c., be filled as before, and let the water from each be run off separately, and if the water passing from each is, in the opinion of the inspector, about equal to the quantity let off above—and a little experience will enable the inspector to judge with sufficient accuracy—then the cover may be cemented on to the drain pipe and covered with some puddled clay, and the whole is finished and ready for use.

All these duties may be efficiently performed for the whole city by two inspectors, and if an average fee of five dollars were levied for each new house, which is a little more than is levied for every house furnace, the inspection would be self-supporting, and although no direct revenue would perhaps accrue to the city, the direct and indirect benefits which must result from a permanently efficient system of house drainage and ventilation would be beyond all price.

*(To be continued).*

## Sanitary Reports.

## MORTUARY STATISTICS FOR AUGUST, 1875.

		Popula- tion.	No. of Deaths.		Total Deaths.
			Male.	Female.	
In Richmond, Va.	White.....	33,452	35	28	63
	Colored.....	27,213	60	50	110
In Norfolk, Va.	White.....	12,500	..	11	11
	Colored.....	9,500	13	18	31
In Lynchburg, Va.	White.....	7,000	6	5	11
	Colored.....	7,000	14	8	22
In Mobile, Ala.	White.....	18,115	17	7	24
	Colored.....	13,919	29	24	53
Selma, Ala.	White.....	3,500	1	2	3
	Colored.....	4,000	4	7	11

Making a total, from these five cities, of 339 deaths, male and female, white and colored. Besides this, there were 26 still born children.

The causes were as follows:—

Abscess, 3; Accidents, Suicides, &c., 8; Apoplexy, 3; Ascetis, Dropsy, 10; Asthma, 1; Births, premature, 10; Bright's Disease, 1; Cancer, 8; Cancrumoris, 1; Childbirth, 3; Cholera Infantum, 42; Cirrhosis Hepatica, 1; Congestion of Bowels, &c., 10; Consumption, 35; Convulsion., 22; C. Puerperal, 1; Diarrhœa and Dysentery, 29; Enteritis, 9; Epilepsy, 1; Fevers (Congestive, 4; Intermittent and Remittent, 2; Puerperal, 1; Typhoid, 6; Typho-Malarial, 3); Flooding, 1; Gangrene, 1; Gasuitis, 1; Heart Disease, 13; Hæmoptysis, 1; Hydrocephalus, 2; Hydro-Pericardium, 2; Old Age, 14; Intussusception, 2; Jaundice, 1; Kidney Disease, 2; Marasmus, 3; Meningitis, 5; Paralysis, general, 4; Peritonitis, 1; Pneumonia, 5; Rheumatism, 2; Scarlatina, 1; Sun-stroke, 1; Syphilis, 3; Teething, 1; Traumatic Tetanus, 2; Trismus, 9; Whooping Cough, 2; Worms, 1; Unknown or Ill-Defined, 39.

—*Virginia Medical Monthly.*

## Correspondence.

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### SMALL-POX HOSPITAL.

*To the Editor of the Public Health Magazine:—*

DEAR SIR.—In your September number, you had a few most timely remarks on the above question in your really useful publication. Allow the writer to make a few further remarks on the same subject. There can be no question as to the great importance and absolute necessity for the erection of a small-pox hospital, perfectly isolated, at least as far as that is possible, where those affected with this loathsome and infectious disease may be properly treated without the fear of coming in contact with others.

In our present hospitals, viz : the Hotel Dieu and Montreal General Hospital, it is almost impossible to prevent contagion spreading among the patients being treated for other diseases.

Those who are in the habit of attending to the institutions above named, know how true this is. Many are the sad instances that could be mentioned of the truth of this assertion; and thus, although the utmost care is exerted to prevent contagion by the medical gentlemen having the care of this department, is it not very sad to know that, when a patient has been cured of another complaint, notwithstanding all precautions, the poor convalescent should be attacked by this fell disease, and, from a weakened system, thus become an easy prey to the attack, and die?—yet, Mr. Editor, as you well know, this has often been the case. In one of the institutions above named, every effort was made to isolate small-pox patients, yet occasionally infection would occur, and with fatal results.

What should be done in the name of suffering humanity, is the question that should engage the utmost attention of every lover of his kind? Permit me to offer a few suggestions as to this question, as follows :—An inexpensive building, in an isolat-



ed position, ought to be erected as a hospital for the special treatment of this disease, where all suffering may be sent, and be under the care of medical men appointed to this duty. This hospital, in the judgment of the writer, should be under the control and management of the Council of the City of Montreal, the medical health officers of that body having its control and management. There are differences of opinion, we know, as to the nursing of patients in such a building; some taking the ground that the good sisters, the nuns, should perform this duty, while those of a different faith think differently, only being anxious, irrespective of creed, that the nursing should be of such a character as shall best promote harmony of action and the cure of the patients, whether Protestants or Catholics. Why such feelings of disagreement should exist in a mixed community as ours, on such a subject, it is hard to conceive. Yet such is the fact, and it is a great pity.

Now, such being the case, in order to meet the prejudices of these excellent people, and to secure the desirable result we seek to obtain, we would suggest in the erection of such a hospital: let there be two wings, one for Protestants and one for our Roman Catholic fellow-citizens, the one having Protestant nurses, the other to be attended to by those nurses desired by our friends of the Catholic Church. Surely this would meet the case and secure united action, and heal the division that seems to exist as to the whole question of nursing.

Enough has been said on this part of these remarks, which, I trust, will commend themselves to the thoughtful attention of any who may oppose the erection of a Small-Pox Hospital under civic control unless under the care of the good Sisters of Charity.

Mr. Editor, the writer would take broader views of this great question, and be only very anxious that such measures be adopted as shall *save life*, and arrest in the best possible manner this fearful disease that has during these past months taken away so many of our population by death. Shall we not make an effort in the wisest direction to rid our fair and beautiful city of this scourge? Would that some of those who oppose the above suggestions could see the great importance of this question, and know, as the writer has known, how many have been cut down in youth and early manhood; often, it is true, from non-vaccination, or imper,

fect vaccination, but oftener from contagion from others, simply for the want of having a completely isolated building. All honor to those members of the City Council who have provided a building for the treatment of this disease, and for all their efforts to stay the progress of disease; but that building is too small—especially has it been so during the last fearful epidemic. Now is the time, then, to take action, as we know not how soon it may break out again and find us still unprepared for such an exigency, should it occur. Thanks to kind Providence, it has now ceased to be epidemic; but should we not be ready to meet it by judicious forethought and timely arrangements for the future? All who have studied the matter will, I venture to affirm, say, yes.

As I have already trespassed too much on your columns allow me, in conclusion, to wish the success of your well-conducted Magazine, with the hope, also, that you may have the very generous support of your fellow-citizens.

Very respectfully yours,

CHARLES ALEXANDER.

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*To the Editor of the Public Health Magazine.*

DEAR SIR,—The loss of life from accident alone is something appalling. Can nothing be done to stop it? I do not know if it comes directly under the sphere of work you are undertaking, Mr. Editor, hygienically, but a word from you in your unrivalled magazine would, I am sure, carry weight, and thus effect good. Take that class of accidents from fire alone. Every daily paper you take up seems to give us a warning in this respect, but we seem to think nothing of it. "We are used to it," I suppose. Would you please inform me what the particular virtues of the chemical fire extinguisher are, and would you advise its use?

Yours, sincerely,

A SUBSCRIBER.

## Reviews.

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A REPORT OF THE HYGIENE OF THE UNITED STATES ARMY, with Description of Military Outposts. This is Circular No. 8, from the War Department, Surgeon General's Office, Washington, May 1, 1875.

This is a valuable contribution to medical, geographical and sanitary science, containing descriptions of the different military posts of the United States army. As these are scattered over a very extensive range of territory, and include almost every condition of climate and altitude, it is especially valuable to medical officers ordered to posts with which they are unacquainted by actual observation or experience, and to those in civil life who have occasion to investigate climatic sanitary conditions. Many of the reports from post surgeons in this volume contain very serviceable information in regard to the equipment, clothing, &c., of the soldier, with plates of those recommended. The work also contains plans of many of the hospitals, among which may be found the hospital at Soldier's Home, Washington. There is also a map of the western military departments of the United States, showing the occupied posts, discontinued cities and towns, railroads and common roads. This volume will be found very useful to every scientific physician into whose hands it may come.

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THE NEW STANDARD ATLAS OF THE DOMINION OF CANADA; compiled, by special permission of the General and Provincial Governments, from the latest official maps and surveys, and comprising a correct and complete series of the topographical, geological, postal, railway and timber land maps of Canada, with letter-press descriptions of the Provinces, cities and chief towns, the railways, and the geology of the Dominion, and lists of the towns, post-offices, etc. Also a complete list of the banks of the Dominion, their capital, branches and foreign agents, arranged from special reports. Published by Walker & Miles, Montreal and Toronto.

We have received the above Atlas for review, and having carefully examined it we must place it in the position it deserves. It

certainly stands foremost in every respect to every other map we have seen of the Dominion. As a "Standard Atlas," it is invaluable to any one who desires a thorough acquaintance with Canada. The printed matter consists of fifty pages, double column—of most important information—arranged for ready reference under appropriate headings. Among other things treated of are imports and exports, marine, fisheries, banking, canals, post-office, land system and regulations, population, militia, revenue and climate of the Dominion. All this information has been culled, by authority, from the general departments of the Dominion at Ottawa.

The maps are most beautifully arranged. The world in hemispheres—an emigration chart, shewing the distances and routes of the different steamships from the Old World—maps of the Provinces of Quebec, Ontario, Nova Scotia, Prince Edward's Island, New Brunswick, Manitoba, the North-West Territory and British Columbia.

Maps of the principal cities; among others, of Montreal, Quebec, Ottawa, Toronto, Halifax, &c, shewing the streets and public buildings.

Geological maps, from the Geological Survey, shewing the coal fields of Pictou, N.S., Springhill, N.S., Grand Lake, N.B.; also the timber lands of Quebec, Ontario, New Brunswick, &c., all occupying three and four sheets each, the Canadian Pacific Railway and the Dawson Route (6 pages.) One feature of particular interest and value, is that in these new maps all the distances are marked in plain figures from town to town and station to station, not forgetting the post and money-order offices and telegraph stations. So as to secure accuracy, every map in the Atlas was submitted for revision to the Governmental Department to which it belonged for additions and correction.

When we consider the amount of most valuable information contained in each map, we are only surprised at the short time it took to deliver it in its present form to the public.

It is impossible in a short review such as this, to do the work justice. But we can assure our readers that a perusal of it will fully repay them, and make them anxious to possess such a fund of information, so compact in itself and so moderate in price.

Messrs. Walker & Miles deserve the highest praise for the real services they have rendered the public, and we hope they will receive the generous support which they merit.

# PUBLIC HEALTH MAGAZINE,

NOVEMBER, 1875.

## SCHOOLS AND SCHOOLHOUSES.

Education is not a science but an art, which depends less on its absolute value than on the judgment with which it is employed. "The human flower is that which most needs the sun." Children kept indoors are hot-house plants, and what has been said of the sun may be said of the air also, for without this no good physical education can be accomplished, for good air is as necessary as good food. Air, water, light, these three elements of health which Nature has so bountifully given us with liberal profusion, ought to be supplied to every child.

Froebel says the "Instructor is the highpriest of nature," which is only a paraphrase of what Hippocrates said many centuries before, "*Medicus naturæ minister et interpres.*" People in those days had a high opinion of the teacher, but in this utilitarian age of ours it has sadly retrograded; not that it is less honorable, but that character and attainments are put into the balance against the solid elements, which "may be grasped at," and so talent, assiduity and ability retire into the cold and depressing shades of poverty and neglect. \*

The showy charlatan who tells ignorant parents that his child can be made a prodigy, and "puts on" all kinds of "extras" for the purpose of showing the care and attention bestowed on him, is usually what is called successful.

"Hygiene is sacrificed to ambition," and God only knows what kind of men these debilitated, nervous, used-up children promise for society, for whom everything has been done, *except to make them vigorous and healthy.*

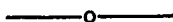
Reform is urgent. It begins already to fill the horizon, and soon there must be a more equitable arrangement between the work of mind and muscle. Mons. Raoul sums up the ordinary hygienic conditions of schools thus:—

"Health," he says, "is the last pre-occupation of a school-master at present. Narrow rooms, low, damp, deprived of sun, saturated with bad odors, sometimes too hot and close, or subject to draughts, flat desks, seats too high or too low, clothing tight round the neck, the waist, or the legs, positions dangerous for the lungs, the stomach and the circulation, the spinal column and the brain, restraint in one position too long, brilliant colors, dazzling reflections of light, either in quantity or direction—these are the conditions in the midst of which the *great majority* of children are brought up at schools, and even under the roofs of private families." Statistics innumerable can be given of the death rate attendant on these circumstances, if required. It is an incontestable fact that one-half of the children die before they are ten years of age.

It would be quite another question if we speak of the incurable debility, chronic affections, germs of mortal illness, or of premature old age, brought on by the continued violation of the elementary principles of hygiene. In our day, every one follows his own personal wish in the education of his children, and is perfectly indifferent to the principles of philosophy and hygiene.

Our officers of health should have access at all hours for purposes of inspection. The *New York Tribune* says, and we quite agree with it: "Even our public schools, held in buildings constructed for their especial use and supposed to be under the watchful and enlightened care of the public authorities, are, as we have often shown, generally models of all that schools ought not to be; overcrowded and unventilated; poisoned, not only with the pent-up exhalations from the inmates, but frequently with adventitious sewer-gases; and very many private schools, wholly exempt from any semblance of official supervision, are in worse case. One or two rooms in an ordinary dwelling-house, barely suited for the sanitary needs of a small family, are hired by some speculative pedagogue who knows no limit except that imposed by the dimensions of benches and desks to the number of pupils whom he is anxious to pack therein. Ventilation in warm weather depends on inadequate windows, and in winter these are shut, and the scholars wedged still closer together to make room for an air-tight stove; and in such pens in every town, hundreds of children stifle half the day

and sap the foundations of their health. More particularly does this apply to the younger classes of pupils, who at the most susceptible age too frequently fall into the hands of persons with just sufficient knowledge to teach the lowest rudiments of learning, but altogether ignorant of the simplest and most essential rules of hygiene. In a matter so nearly concerning our national welfare it is time that some action were taken, and we might treat our school children with at least as much consideration as we show our convicts, by requiring certain specified sanitary conditions in the places of their confinement, and fixing the minimum allotment of cubic space for each."



### DWELLINGS FOR THE POORER CLASSES.

The great difficulty in supplying houses for the poorer classes, is the building of them with a due regard to hygienic principles, combined with a low rental. In towns we find another difficulty, in obtaining good sites at a low figure, and in the country building is as expensive; so that the poor man is unable to pay a rental commensurate with the expenditure. Where the ground rent is low, a very good laborer's house or cottage may be put up on the following plan: First a living room for general every-day use, a bedroom for the laborer and his wife, a bedroom for boys, a bedroom for girls, a wash-house and closet—at a cost of from four to six hundred dollars. But supposing the ground to be large enough, two could be built together at a very much less cost.

In large towns very excellent house accommodation may be given to the laboring man in what are called tenements, thus making the ground rent cheaper for each individual tenant. This, of course, applies to newly built houses, but a far more difficult problem is the repairing and improving of the unhealthy abodes which increase the annual mortality to an extent that is appalling. Our laws should prohibit the inhabiting of dwellings which are dark, damp, and underground. There are many habitations such as these which it is impossible to improve or alter, where the only other alternative is that of immediate demolition. They are situated in narrow dingy alleys, or huddled together in courts, so as to be practically unventilable, and the internal structure and

arrangements are so faulty as to be beyond remedy. It is in these very dwellings that the filth and poisonous effluvia are constantly accumulating, and that the germs of disease find a fitting soil for their development. Hitherto, sanitary legislation has achieved comparatively little in abating the enormous evils arising from unhealthy dwellings, over-crowding, and filth accumulation; but it is to be hoped that as the requirements of public health become more widely appreciated, these evils will be greatly mitigated, if they cannot be entirely removed. But never mind how strenuous the exertions of our sanitary officers, the evils of surface crowding, as it is called, must necessarily for many years to come, throw great obstacles in the way of reaping to the full extent the advantages to be gained from lessening the in-door crowding. We may congratulate ourselves that we are not in as bad a plight as those in Liverpool, where a thousand persons have been known to be huddled together in one acre of ground; Glasgow and Greenock tell the same tale in some districts. All the sanitary regulations and ventilation in the world would never make healthy such a congregation of small pens packed together in so limited a space.

Demolition of old houses, and the displacement of the population into new blocks of model dwellings, and the opening of new streets, are all necessary.

It is impossible for a corporation to provide houses for its poor citizens. It would be merely offering a premium for pauperism; but great aids may be given to those who can provide houses, by two measures which may be properly carried out by the principal authorities:

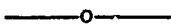
I That the houses should be constructed under the immediate supervision of a properly instructed officer of the corporation, as regards drainage, ventilation, and general plan; and,

II. That they should be maintained in sanitary repair under strict regulations.

By the observance of these two simple rules, and perseverance with the measure in force, a great improvement would, within a few years, take place in the ventilation of the houses, in the crowded quarters. And we are confident that there would be a commensurate and material improvement in the health of this most important class.



In connection with the displacement of the population there are questions which seriously affect the poorer classes. The demolition of their homes by widening streets, construction of railways, and other extensive undertakings in the crowded districts, only tend to increase the crowding in neighboring parts; for families are thus rendered homeless and seek the nearest shelter, rents are raised in consequence of the increased demand for accommodation, and such as cannot afford to expend more than they did previously, must be content with homes even less healthy than those which they have been compelled to leave. The question naturally, then, resolves itself into two alternatives, that of listless apathy, and the leaving of the working classes to certain death or ultimate degeneracy, or, as a compensating measure, the running of workmen's trains morning and evening between the suburbs and the town.



## VENTILATION AND WARMING.

At this season of the year we do not think a few general remarks would be out of place. In this country, where we require this combination to perfection, it is most difficult to accomplish. We are obliged to protect ourselves from the inclemency of our severe winters by double windows, and even then we sometimes find they are not sufficient without stuffing them to keep out the inordinate cold of from  $15^{\circ}$  to  $20^{\circ}$  below zero. What with our stoves using up the little oxygen in the houses, and the ill-constructed drain pipes allowing free access of malarious effluvia with carbonic acid, and the stuffing of our windows to exclude the great vivifying property, ozone, we so much need, can any one be surprised that in winter we are visited by such fearful epidemics of small-pox and typhoid fever? The truth is, we actually court them and invite them to feast upon our dear ones, and it is only after we realize the great loss that has visited us we then look to the removal of the cause. It amounts to culpable negligence, and nature punishes us with a just recompense for our apathy in neglecting to provide ourselves with those protections which are now known to be specifics.

Artificial ventilation is carried on by two methods, that of

“plenum,” which is forcing the air into and thro’ the room; or by “vacuum,” which is drawing the air out of the room.

The two methods are more commonly known as that of *propulsion* and *extraction*. In this country, where both warmth and ventilation are to be combined, it is a most considerable difficulty, although the simple ventilation of a room where warmth is not required is comparatively easy, although this is no easy matter from the peculiar architectural character of some buildings.

Where an open fire-place is used constantly, it is found to be the most easy and desirable means of ventilation, especially if you have other modes of heating as well. The heat being too small for this latitude, we must have the addition of a stove, hot water, steam, or hot air; but supposing the season of the year being such that a fire-place is sufficient, it acts in this wise: The heat is obtained by radiation from the incandescent fire, also by reflection from the different parts of the grate, while ventilation is carried on by the constant current of heated air rushing up the chimney. Even when no fire is made the chimney acts as a very efficient ventilating shaft. When the doors and windows are closed, the air finds its way through every chink and opening, if no special inlet is provided. So that the very plan of stuffing double windows is defeating the very object we wish to obtain. But where this is the case, the opened fire-place is found to establish fair ventilation, by a double current in the chimney, one up or out, and one in or downward. But unless the fire-place is made in the most approved style, the amount of fuel that may be consumed unnecessarily is wilful waste, and the temperature not equable. It is established that the per centage of heat that passes up the chimney is about seven-eighths of the whole amount generated, along with from 6 to 20 thousand cubic feet of air per hour. Thus it is evident that a single chimney will give an efficient ventilating shaft for a room containing from 5 to 6 or more persons. But unfortunately by far the greatest portion of the fuel is wasted. So, as a heating medium for Canada’s winter, it would be useless.

You may very easily heat and ventilate at the same time by hot air, water, or steam; but by all these modes you must have inlets for fresh air and outlets for the foul, vitiated atmosphere. All the air passes through or round the heating apparatus, and from thence it is distributed to the rooms in the building, the foul air being

carried out by flues, as fast as it can reach the top of the house or ceiling. If you do not have fresh air constantly supplied from without, you are sure to cause the air of the house to become so dry and vitiated that injury is certain to follow. The natural moisture must also be kept up by causing the air to pass over water basins. This remedies the evil partially.

Large buildings, such as hospitals, asylums and prisons, can be efficiently warmed by hot water pipes, air passing through the coils of pipe before entering the rooms and wards. The vitiated air is extracted by means of coils of pipe in the extraction flue or shaft. This shaft may also be heated by the furnace in the ground flat and branch flues leading into the main. This is admirably adapted for prisons.

All large mines nearly are ventilated in this way by extraction. A furnace is placed at the bottom of the up shaft, the air is drawn down another shaft, and made to traverse the various galleries. In this way as many as 2,000 cubic feet of air per head per hour can be supplied.

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### FOOD.

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As some of our readers may be desirous of trying the vegetarian diet as recommended by Dr. Alfred Crispi, we give the accompanying table as a guide and help to choose what vegetables may be used to make up the requisite amount of carbonaceous and nitrogenous substances for subsistence. Experience teaches that three meals daily are best suited to the wants of the body. Dr. Edward Smith, in his physiological diet of 4,300 grains of carbon and 200 of nitrogen, distributes the amounts as follows:—

	Carbon.	Nitrogen.	Carbonaceous.	Nitrogenous.
	Grs.	Grs.	Oz.	Oz.
For Breakfast.....	1500	70	6.62	1.04
For Dinner.....	1800	90	7.85	1.34
For Supper.....	1000	40	4.52	0.59
	4300	200	18.99	2.97

The reason for estimating the amount of carbon and nitrogen in different articles of diet, is that the phenomena of nutrition depend mainly on the *chemical* interchanges of nitrogen and carbon with oxygen. (We will explain at length the phenomena of digestion and nutrition in our next number.)

	GRS. PER POUND.			GRS. PER POUND.	
	Carbon	Nitrogen		Carbon	Nitrogen
Split peas .. ..	2699	248	New milk .. ..	599	44
Indian meal .. ..	3016	120	Skim cheese .. ..	1947	483
Barley meal .. ..	2563	68	Cheddar cheese .. ..	3344	306
Rye meal .. ..	2693	86	Bullock's liver .. ..	934	204
Seconds flour .. ..	2700	116	Mutton .. ..	1900	189
Oatmeal .. ..	2831	136	Beef .. ..	1854	184
Baker's bread .. ..	1975	88	Fat pork .. ..	4113	106
Pearl barley .. ..	2660	91	Dry bacon .. ..	5987	95
Rice .. ..	2732	68	Green bacon .. ..	5426	76
Potatoes .. ..	769	22	White fish .. ..	871	195
Turnips .. ..	263	13	Red herrings .. ..	1435	217
Green vegetables .. ..	420	14	Dripping .. ..	5456	—
Carrots .. ..	508	14	Suet .. ..	4710	—
Parsnips .. ..	554	12	Lard .. ..	4819	—
Sugar .. ..	2955	—	Salt butter .. ..	4585	—
Treacle .. ..	2395	—	Fresh butter .. ..	6456	—
Buttermilk .. ..	387	44	Cocoa .. ..	3934	140
Whey .. ..	154	13	Beer and porter .. ..	274	1
Skimmed milk .. ..	438	43			

### A FEW FACTS ABOUT ALCOHOL.

The popular plan of administering alcohol for the purpose of sustaining animal warmth is an entire and dangerous error, and when it is brought into practice during extremely cold weather it is calculated to lead even to fatal consequences, from the readiness with which it permits the blood to become congested in the vital organs. We cannot too forcibly impress the fact that cold and alcohol act, physiologically, in the same manner, and that, combined in action, every danger resulting from either agent is doubled.

Whenever we see a person disposed to meet the effects of cold by strong drink, it is our duty to endeavor to check that effort, and whenever we see an unfortunate person under the influence of alcohol, it is our duty to suggest warmth as the best means for his recovery. These facts prompt many other useful ideas of detail in our common life.

If, for instance, our police were taught the simple art of taking the animal temperature of persons they have removed from the streets in a state of insensibility, the results would be more beneficial. The operation is one that hundreds of nurses now carry out daily, and applied by our police-officers, at their stations, it would enable them not only to detect the difference between a

man in an apoplectic fit and a man intoxicated, but would suggest naturally the instant abolition of the practice of thrusting the really intoxicated into a cold and damp cell, which to such persons is actually an ante-room to the grave. The sleep of apoplexy and the sleep of drunkenness may be distinguished by a marked difference in the animal temperature. In apoplexy the temperature of the body is  $100^{\circ}$ , in drunkenness below, the natural standard of  $98^{\circ}$  F.

We would also suggest that the systematic administration of alcohol for the purpose of giving and sustaining strength is an entire delusion. We do not say that occasions do not arise when an enfeebled and fainting heart is temporarily relieved by the relaxation of the vessels which alcohol, on its diffusion through the blood, induces; but, that spirit gives any persistent increase of power by which men are enabled to perform more sustained work, is a mistake as serious as it is universal. In proof of which we give the following experiment of Dr Richardson's, when he submitted muscle to the test:—He gently weighed the hinder limb of a frog until the power of contraction was just overcome; then, by a measured electrical current, he stimulated the muscle to extra contraction, and determined the increase of weight that could thus be lifted. This decided upon in the healthy animal, the trial was repeated some days later on the same frog after it had received alcohol in sufficient quantities. The result was that through every stage the response to the electrical current was enfeebled, and so soon as narcotism was developed by the spirit, it was so enfeebled that less than half the weight that could be lifted in the previous trial, by the natural effort of the animal, could not now be raised even under the electrical excitation. The muscular excitement which passes for increased muscular power is only due to alcoholic disturbance. The muscles are then truly more rapidly stimulated into motion by the nervous tumult, but the muscular power is actually enfeebled.

We must also draw attention to the fact that alcohol is incapable of fattening the body; for if we could successfully fatten the body, we should but destroy it more swiftly and surely; inasmuch as the fattening which follows the use of alcohol is not confined to the external development of fat, but extends to a degeneration through the minute structures of the vital organs, including the heart itself.

## Miscellaneous Selections.

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### CUPBOARD VENTILATION.

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In the construction of old houses, and in too many instances of new ones also, a great defect is to be found in the absence of any mode of ventilation for the cupboards. This omission is a serious one in all cases, but especially in those which are devoted to the reception of food or of dirty linen. In such cases these closets, with their contents, become laboratories for the manufacture of polluted air, which from time to time escapes into the living rooms, and makes itself unpleasantly apparent. The remedy for this is not difficult; a few perforations in the doors will be found serviceable, but if practicable, the wall of the cupboard should also be perforated, so that a thorough draught could be obtained. For damp closets and cupboards which generate mildew, a trayful of quick lime will be found to absorb the moisture and render the air pure, but of course it is necessary to renew the lime from time to time as it becomes fully slaked. This last remedy will be found useful in safes and strong rooms, the damp air of which acts frequently most injuriously on the valuable deeds and documents which they contain.—*Sanitary Record.*

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### ROYALTY AND TEMPERANCE.

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The gratifying announcement that Her Majesty the Queen would become a patron of the Church of England Temperance Society is followed up by the almost equally gratifying statement that the Rev. Basil Wilberforce has received a letter announcing that His Royal Highness Prince Leopold will become President of the Oxford Branch of the Church of England Temperance Society. The Church of England can do no higher service to this country than by enlisting the sympathy of Royalty and rank in the temperance movement. It is high time that the amount of drinking which goes on, not only in Liverpool, but in all

parts of the kingdom, should be abated, as something intensely degrading and disgraceful, having no foundation either in sense or morality, as it certainly has none in physiology. Let us hope that we are at the beginning of a great religious and patriotic effort to increase the temperance of every section of the community. Mere patronage will not do it. But we shall have more assistance in this enterprise from the Royal Family than is implied in mere patronage; and not the least glory of the Victorian reign will be the perception of a great social vice by Her Majesty, and the desire personally to help in its removal.—*The Lancet*.

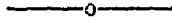
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### TOBACCO IN RELATION TO HEALTH.

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Dr. Richardson, F.R.S., delivered a lecture on this subject before a very large audience at Birmingham on Wednesday evening, the 15th ult. The lecture was delivered in connection with the Laws of Health class of the Midland Institute. After speaking of the introduction of tobacco to Europe, and its enormous consumption at the present time, the lecturer said: The nature of the luxury forms a subject of discussion on which the extremest views prevail. On one side tobacco has been held up as the most harmless of luxuries; and on the other side it has been denounced as the originator not only of mere functional, but of some of the worst forms of organic disease. Following out the researches made by himself, he showed the constituents of tobacco smoke and their results upon the human body, and pointed out the effect exerted by different kinds of tobacco. Speaking of the influence of smoking on the mental faculties, he said: When mental labor is being commenced, indulgence in a pipe produces in most persons a heavy dull condition; but if mental labor be continued for a long time, until exhaustion is felt, then the resort to a pipe gives to some *habitués* a feeling of relief; it soothes, it is said, and gives new impetus to thought. This is the practical experience of almost all smokers, but few men become so habituated to the pipe as to commence well a day of physical or mental work on tobacco. Dr. Richardson carefully discussed the question whether the practice of smoking could be considered, fairly, as a cause of those fatal diseases, consumption, cancer and

apoplexy. The argument, he stated, was conclusive against this extreme view. The same conclusion was arrived at in respect to insanity, epilepsy, St. Vitus's dance, heart disease, and chronic bronchitis. At the same time, immoderate smoking cannot be carried on without danger, sometimes even to life itself.—*Ibid.*



### A CAUTION FOR LADIES.



Women of the present day are happily too strong-minded to paint their faces or dye their hair (says the *Pall Mall Gazette*), even were such proceedings necessary to heighten their attractions. They can therefore afford to smile at a warning conveyed by the *Sanitary Record* against the use of cosmetics and hair dyes, which frequently contain lead, and consequently produce disastrous results on the inner system, hardly compensated for by their pleasing effects on the outer system. It seems a patient was lately admitted into King's College Hospital, suffering from all the symptoms of lead poison. On enquiry, it was found that the sufferer was a ballet dancer by profession, and, as is usual with ballet dancers, was in the habit of using flake white freely as a cosmetic. This powder proved on analysis to be composed chiefly of carbonate of lead. When applied to the face, the powder becomes partly absorbed through the mouth and nostrils, and thus enters the circulation and pervades the whole system. A friend of the patient was, according to her account, suffering from the same symptoms as herself, and there is, it is stated, nothing unusual in the case, as symptoms of lead poisoning have often been traced to the use of cosmetics and also to the habitual employment of hair dyes containing lead. In short, when Beauty with paint competes with Beauty without paint, she does so at the risk not only of defeat, but also of death.



## Editorial Notices and Answers to Correspondents.

We have now for some time been prescribing Dr. F. B. Wheeler's "Elixir Ferri et Calcis Phosphatis Co," and we must in justice to the Doctor, state that it is quite equal to if not superior to any compound of the kind. We have used it in the first stages of Phthisis with marked benefit, as also in cases of severe Dyspepsia where everything else had failed, and in many other affections. It is a pleasant preparation, and may be taken for a long time without "palling" on the stomach.

### Opinion of the Press.

*From the Canada Medical and Surgical Journal.*

PUBLIC HEALTH MAGAZINE. — We have received the first number of a magazine, with the above title, a periodical which is destined, we hope, to do much good in the community. Its mission is educational, and if conducted in a proper spirit so as to call the attention of the masses to all subjects bearing on the laws of health, we doubt not that it will be a success, and take rank as "an authority" in Sanitary science to which it aspires.

This journal is edited by Dr. George A. Baynes, a gentleman who has already given evidence of his devotion to Sanitary subjects by a very excellent course of popular lectures delivered by him during the past winter, as also by a brochure on the disposal of the dead, which is worth reading. We wish the periodical every success, it is very neatly gotten up, and is issued from the printing establishment of John Dougall & Son.

*From the Canada Medical Record.*

PUBLIC HEALTH MAGAZINE. \* \* \* \* In general appearance, it is very creditable, and the contents are interesting and instructive. The subject of sanitary science is one which is attracting, we are glad to say, a considerable amount of public attention at the present time, and it is meet that sanitary literature should emanate from the Metropolis of the Dominion. Dr. Baynes has for some time back devoted much attention to the subject of hygiene, and as editor of the new Health Magazine he has our warmest wishes for its success.

*From the Sanitary Journal, Toronto.*

PUBLIC HEALTH MAGAZINE. — This is a new magazine, consisting largely of reports and original papers on important sanitary subjects. The field for sanitary labor is large and demands many laborers, at Montreal it appears to need vigorous husbandry. We wish our contemporary the success it merits.

*From the Daily Witness, Montreal.*

The great interest which is now generally felt concerning health matters renders this a favorable time for the publication of a monthly magazine of san-